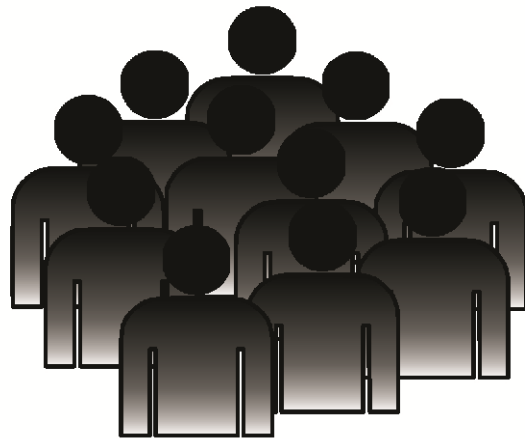


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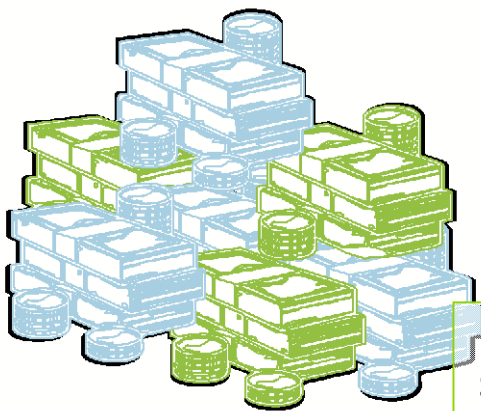
CROWDFUNDING FOR INNOVATION:

**A QUALITATIVE RESEARCH ON RESOURCES, CAPABILITIES AND
STAKES**

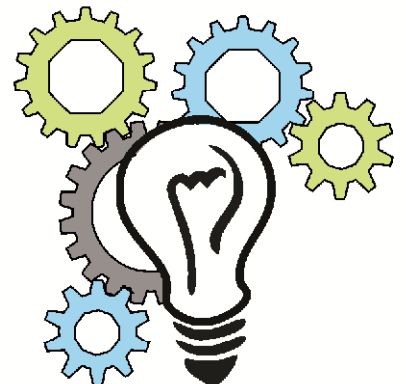


**MASTER THESIS FOR MASTER OF SCIENCE
BUSINESS ADMINISTRATION PROGRAMME**

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'Cuiusvis hominis est errare, nullius nisi insipientis in errore perseverare'
(Cicero)

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Foreword

This thesis is the result of an intensive Master year at the University of Twente in Enschede. When I moved to the Netherlands in November 2007 I did not predict I would take up the Business Administration Programme as my final study choice. Although I was uncertain about engaging in another new scientific field, thanks to motivation and gradually acquired interest in this academic area, I made it till the end. At the moment I am looking into the future with the same light of motivation and confidence, as back in 2007.

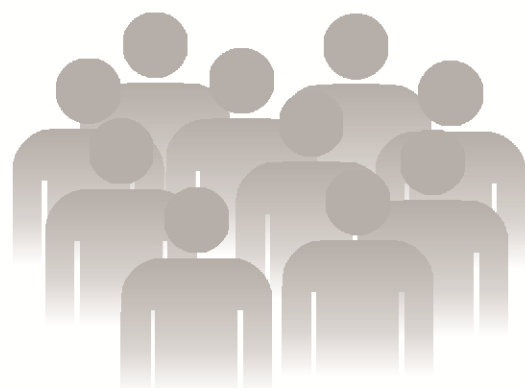
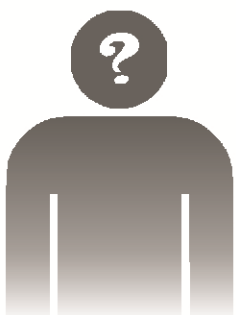
The road leading to the colloquium was all but easy. There were hardships and struggles, times of resignation and lack of confidence. Nevertheless, I will always remember this period as one full of joy, laughter and solid friendships. Yet most of all, the time at the University of Twente will be marked with hard work rewarded with decent results, not only regarding the studying, but also regarding shaping of the personality.

Most of all, I would like to show my appreciation and gratitude for the involvement of my supervisor, Dr. Ir. Klaasjan Visscher, who kept an eye on the shaping of the thesis. Without his thoroughness, understanding and excellent pedagogic skills, writing of this thesis would never be possible, nor would it be pleasant. Moreover, I recognize and appreciate the effort and creative input of Dr. De Visser who encouraged me to explore the undertaken subject even further.

This study would not be conducted without the courtesy and participation of interesting persons engaged in crowdfunding, scattered all over the world. Without the genuine input and time of project creators, and honest opinions of their backers, this study would never achieve its actual form and value. Besides, the insights of consultants were remarkable in balancing and structuring the analytical efforts.

All the effort put into this Master Thesis would not be enough, if I did not have the support of my loving family and friends around me. Therefore, I would like to thank my mother, Teresa Rakowska, for being strict when I needed it and her priceless advice and support she was always ready to give. This support would not be complete without the helping hand of Roel Bakker, who did not hesitate to help me with any difficulties I encountered.

Thereby I would like to close one chapter of my life and open up a different one, hopefully as interesting and rewarding as the studying at the University of Twente.



Executive Summary

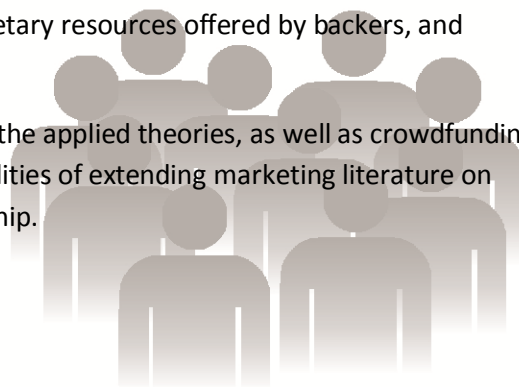
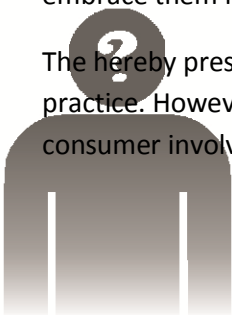
This thesis investigates the effects of crowdfunding on innovation. The aim of the research is to seek potential explanations for the central question: *How can crowdfunding be best used to bolster successful technological product innovations?* The major added value presented in this document is gathering better insights and understanding of the understudied phenomenon of crowdfunding.

In order to achieve the aforementioned, the study involves the use of well – known and well-established business administration theories. However, to start with, it is crucial to give the definition of crowdfunding which is a collective effort by consumers who network and pool their money together, usually via the internet, in order to invest in and support efforts initiated by other people or organizations (Ordanini et al., 2011). The process thus involves acquiring finances and possibly other resources from many funders, or backers. So far, current research focused on the motives to engage in this fundraising process, where many open questions were asked towards the non-monetary benefits flowing from crowdfunding. This study aims at advancing this perspective by the use of following theories. The resource – based view (Barney, 1991) is applied to uncover the real nature of resource exchange process in crowdfunding. Furthermore, for the purpose of investigating backer’s influence on a crowdfunded project, stakeholder theory (Freeman, 1984) forms an important component. Additionally, the notion of dynamic capabilities (Teece, et al. 1997) is included to control for an entrepreneurial factor influencing innovation.

As for methodology, this study presents a qualitative, in – depth study of seven successfully crowdfunded projects, representing technological innovations. Entering the phase of data analysis, each case was analyzed separately in order to inhibit the understanding of case-specific dynamics and organize the findings. Afterwards, a cross-case analysis was conducted to strengthen the collected evidence (Eisenhardt, 1989). The data analyzed include both primary data, gathered through in-depth interviews with project creators, backers and crowdfunding consultants, as well as secondary data.

The findings from this analysis offer some interesting and breakthrough insights into the real nature of crowdfunding, especially regarding the roles of stakeholders in this process. The study uncovers that the phenomenon is investment intensive for creators and backers. However, the degree of devoting efforts and resources largely depends on the motivations that backers and creators have upon their participation. Based on this notion, the study presents two strategies where the founders’ key role is to decide whether backers offering primarily monetary or non-monetary resources will be involved to larger extent. The proper engagement of funders requires e-mail gatekeeping and issuing notifications, as well as personal contact, in case of co-development. This division offers an optimal manner for seizing the benefits and minimizing externalities in a crowdfunding campaign, which positively affects the efficiency and effectiveness of the campaign. Moreover, it improves to capability to properly defined and grasp the non-monetary resources offered by backers, and embrace them into the project.

The hereby presented thesis offers several insights to the applied theories, as well as crowdfunding practice. However, unexpectedly, it also offers possibilities of extending marketing literature on consumer involvement and the field of entrepreneurship.



List of Abbreviations

CAGR – Compound Annual Growth Rate

RBV – Resource – Based View

VC(s) – Venture Capital, Venture Capitalist(s)

VRIN(O) – Referring to resources that are: valuable, rare, inimitable, non – substitutable and organization capable to exploit them

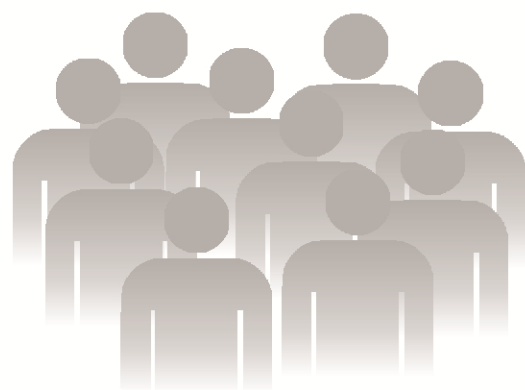
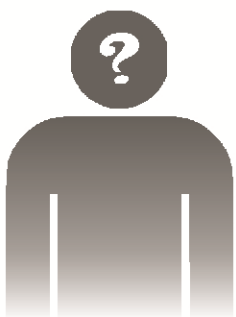
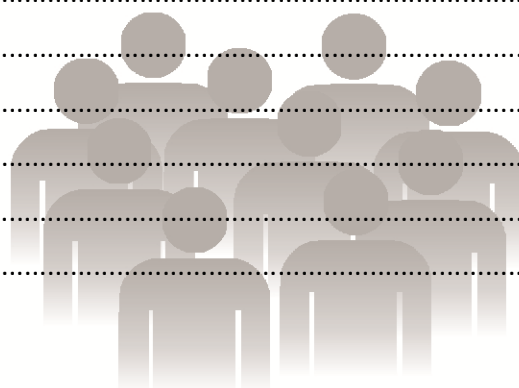
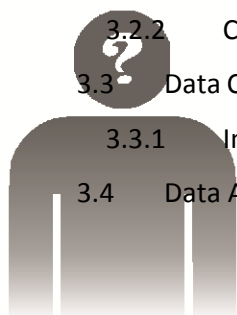
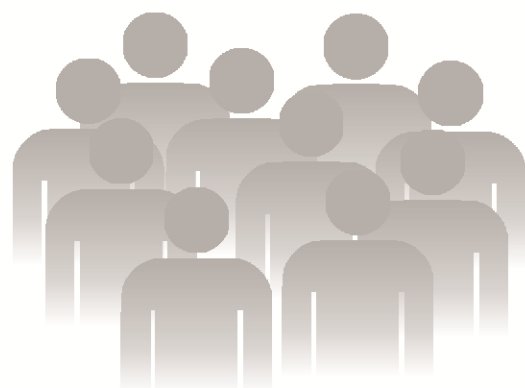
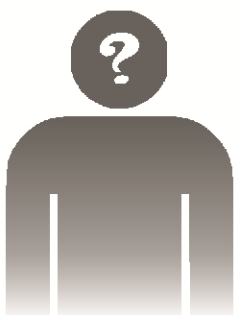


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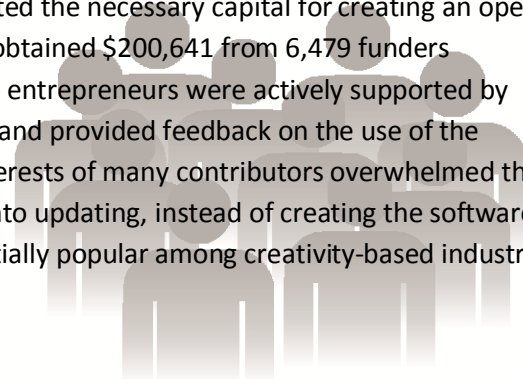
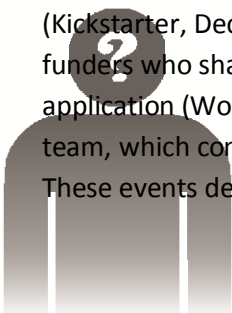


1 Introduction

Nowadays, the industrial development is characterized by a profusion of alternatives, all different in terms of design or technology applied (Surowiecki, 2004). Yet, not all of them are flourishing, as the market winnows the winners and losers of the competition for innovation. Also, the increasing variety of possible funding sources for these endeavors does not guarantee that a technological alternative developed will not fail (Surowiecki, 2004). This is because only a slight amount of entrepreneurial incentives will meet the support of the crowd. However, the option favored by the crowd will prosper (Surowiecki, 2004). Crowdfunding is likely to foster this process.

The crowd, once diverse, independent and decentralized, sometimes proves wiser than a single person, which raises the possibilities for innovation (Surowiecki, 2004). The crowd, already engaged as idea-generator in the process of crowdsourcing, faces an even deeper form of engagement when asked for monetary contributions in crowdfunding (Ordanini et al., 2011). This relatively new phenomenon capitalizes on delivering a solution that empowers the crowd, by providing tools (usually internet) to join efforts and raise funds for specific projects (Belleflamme and colleagues, 2011). Different players are involved in crowdfunding models. First, there are the project creators who propose ideas or projects to be funded. Their objective is to use crowdfunding to get direct access to the market and to gather financial support from truly interested supporters (Ordanini et al., 2011). Then there is the crowd of people that decide to financially support these projects, bearing a risk and expecting a certain payoff (Belleflamme et al., 2011). These supporters sometimes co-produce the output, selecting – and even developing – the offers they consider to be the most promising or interesting (Agrawal et al., 2013). A third player is the crowdfunding platform, which brings together project creators who want to deliver new initiatives using crowdfunding mechanisms and those who may wish to support such incentives through their investment efforts (Ordanini et al., 2011).

Crowdfunding has recently been a subject of increased media attention. The reason for such a buzz around the phenomenon has been the case of a Pebble watch (Agrawal et al., 2013). After Eric Migicovsky, an inventor-entrepreneur, has tried to raise sufficient funding for launching an innovative e-paper display – the Pebble watch, enabling interactions with Android and iOS devices through a wrist application, the high profile angel investors from Silicon Valley did not see the potential of his idea. Migicovsky, despite his entrepreneurial experience and technological knowledge, failed to convince investors that the watch would actually be a prosperous investment opportunity. Hence, in April 2012, the inventor turned to crowdfunding. His Kickstarter-launched campaign succeeded to collect the necessary capital in just two hours. The elevator pitch for Pebble watch earned Migicovsky \$10,266,844 pledged by 68,928 people (Kosner, 2012). In return, every funder contributing a pledge of \$120 was promised a watch in return. Unfortunately, Migicovsky has not been able to ship any unit on time, despite his best intentions and frequent updates towards the project funders. In the same year, Max Salzberg and team successfully collected the necessary capital for creating an open-source alternative for Facebook - Diaspora. This idea obtained \$200,641 from 6,479 funders (Kickstarter, Decentralize the web with Diaspora). The entrepreneurs were actively supported by funders who shared their ideas on software interface and provided feedback on the use of the application (Wortham, 2012). However, managing interests of many contributors overwhelmed the team, which committed most of the effort and time into updating, instead of creating the software. These events demonstrate that the crowdfunding, initially popular among creativity-based industries,

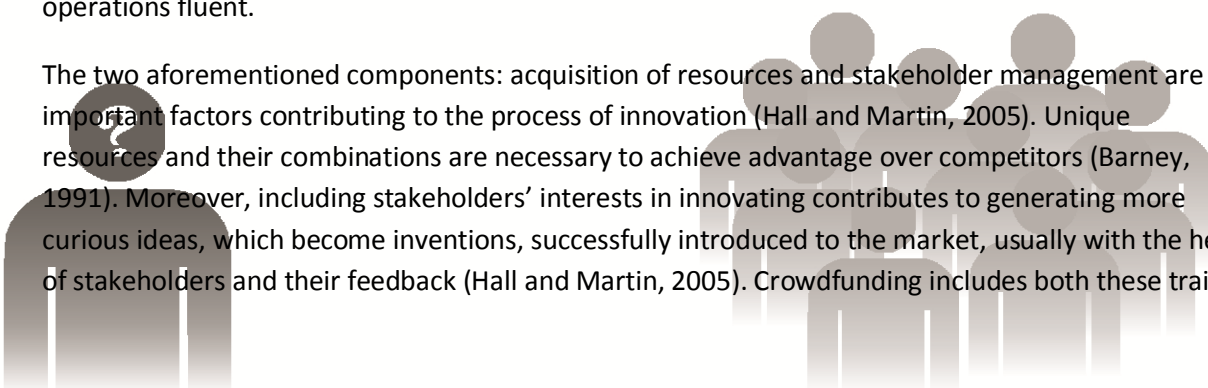


is being used for financing technological product innovations, and there is more to it than just providing pecuniary support. However, the scarcity of academic research on the matter and novelty of the phenomenon, have left this interesting matter as an open question.

Crowdfunding is different from the classical funding system, in which a small group of sophisticated investors funds a project. In the case of crowdfunding it is a large group of people that provides funding. In this group each individual contributes with a very small amount of money to finance the project and provide other forms of support to the ideas they favor (Gambadrella, 2012). The goal of this study is to find out how this phenomenon exactly contributes towards the rise of such novelties, in order to bring in deeper understanding of crowdfunding and its actual impact on inventions, beyond the monetary scope.

During the interview with Gijsbert Koren from Douw&Koren, a crowdfunding consultancy in Amsterdam, The Netherlands, the issue of recognition of the benefits and threats the crowdfunding poses on technological innovations, seems very relevant to the contemporary business practice. Because the impact of a crowdfunding campaign on the introduction of an invention to the market is not fully understood and many entrepreneurs are not fully aware of the potential and drawbacks of crowdfunding, many original ideas land on the desk of bankers or venture capitalists. Koren explicated that while the traditional sources of financing are not always likely to support innovations, as illustrated by the example of Pebble watch above, the entrepreneurs are aware of the added value they deliver. Crowdfunding has so far only been associated with the acquisition of money, but the additional benefits have not been indicated. According to the consultant, once all parties involved in crowdfunding understand not only the mechanism of money exchange, but also the exchange of non-pecuniary resources that goes with it, more campaigns will be likely to achieve a blasting success in meeting the monetary goal and launching the product to the market. Furthermore, Koren mentioned that crowdfunding originates from creative and charity industries, and the effect the process has on these two business branches is observable. However, when it comes to technology, the use of crowdfunding is in its infancy and needs to be studied further. Another motive for choosing the technology sector is that the entrepreneurial incentives with successful crowdfunding campaigns gained a considerable media attention due to the magnitude of gathered resources and following, the delivery problems to the funders. This allows making an implicit assumption about one very important factor in crowdfunding: managing stakeholders. Alongside the resource acquisition, entrepreneurs engaged in crowdfunding acquire the responsibility of matching funders' contributions with adequate returns. Backers may require updates as to how the project is progressing after the termination of the campaign, and eventually, as many of them pre-ordered a product, timely delivery is crucial. This involves a considerable effort from the entrepreneurs and puts pressure on the post-campaign operation. As shown in the case of Diaspora, project creators have to consider these externalities if their objective is to keep the funders contented and business operations fluent.

The two aforementioned components: acquisition of resources and stakeholder management are important factors contributing to the process of innovation (Hall and Martin, 2005). Unique resources and their combinations are necessary to achieve advantage over competitors (Barney, 1991). Moreover, including stakeholders' interests in innovating contributes to generating more curious ideas, which become inventions, successfully introduced to the market, usually with the help of stakeholders and their feedback (Hall and Martin, 2005). Crowdfunding includes both these traits;



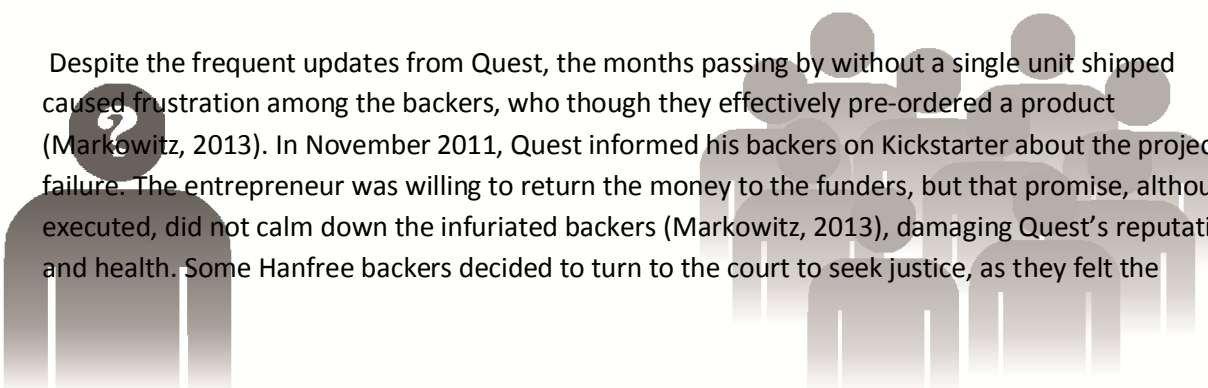
however their impact on technological product innovations remains a riddle to be solved in this research project.

This riddle is best explained by the following crowdfunding case. Hanfree was the project initiated by Seth Quest and Juan Cespedes, which aimed at providing the users with the possibility of operating their iPad handsfree. The team launched Kickstarter campaign in April 2011. By May 2011 the Hanfree reached its \$10,000 goal. In total, Seth Quest, and his business partner raised \$35,004 from 440 backers (Markowitz, 2013). The entrepreneurs promised to ship a device for every \$50 pledge. The project became popular throughout the media and has been praised for its inventive character and high potential (Markowitz, 2013). This incentive raised more capital through crowdfunding than there was pledged for and many backers were involved in the fundraising, which as will unfold in the paragraphs below, brought about several problems for project execution, leading to its failure.

Hanfree's Kickstarter backers appreciated the introduced rewards system in their comments, as it allowed them to pre-order the device against a relatively small contribution, and the limited edition was available as well. Seth Quest posted regular notifications to the interested funders, which mainly consisted of the information on the project's progress, the application of the device and engineering specifications of the design. All in all, Hanfree attracted a network of backers interested in the idea, who in the majority, were interested in extending more than just the financial support. This notion is visible in the comments under each update. Quest and Cespedes also engaged in the dialogue with some of the backers to discuss their ideas on the Kickstarter forum, which tightened the network. This snapshot shows that the project had the ingredients to succeed outside of the Kickstarter: the entrepreneurs collected sufficient amount of funds, backers were keen on the idea and kept updated and the extended information on the progress was rich in content.

However, the celebration around the project's funding success was short-lived. After meeting the target, the designers needed to build the stands, manufacture them, and ship them out to the backers. This quickly became problematic. The challenge lied in the preparation of the entrepreneurs towards the operational phase of their project. *'Quest did not have contracts already in place before he went on Kickstarter – a novice mistake. Once the Hanfree was funded, Quest says, he began contracting with accessories manufacturers in China, Singapore, and Los Angeles. But because those manufacturers were able to see precisely how much money Quest had raised on Kickstarter, Quest says they gained too much leverage in negotiations, chipping away at the product's margins. It soon became too expensive to create the product with the funds raised'* (Markowitz, 2013). Other than that, the disagreement between Quest and Cespedes lead to deterioration of the team working on the Hanfree. Soon after, Quest was left alone with the operational problems and had no backup engineers in place to carry out the necessary actions. In the end, this unexpected circumstance was the direct cause of Hanfree's failure.

Despite the frequent updates from Quest, the months passing by without a single unit shipped caused frustration among the backers, who though they effectively pre-ordered a product (Markowitz, 2013). In November 2011, Quest informed his backers on Kickstarter about the project's failure. The entrepreneur was willing to return the money to the funders, but that promise, although executed, did not calm down the infuriated backers (Markowitz, 2013), damaging Quest's reputation and health. Some Hanfree backers decided to turn to the court to seek justice, as they felt the



Hanfrees was an ordinary embezzlement. However, the majority of the Hanfree backers, despite their disappointment, do not turn to such harsh ostracism. They attribute the failure to *'entrepreneurial stupidity'* and *'lack of entrepreneurial experience'* (Kickstarter).

The case raises fundamental questions that go to the heart of what means to "crowdfund" in the first place, when there are no customers (just backers), no products (just projects), no business owners (just creators), and no payments (just pledges). It also shows that despite having all the ingredients necessary for the success outside Kickstarter, the project representing some kind of innovation, can fail. This practice-related example exhibits that this undertaken research aims at investigating an important matter with substantial relevance towards the crowdfunding practice. The current investigation is directed at revealing to what extents the crowdfunding can be used in order to positively affect the success of technological innovations.

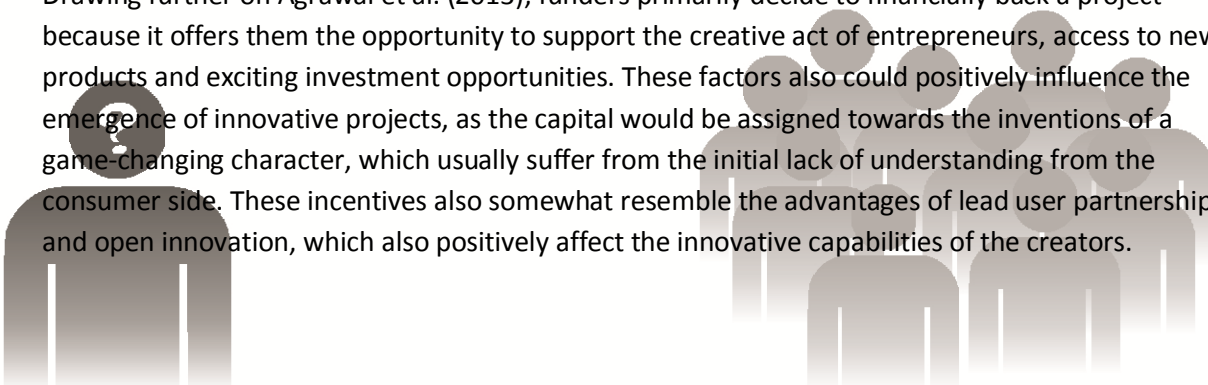
Relating to the aforementioned, the words of Douw&Koren's spokesman as well as the mentioned crowdfunding facts indicate thus that there is a perceived need for researching how crowdfunding could support technological innovations. As aforementioned, crowdfunding is not limited by geographic scope. Therefore, this study will focus on projects worldwide, from different crowdfunding platforms. By not binding the choice of cases to one geographic location, the findings will also gain on validity and reliability aspects.

1.1 Relevant Theories

The purpose of this paper is to analyze the emerging crowdfunding phenomenon, which is a collective effort by consumers who network and pool their money together, usually via the internet, in order to invest in and support efforts initiated by other people or organizations (Ordanini et al., 2011) and the way it affects the emergence of innovations. Creators of projects pitch their ideas on online platforms, in order to pledge for financial contributions. These are granted by (usually) a large number of backers who offer pecuniary support in small amounts against some kind of reward (Gerber et al., 2011).

The three main actors are motivated to take part in crowdfunding for different reasons. The project creators have two primary motives behind this mode of fund raising: crowdfunding implicates lower costs of capital and offers a preliminary opportunity for market research under low costs as well, since the interest in the project could indicate the potential demand and the incentive for users to switch from the existing product to the offered alternatives. Having looked at the conditions for successful innovation adoption outlined in the previous paragraph, these two factors reported by Agrawal et al. (2013) could positively influence the success of an invention.

Drawing further on Agrawal et al. (2013), funders primarily decide to financially back a project because it offers them the opportunity to support the creative act of entrepreneurs, access to new products and exciting investment opportunities. These factors also could positively influence the emergence of innovative projects, as the capital would be assigned towards the inventions of a game-changing character, which usually suffer from the initial lack of understanding from the consumer side. These incentives also somewhat resemble the advantages of lead user partnerships and open innovation, which also positively affect the innovative capabilities of the creators.



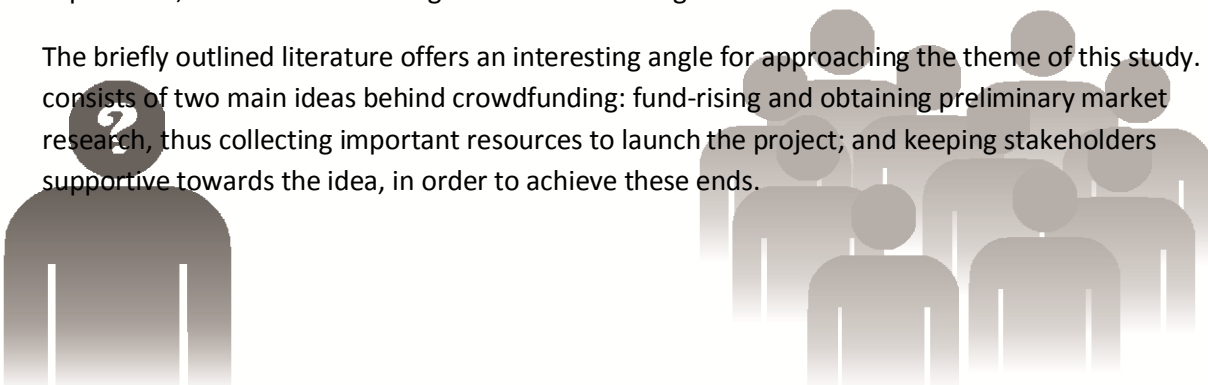
Looking at crowdfunding platforms, Agrawal et al (2013) point out that their main interest is generating as much profit as possible. This indicates that a platform is looking at attracting many creators and funders, since it increases the chances for successfully financed projects. By creating a milieu where inventors are able to pitch their ideas and matching these with backers willing to support them, platforms could act as 'innovation brokers', stimulating the growth of successfully brought out innovative projects.

On the other hand, crowdfunding also implies several disincentives which may have a negative influence on the rise of innovations. Creators are usually constrained by the demand of full disclosure which leaves some with fear for the imitation of their projects during the period between raising capital and launching their product (Gerber et al., 2011), while the project backers are taking the risk of fraud, which may discourage them from providing financial support for innovative incentives (Agrawal et al., 2013). These two factors could result in lower innovative potential of crowdfunded projects because the inventors would not be able to create value from their inventions, being hampered by lacking secrecy, while the capital providers would be likely to disinvest, which could lead to lower support for innovative capabilities. Crowdfunding platforms would not remain unaffected, as the abovementioned risks would likely lower the amount of participants, leading to less income.

These theories will be complemented by the relevant literature on innovation. As Frankelius (2009) observed, innovation is introducing something new, original, accepted by interest groups and offering added value to the users. In order to effectively innovate one has to grasp the opportunity and strategic knowledge about the business development and project management skills. It is also vital to develop relationships with stakeholders, for instance users and suppliers (Frankelius, 2009). These two notions indicate that in order to innovate, an organization needs resources, dynamic capabilities derived from them, as well as stakeholder management approaches.

The subject will be approached by combining two perspectives: the stakeholder theory and resource-based view, in accordance with the statements of Frankelius (2009) and dynamics of crowdfunding process. The first theory, introduced by Freeman in 1984, indicates that an organization needs to pay attention to stakeholder's interest in order to effectively innovate and benefit from their expertise. Careful management of stakeholder relations can be a resource valuable for the firm. Financiers, who are important stakeholders for the organization, provide not only monetary support, but also expertise and advice for new ventures, aiming on fostering firm's success. Hence the use of resource-based view, which capitalizes on explaining firm's sustainable competitive advantage by taking an inside-out view of the organization. Barney (1991) proposed that firms with valuable, rare, inimitable and non-substitutable (VRIN) resources and an organization in place to handle them have a sustained competitive advantage. Teece et al. (1997) broadened this thought by adding the concept of dynamic capabilities, which enable the organization to reconfigure the resources.

The briefly outlined literature offers an interesting angle for approaching the theme of this study. It consists of two main ideas behind crowdfunding: fund-raising and obtaining preliminary market research, thus collecting important resources to launch the project; and keeping stakeholders supportive towards the idea, in order to achieve these ends.



1.2 Research Questions

As mentioned in the previous sections, this study aims at investigating the effects of crowdfunding on innovations. Because the researched phenomenon bears the attributes of resource exchange patterns, stakeholder involvement and management, this research will seek to apply these concepts in addressing research questions. In order to meet the aforementioned objective, the thesis will oscillate among answering this central question:

How can crowdfunding be best used to bolster successful technological product innovations?

The complex process of answer searching will be facilitated by dividing the central question in smaller steps, the sub-questions, which will be dealt with in this thesis:

1. What are the characteristics of stakeholders and resource exchange process in the crowdfunding?
2. What are the motivations of project creators and funders to engage in crowdfunding?
3. How does stakeholder management influence innovation in the process of crowdfunding?
4. How can innovative capabilities in crowdfunding be exploited in such a way that they contribute to the success of technological product innovations?

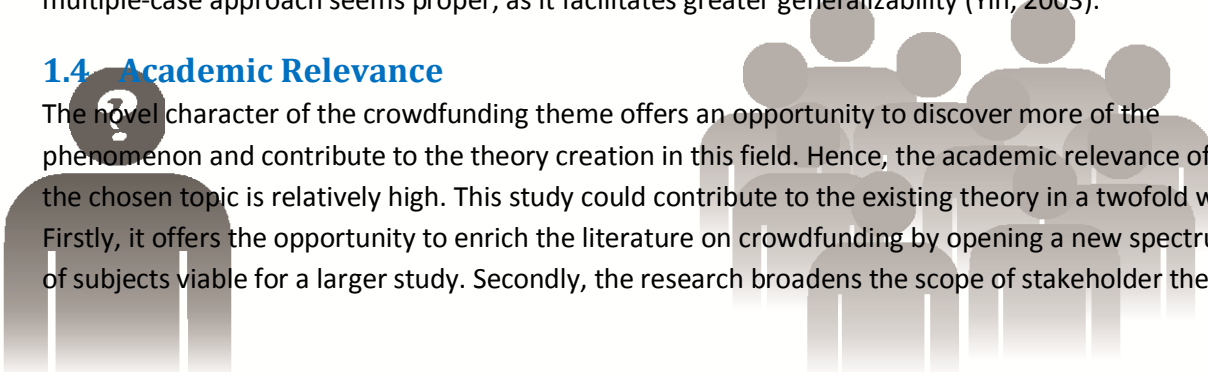
1.3 Research Method

The research involves studying multiple cases, derived on base of purposive sampling principle. In order to set up a design with sufficient generalizability, seven crowdfunding projects will be investigated. According to Yin (2003), this number of cases fosters study's external validity. The cases involve crowdfunding incentives where successfully funded technological product innovations are involved. The sample was drawn from crowdfunded projects, labeled as the most popular by the crowdfunding platforms Kickstarter and Indiegogo. Further, the incentives were admitted for research on base of the first choice principle. In order to satisfy theoretical sampling conditions (Shadish et al., 2002), the projects need to be launched after the successful campaign is terminated, in order to determine the notion of 'successful innovation'. The collected data will come from secondary sources, such as academic literature, working papers and press releases, however primary sources will be involved as well, as the research needs empirical evidence to achieve high levels of validity (Babbie, 2007). For this purpose, project funders, creators and spokesman of the crowdfunding consultancy Polak Potrafi will be interviewed, to enrich the material for analysis.

Given the inductive and emergent character of the study, a qualitative case-based approach is applied. This method enables exploration of the new phenomenon, where crowdfunding qualifies, using various data sources (Yin, 2003). Moreover, this method facilitates the answering of 'how' and 'why' research questions (Babbie, 2007), adopted in this study. Besides, as the findings of this study shall give foundations for the deeper understanding of crowdfunding and innovation, adopting multiple-case approach seems proper, as it facilitates greater generalizability (Yin, 2003).

1.4 Academic Relevance

The novel character of the crowdfunding theme offers an opportunity to discover more of the phenomenon and contribute to the theory creation in this field. Hence, the academic relevance of the chosen topic is relatively high. This study could contribute to the existing theory in a twofold way. Firstly, it offers the opportunity to enrich the literature on crowdfunding by opening a new spectrum of subjects viable for a larger study. Secondly, the research broadens the scope of stakeholder theory



by indicating how the crowd functions as an interest group in innovation process. Other than that, it explicates the broad notions of resources and dynamic (innovative) capabilities.

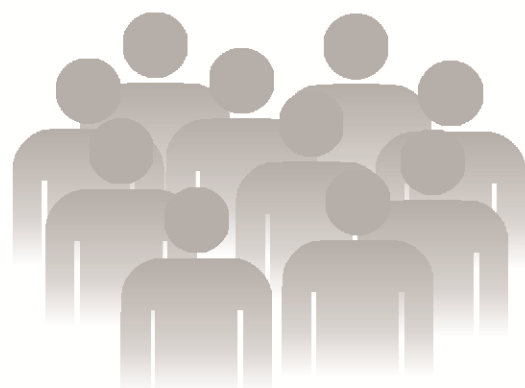
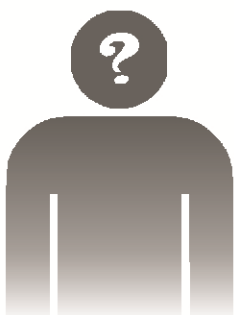
1.5 Practical Relevance

This research could be valuable for all actors involved in crowdfunding. The crowdfunding platforms could focus on stimulating innovative projects by amending project admission conditions, the creators could obtain useful insights on how to direct their project and pitch it towards success, while funders could gain inquiry in which projects offer future potential and are worth supporting.

Furthermore, the outcomes would enable the entrepreneurs to recognize possible benefits and costs carried by initiating a crowdfunding campaign. The findings also have implications for service managers interested in launching or managing crowdfunding initiatives. In other words, this research could dispel the cloud of doubt whether the crowdfunding of technological innovations is just a buzz or a phenomenon likely to remain and bloom.

1.6 Structure of the Thesis

This study is organized in five main chapters. To start with, the research questions are outlined and the context of the study is described. The second chapter contains the theoretical framework where the resource based view (RBV) and stakeholder theory are sketched out as a main conceptual angle, along with relevant information on crowdfunding and innovation. The resulting conceptual model illustrates the main studied variables and linkages between them. In the next section, the research design is described along the lines of the aforementioned model. Moreover, in the methodology chapter, one will find case selection, the interview protocol, data analysis method. And finally reliability and validity of the research are reviewed. The following chapter contains the results of the two parts of research in the context of answering research questions. The thesis closes with concluding remarks, outline of future research possibilities and discussing the limitations of this study.



2 Theoretical Framework

The purpose of this chapter is to give an outline and explanation of the main concepts under the study and provide theoretical linkages between them. The theoretical part will reveal the angle under which the subject will be analyzed, as well as provide insight into crowdfunding. The chapter has the following structure: it begins with defining crowdfunding, incentives and disincentives to engage in this process. Further, it offers the explanation of innovation and its components. Then, theoretical perspectives: stakeholder theory and resource-based view are indicated. The section will be closed by a conceptual model, which will foster further research and data analysis.

2.1 Crowdfunding: Definition and Practice

As mentioned before, involving customers in the development of new, creative inventions may be beneficial. As Surowiecki (2004) noticed, it has been known for decades that a crowd can outsmart an individual, if the group involved is diversified, decentralized and independent. Such groups are able to bring out creative ideas, once their actions are coordinated and aim at the same end (Surowiecki, 2004). As Hienreth and Riar (2013) reason, the expertise of a crowd is likely to provide an evaluation with higher validity and verify the proposed idea more effectively than experts. This paragraph will introduce the idea of crowdfunding - a specific form of engaging crowds in the financing of entrepreneurial projects, which in times of an economic downturn, is increasingly becoming an interesting alternative for financing unusual and impressive projects (Giudici et al., 2012).

The most compelling definition of crowdfunding is given by Belleflamme et al. (2011, p. 7). According to the authors, this process 'involves an open call, mostly through the Internet, for the provision of financial resources either in form of donation or in exchange for a future product or some form of reward and / or voting rights'. Principally, crowdfunding platforms provide opportunities for anyone to pitch their incentive to groups beyond their social network (Gerber et al., 2011). This new model of crowds' engagement transforms the regular customer, as know from marketing theories, into an investor (Ordanini et al., 2011) and source of first-hand information about the possible market for a project in question (Agrawal et al., 2011). Crowdfunding connects the concepts of micro-finance and crowdsourcing, but represents a unique category of fundraising, facilitated by a growing number of internet platforms which allow increased interaction (Mollick, 2013).

Agrawal et al. (2013) describe the working of crowdfunding, as posting and pitching (usually in a form of an amusing video) interesting projects on an online platform, where the project funders make a financial goal they want to achieve. A crowdfunding platform usually has a policy towards admitting a project, which then is placed in a relevant category. Then, potential project funders have 60 days' time to issue their contributions, against a reward, either in monetary or non-monetary manner (Ordanini et al., 2011). The non-pecuniary forms of gratification typically contain the provision of a not-yet marketed product, an acknowledgment of funder's involvement or an opportunity to discuss the business specifications behind the pitched idea (Gerber et al., 2011). A crowdfunded project is only successful when it captures the wished pledges on time, otherwise the financial contributions are returned to the backers. As soon as the project is funded, the crowdfunding platform receives approximately 4-5% of the gathered income (Gerber et al., 2011). In return, project founders are bounded to inform their backers about the progress and deliveries of the rewards. As Giudici et al. (2012) mention, projects from the categories of art or technology are likely to be more successful, since the supporters are met with rewards, that, when coming in a form of a product, are very novel

and unique. In short, it is the novelty of the project that the crowdfunders value the most while issuing financial contributions, because that guarantees the purchase of a product no one else is likely to have (Gerber et al., 2011).

Based on the aforementioned, two unique traits of crowdfunding can be defined (Belleflamme et al., 2011). The phenomenon in case usually involves the purchase of a product not yet available on the market, based on a description or a promise made by project founders towards the project backers. Secondly, the crowdfunders are connected by the feeling that they belong to the group of privileged consumers. This exclusive character can flow in many ways, from engagement in the project, to receiving the rewards for the contributions. As Giudici et al. (2012) observe this reward does not need to have a character of a monetary compensation. Hence, there are several business models for crowdfunding, in which internet platforms can engage:

- Equity – based: project backers have the right for a dividend generated through the income gained by an entrepreneurial incentive
- Lending- based: in this form, the contributors are paid back for their financial involvement, and are entitled to an interest payment as well, in some cases
- Donation- based: this form is characteristic for charity pledges, where the contributors are not compensated for their payments
- Reward - based: here, the project backers are provided with a non-monetary reward for their contributions, for example a product, or an acknowledgment

According to De Buysere et al. (2012), there are also possibilities of hybrid structures, which are then a combination of the aforementioned models. However, it seems these forms are rarely chosen by mainstream crowdfunding platforms (De Buysere et al., 2012).

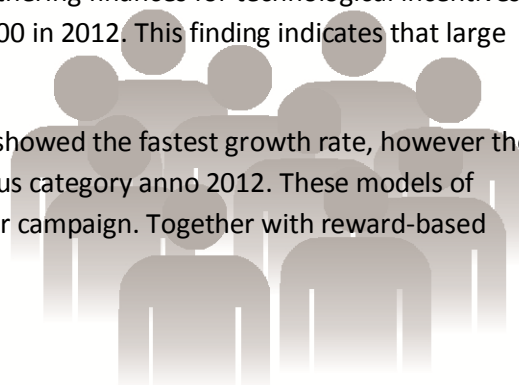
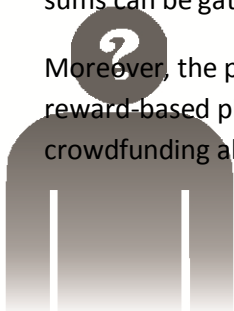
2.1.1 Crowdfunding: Facts and Figures

This section will depict information about the growth of the crowdfunding, by indicating major figures and facts related to the process. The data below is based on the Crowdfunding Industry Report (Crowdsourcing, Massolution).

According to the Crowdfunding Industry Report brought out in 2012, nowadays 452 crowdfunding platforms are active worldwide, the majority of which was located in the North America and Western Europe. This number was expected to grow to 536 by 2013. These platforms raised almost \$1,5 billion together which successfully funded about 1 million campaigns across the world, out of which 654 000 in Europe and 532 000 in the North America. The report also informed that the amount of funds raised grew with 63% Compound Annual Growth (CAGR) since 2009,

The survey conducted among 135 crowdfunding platforms indicated that equity-based and lending-based crowdfunding were the most effective when gathering finances for technological incentives. More than 80% of such campaigns raised above \$25,000 in 2012. This finding indicates that large sums can be gathered by equity-based platforms.

Moreover, the platforms from equity-based category showed the fastest growth rate, however the reward-based platforms still remain the most numerous category anno 2012. These models of crowdfunding also raised the largest sum of money per campaign. Together with reward-based



platforms, the estimated total volume of funding for 2012 capitalized at \$2,806 million, indicating a 19% growth compared with the previous year.

The findings from the Crowdfunding Industry Report indicate that large sums can be gathered by equity-based platforms, where crowdfunding shows to grow in the direction of becoming a feasible alternative for raising capital to finance small businesses and start-ups. Furthermore, the numbers demonstrate that the success rate of the crowdfunding increases, leading to more prosperity in the crowdfunding market.

2.2 Crowdfunding: Motives to engage in the game

As Agrawal and colleagues (2013) elaborate, the success of a crowdfunded project largely depends on the incentives behind the participation of the main actors in crowdfunding: creators, funders and platforms. The aim of this paragraph is to outline the motivations for each actor to engage in crowdfunding.

2.2.1 Creator Motives

According to Agrawal et al. (2013), creators are likely to raise capital through crowdfunding instead of choosing traditional channels, because of two factors: lower cost of capital and access to more information. These factors will be examined in detail below.

2.2.1.1 Lower cost of capital

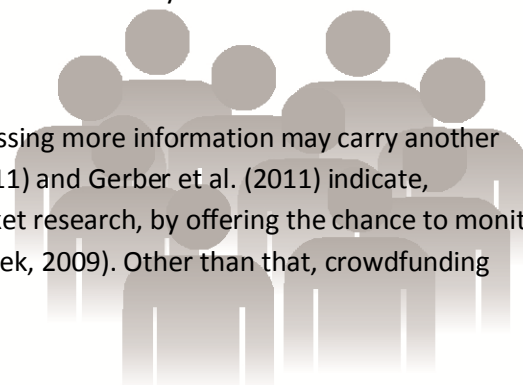
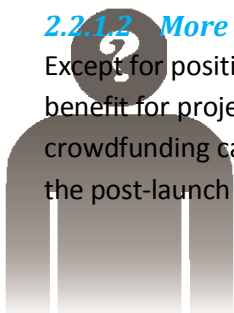
As Agrawal and colleagues (2013) indicate, crowdfunding enables the process of matching creators with funders willing to contribute to the project and the search for such matches happens across the global, not local community. Hence, the access to capital in the crowdfunding process is influenced by creator's location to lesser extent, compared to the traditional mechanisms of financing (Gerber et al., 2011). In another research, Agrawal et al. (2011) reported that for example, in case of the Kickstarter, nearly 86% of the contributions came from backers who on average were parted from the creators by a 3000 mile distance.

Moreover, research by Belleflamme et al. (2011) and Gerber et al. (2011) have shown that in many cases, funders value early access to products and recognition for participation in the process of innovation, all being non-monetary rewards. By providing these experiences to the project backers, creators may be able to lower the cost of capital by providing goods otherwise difficult to trade (Agrawal et al., 2013).

Other than that, the process of crowdfunding can lead to generating more information about the project and creator, as opposed to traditional sources of early stage capital (Ordanini et al., 2011). When this situation takes place, Agrawal et al. (2013) indicate that funders will be likely to show a higher willingness to pay, leading to lower capital cost. However, if the information gathered is negatively related to the expectations of the funders, this factor may have an adverse effect of the capital cost.

2.2.1.2 More Information

Except for positively affecting the cost of capital, accessing more information may carry another benefit for project creators. As Belleflamme et al. (2011) and Gerber et al. (2011) indicate, crowdfunding can serve as a tool for preliminary market research, by offering the chance to monitor the post-launch demand of the product (Lauga and Ofek, 2009). Other than that, crowdfunding



sometimes includes advanced selling of the product, which functions as a demand and quality signal for the creators (Gerber et al., 2011). Following this notion, crowdfunding sometimes enables the creators to obtain valuable input on the offering or the business plan, which comes from the project funders (Agrawal et al., 2013). As the research by Agrawal and colleagues (2013) reports, crowdfunding may thus positively influence the variance of the offering, product innovativeness and lead to increase in value for the potential users.

2.2.2 Funder Motives

Funders have heterogeneous motivations towards the engagement in crowdfunding process. The research by Agrawal et al. (2013) indicated there are five main incentives: access to investment opportunities and new products, community participation, support for the pitched idea and formalization of contracts. These stimuli will be discussed below.

2.2.2.1 Access to Investment Opportunities

While traditional, offline sources of early stage capital provide the funders with access towards local investment opportunities, crowdfunding works globally. This enriches the variety and choice of different project, which 'gives ordinary investors the opportunity to get in on the ground floor of the next big idea' (Gubler, 2013).

2.2.2.2 Access to new products

In some cases, as mentioned before, crowdfunding also allows the purchase of a product pitched before it is available on the market. As Gerber et al. (2011) indicate, for funders who seek tangible rewards for their contributions and belong to the group of early adopters, interested in innovations, this may be an important perk leading to the backing of a project.

2.2.2.3 Community participation

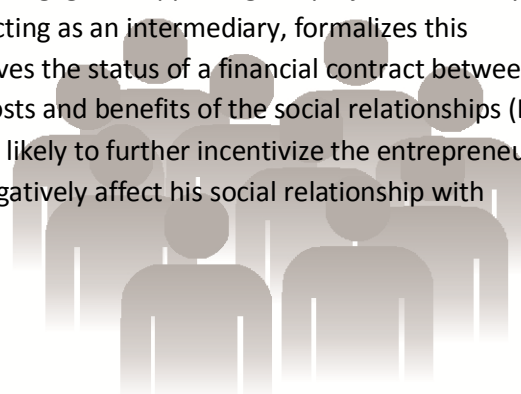
Other than looking at the newness of a product, funders often participate in crowdfunding because they see it as a social activity, which gives them the feeling of being a part of a community (Gerber et al., 2011). The funders also appreciate the participation in an entrepreneurial initiative which provides them with a feeling of recognition (Schwienbacher and Larralde, 2010).

2.2.2.4 Support for an idea

Funders do not necessarily seek pecuniary rewards from participating in crowdfunding. The research of Gerber et al. (2011) provided data on the fact that philanthropy plays a significant role for funders willing to contribute to the pitched idea.

2.2.2.5 Formalization of contracts

In the early stage, crowdfunding usually resembles the bootstrapping type of finance, where the family and friends belong to the group of the most significant contributors (Lee and Presson, 2012). In an offline, traditional setting, these financiers would engage in supporting the project informally, whereas in the process of crowdfunding, a platform acting as an intermediary, formalizes this relationship (Agrawal et al., 2011). This process improves the status of a financial contract between an entrepreneur and the financiers by balancing the costs and benefits of the social relationships (Lee and Presson, 2012). Formalized financial contracts are likely to further incentivize the entrepreneur and discourage ex-ante risk-taking, as failure could negatively affect his social relationship with financiers (Lee and Presson, 2012).



2.2.3 Platform Motives

Crowdfunding platforms are, generally speaking, for profit entrepreneurs. According to Gerber and colleagues (2011), most of the platforms apply a business model which is based on a 4-5% transaction fee for successful projects. Following this trait, the primary objective of a crowdfunding platform is to maximize the number and financial impact of the prosperous entrepreneurial incentives. As such, this requires attracting a large number of project creators and funders, and designing the market for exuberant projects (Agrawal et al., 2011). The more promising the project placed on the platform, the more possibility there is for media attention, which is likely to expand the community participating in crowdfunding (Kain, 2012). In order to achieve these ends, platforms should facilitate fraud reduction and efficient matching between projects and potential funders (Gerber et al., 2011).

2.3 Crowdfunding: factors hampering the participation

On the other hand, crowdfunding also implies several challenges which may have a negative influence on the rise of innovations. These constraints for the cases of project creators and funders will be examined in the section below.

2.3.1 Disincentives for creators

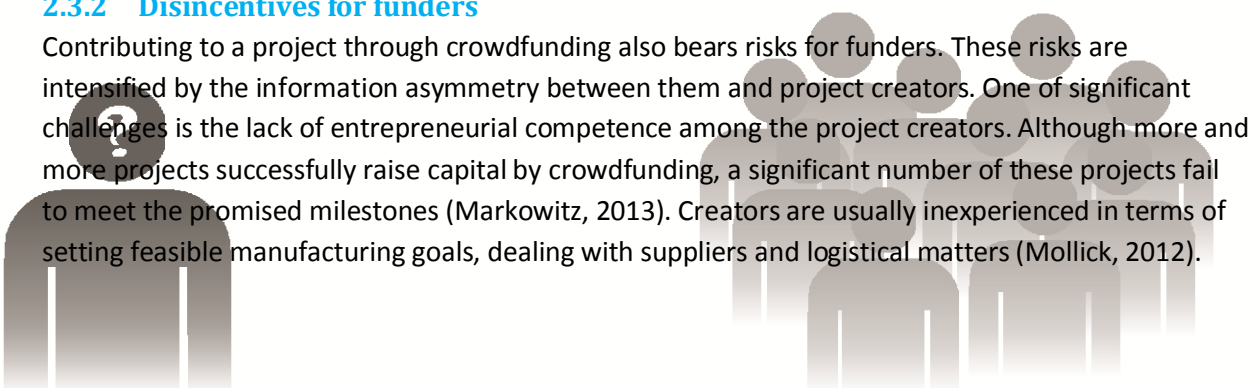
Creators are usually constrained by the demand of full disclosure which leaves some with fear for the imitation of their projects during the period between raising capital and launching their product which is characterized by highest risk for such undesired idea duplication from the side of competitors (Gerber et al., 2011). This may discourage the creators from using crowdfunding as a financing mechanism, since the traditional sources of funding usually allow the creators to keep their innovation secret from the public before launching the offering (Agrawal et al., 2013). The disclosure requirement may also carry negative reverberations on intellectual property protection (Vass, 2013) and on negotiating with suppliers when the necessary funds are collected (Markowitz, 2013).

Another challenge is raised by collecting capital from 'the crowd' instead of professional investors. While venture capitalists or angel investors usually bring added value to the entrepreneurial initiative, such as industry knowledge or status (Hsu, 2004), the crowdfunders are less likely to provide the creators with such benefits, so as they will most likely make less effort to transfer this information to the project creators (Agrawal et al., 2013).

Furthermore, crowdfunding presents a challenge when it comes to managing the stakeholders. As the idea behind the process is that many contributors support a project with lesser amounts, than traditional financiers, a project creator faces the challenge of satisfying more funders (Agrawal et al., 2013). This arrangement can bear significant costs, not only in time and effort, but also in terms of promptly delivering the promised rewards (Wortham, 2012).

2.3.2 Disincentives for funders

Contributing to a project through crowdfunding also bears risks for funders. These risks are intensified by the information asymmetry between them and project creators. One of significant challenges is the lack of entrepreneurial competence among the project creators. Although more and more projects successfully raise capital by crowdfunding, a significant number of these projects fail to meet the promised milestones (Markowitz, 2013). Creators are usually inexperienced in terms of setting feasible manufacturing goals, dealing with suppliers and logistical matters (Mollick, 2012).



The cases of substantial delays in reward delivery discourage funders from contributing to pitched ideas.

Another problem is the possibility of fraud. Because of large geographical distances between creators and funders, as well as limited mechanisms for controlling on the uprightness of the provided information, the creators can subject themselves to crafting fraudulent contents (Mollick, 2012). Another issue increasing the potential for fraud is the fact that the interactions between the creators and funders happens over a short period of time, limiting the time and possibilities for signaling extortions (Agrawal et al., 2013).

An intertwined issue representing a disincentive for funders concerns the riskiness of a project. Early-stage projects bear a significant risk of failure, magnified by creator incompetence, information asymmetry and fraud risk (Agrawal et al., 2013).

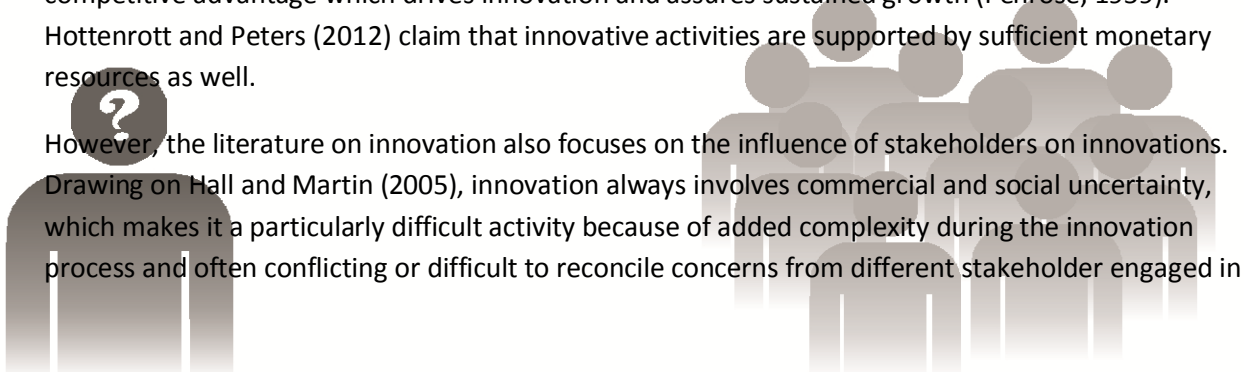
2.4 Innovation: Definition

This paragraph will handle the question of innovation, giving its definition, necessary to understand what an organization needs to successfully innovate.

According to Boer and Gertsen (2003), innovation is the accelerator of growth. Firms need continuous renewal to remain competitive and prosper in dynamic environments (Schumpeter, 1942). Product innovation is one of the strongest means by which organizations can achieve the aforementioned renewal (Dougherty, 1992). In the light of ever changing customer demands and the need for continuous improvement, it is necessary for companies to engage in a process of innovation which is developing 'something new with high levels of originality and substantial, in whatever area that breaks in to (or obtains a foothold in) society, often via the market and mean something revolutionary to people' (Frankelius, 2009, p. 49). Innovation can either include technical, design, or other operational activities, such as management, manufacturing and commercialization of a new product or service (Freeman, 1982). The process of innovation is only accomplished if the groups for whom it is meant and which are supposed to capture benefit from it, accepted the novelty (Frankelius, 2009).

In his research, Frankelius (2009) found that in order to innovate, an entrepreneur has to possess strategic knowledge. An innovation can only be brought about if an entrepreneur is aware of an opportunity and acts upon it. Hence, it is crucial to have the thinking-knowledge, as well as, acting – knowledge, which enables the transformation of an opportunity into a product or service (Drucker, 1966). This 'strategic knowledge' indicated by Frankelius (2009) goes beyond the visualization of an idea. To innovate successfully, as the author argues, one needs business development skills, such as project management, and relationships with potential partners, such as users, suppliers, distributors or even financiers. Hall and Martin (2005) underline the necessity of continuous search for competitive advantage which drives innovation and assures sustained growth (Penrose, 1959). Hottenrott and Peters (2012) claim that innovative activities are supported by sufficient monetary resources as well.

However, the literature on innovation also focuses on the influence of stakeholders on innovations. Drawing on Hall and Martin (2005), innovation always involves commercial and social uncertainty, which makes it a particularly difficult activity because of added complexity during the innovation process and often conflicting or difficult to reconcile concerns from different stakeholder engaged in



innovation process. Berman and colleagues (1999) support this notion by arguing that managers who do not consider the effects of deciding on innovating and allocating resources vis-à-vis the stakeholders, are at competitive disadvantage, comparing to their counterparts who take a holistic approach towards innovation and stakeholder management. On the other hand, a stakeholder analysis during innovation process brings challenges of complexity and ambiguity (Hall and Martin, 2005). Complexity is a situation where many interactions lead to compromises or less ideal solutions which may not be fully understood by organizations (Franken, 2001). Including stakeholders in the innovation process thus means that there are many interactions to manage. Hall and Vredenburg (2003) address the notion of stakeholder ambiguity, which involves dealing with different demands and goals from the engaged parties. Following the aforementioned, complexity requires the increased commitment of means, whereas ambiguity requires understanding that different stakeholders want to achieve disparate ends.

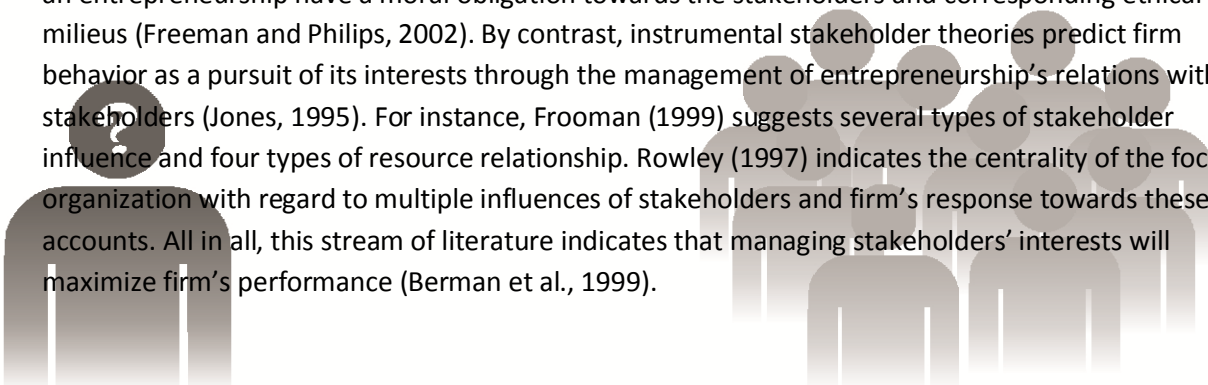
Drawing on the information above, in order to innovate, one has to acquire dynamic capabilities and resources, which will be controlled, exploited and explored. However, it is also important to bear in mind the art of managing stakeholder relations.

2.5 Innovation & Crowdfunding: Resources, capabilities and stakeholders

Following this logic, the renewal of an organization involves developing and expanding competences (Floyd and Lane, 2000). Taking the resource-based view lens, Leonard - Barton (1992) found that firm's capabilities and resources generally speaking enhance product innovation, but followed rigidly, impede innovativeness. Hence, there is an increasing need for firms to continuously acquire new resources, bundle and reconfigure them in a creative way, so that they become a source of new, original capabilities (Eisenhardt and Martin, 2000). This notion is also known as developing dynamic capabilities (Teece, et al., 1997), which over time become a source of new ideas, embedded in developing more innovative products (Eisenhardt and Martin, 2000). Danneels's (2002) research indicated that advancements in product innovation function as means for organizational learning and generating knowledge.

2.5.1 Dealing with Interest groups: Stakeholder Theory

Stakeholder theory deals with the nature of the relationship between the entrepreneurship and its stakeholders. According to Freeman (1984), stakeholders are 'any group or individual who can affect or is affected by the achievement of organization's objectives' (p. 46). It is thus important for firms to pay attention to stakeholder influence for normative and instrumental reasons. Normative accounts of stakeholder theory move firm-stakeholder relations into an ethical domain, proposing that managers should consider the interests of those who have stakes in the organization (Mitchell et al., 1997). In this perspective, stakeholders have a legitimate interest in the firm's actions or products and these engagements carry an intrinsic value (Donaldson and Preston, 1995). Hence, managers of an entrepreneurship have a moral obligation towards the stakeholders and corresponding ethical milieus (Freeman and Philips, 2002). By contrast, instrumental stakeholder theories predict firm behavior as a pursuit of its interests through the management of entrepreneurship's relations with stakeholders (Jones, 1995). For instance, Frooman (1999) suggests several types of stakeholder influence and four types of resource relationship. Rowley (1997) indicates the centrality of the focal organization with regard to multiple influences of stakeholders and firm's response towards these accounts. All in all, this stream of literature indicates that managing stakeholders' interests will maximize firm's performance (Berman et al., 1999).



One of the first challenges for organizations is to identify their stakeholders. So far, scholars classified stakeholders into primary and secondary groups (Clarkson, 1995). The former group, the core, includes stakeholders who are essential for the business to exist or a formal, contractual relationship with the entrepreneurship. Hereby one has to think of for example owners, employees, customers or supplies. The latter group consists of social and political stakeholders who play a vital role in achieving business' credibility and acceptance of its activities. The examples of the secondary stakeholders include the non-governmental organizations (NGOs), communities, governments and competitors.

Assuming that stakeholders have been identified, the next objective of an entrepreneurship is to develop strategies for dealing with them (Mitchell et al., 1997). This may be a difficult matter, because different stakeholders usually have contrasting interests, contradicting goals and diverse priorities. Harrison and St. John (1996) list several examples of stakeholder management practices and suggest that the chosen tactic depends on the strategic importance of a stakeholder to a firm. Accordingly, traditional stakeholder management techniques, such as buffering, attempt to satisfy stakeholder's needs while partnering activities enhance the bridge-building and pursuit of common goals (Harrison and St. John, 1996).

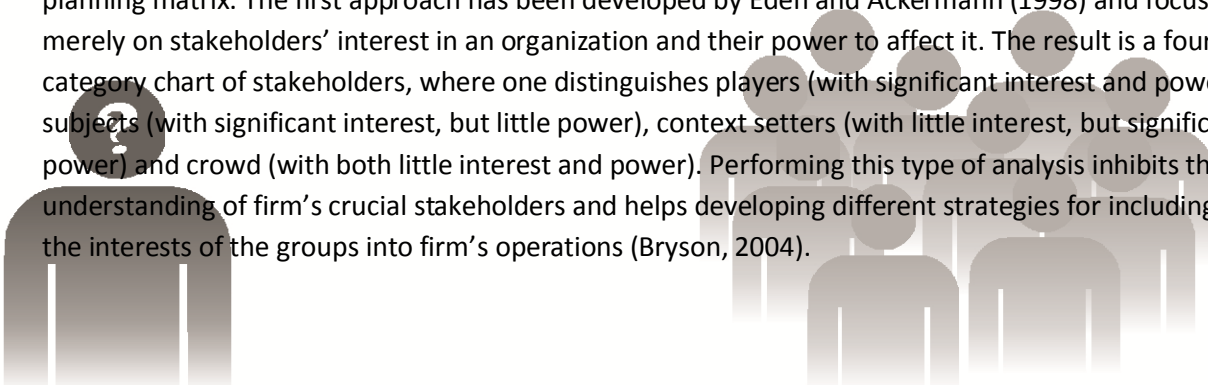
2.5.2 Techniques of Stakeholder Analysis and Involvement

In order to recognize which stakeholders are important for the existence of an entrepreneurship and understand their potential and role therein, it is important to develop a strategy for stakeholder management process. According to Ansoff (1956), such process should begin with identifying critical stakeholders. In this phase, management should understand the needs of stakeholders in order to set up firm's operations. This step is successfully accomplished, if an entrepreneurship recognizes and integrates the interests of all its stakeholders and incorporates these into the operations.

In order to find out which stakeholders are important for a company in its specific life cycle, Mason and Mitroff (1982) propose to carry out an environmental scan. As such, stakeholders can be grouped according to their roles and influence, and be placed in primary or secondary categories. This process enhances the development of knowledge about firm's environment and allows placing the entrepreneurship in a systemic perspective (Pfeffer and Salancik, 1978). Accordingly, stakeholder analysis increases the possibility of focusing on the concrete, firm specific stakeholders, which contributes to developing practices that maximize the value of an organization and its constituencies.

There is a wide range of tactics that can be used by an entrepreneurship to manage their stakeholders and develop strategies. These are best described by Bryson (2004).

The author mentions that the most basic and frequently used techniques of stakeholder identification are the power versus interest grid, stakeholder influence diagram or participation planning matrix. The first approach has been developed by Eden and Ackermann (1998) and focuses merely on stakeholders' interest in an organization and their power to affect it. The result is a four-category chart of stakeholders, where one distinguishes players (with significant interest and power), subjects (with significant interest, but little power), context setters (with little interest, but significant power) and crowd (with both little interest and power). Performing this type of analysis inhibits the understanding of firm's crucial stakeholders and helps developing different strategies for including the interests of the groups into firm's operations (Bryson, 2004).



The stakeholder influence diagram is applied, when an organization wishes to find out how stakeholders on the power vs. interest grid influence one another (Eden and Ackermann, 1998). It starts with undertaking the aforementioned technique, however the modification is adding the information on which influence relationships exist, which are most important and what is the direction of the influence, on the chart (Bryson, 2004).

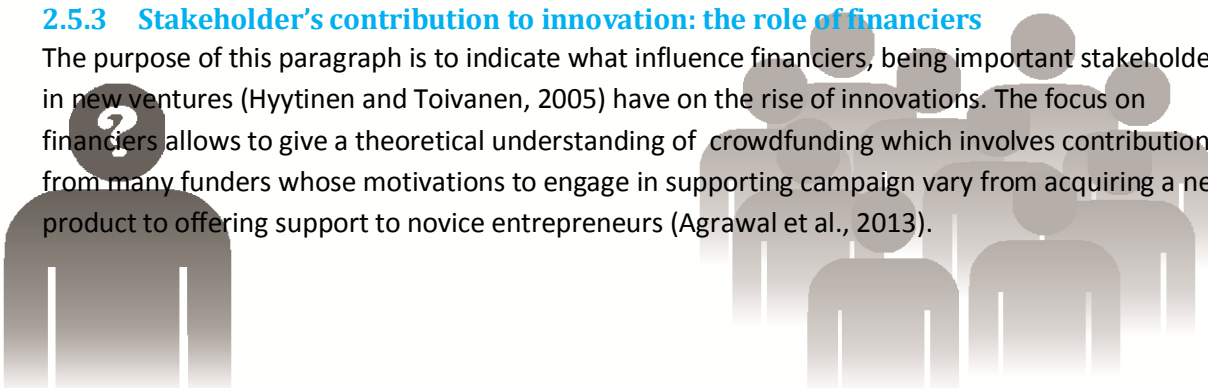
The participation planning matrix may result from the previous undertakings and focuses on establishing a closer contact or communication with the most vital stakeholders, as perceived by an organization (Bryson, 2004). Its purpose is to engage in partnerships with stakeholders, where the latter are empowered in some way and are given influence on decision making (Eden and Ackermann, 1998). The tapping of individual stakeholder interest serves the purpose of pursuing a common good and ensuring that there is a fit between an organization and its constituency (Freeman, 1984).

The aforementioned emphasizes that a stakeholder approach expresses the idea of active management of the business environment, relationships and promotion of shared interests (Freeman, 1984). This technique promotes active plotting of a new direction of an entrepreneurship with consideration how the firm can affect the environment and vice versa. Therefore, a solid stakeholder analysis may have a positive influence on firm's survival, as it carefully balances and integrates multiple relationships and objectives (Mason and Mitroff, 1982). Along this line, stakeholder management encourages developing strategies by looking at a firm's inside characteristics and identifying, investing in all the relationships that will most likely lead to firm's success (Freeman, 1984), which is directly connected to the resource - based view of the firm, constituting a substantial part of the theoretical chapter. And, as Freeman (1984) commented *'corporate survival depends in part on there being some fit between the values of the corporation and its managers, the expectations of stakeholders in the firm and the societal issues which will determine the ability of the firm to sell its products'* (p. 107), hence there is a potential value of including this theory in this thesis.

However, as Harrison and St. John (1996) indicate, stakeholders need to be not only understood, but also managed over the long run. These authors distinguish here between two basic techniques: buffering and bridging. The first is a more traditional approach, which is aimed at containing the effects of stakeholders on the firm. It includes performing market research, engaging in public relations and planning. In contrast, bridging involves forming strategic partnerships. This approach involves recognizing common goals and lowering the barriers between an organization and its external stakeholders. However, in both of the undertakings, it is important to invest sufficient resources in communication with stakeholders, as it clarifies the intentions of the firm and enhances mutual understanding between the organization and its constituencies (Harrison and St. John, 1996).

2.5.3 Stakeholder's contribution to innovation: the role of financiers

The purpose of this paragraph is to indicate what influence financiers, being important stakeholders in new ventures (Hyytinen and Toivanen, 2005) have on the rise of innovations. The focus on financiers allows to give a theoretical understanding of crowdfunding which involves contributions from many funders whose motivations to engage in supporting campaign vary from acquiring a new product to offering support to novice entrepreneurs (Agrawal et al., 2013).



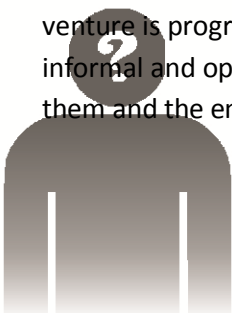
According to Hyytinen and Toivanen (2005) innovative ventures suffer from information asymmetries. Because innovation involves large uncertainty about the acceptance of the offering in the market, entrepreneurial ventures face higher cost of capital than the larger competitors. Hence their need is one for financing that offers not only the monetary resources, but also non-pecuniary assistance (Hall and Martin, 2005).

So far, lots of scientific literature investigated the influence of venture capitalists on innovation and reported its superiority in provision of resources over the more traditional institutions – banks (Gompers and Lerner, 2001). Indeed, venture funding has a strong positive impact on the rise of innovations (Kortum and Lerner, 2000). Venture capital (VC) is defined as equity or equity-linked investments in young, privately held companies, where investor is a financial intermediary who is typically active as a director, advisor, or even a manager of the firm (Kortum and Lerner, 2000). Audebert and Lehmann (2004) discussed the role of debt-based financiers in the process of innovation and found that institutions, such as banks, are able to create a milieu favorable for novel ideas, since their role is similar to the one filled by venture capitalists in a bank-based system. Therefore, under this study it is assumed that benefits brought by VCs to the companies can be equally relevant in case banks provide the financial assistance.

Knowing that financiers are likely to have a positive impact on innovation, it is important to determine how this effect rises. Brophy and Verga (1992) found that ventures with VC backing were found to outperform firms without similar connections and that such venture benefited from the prestige brought about by their VC underwriter. The research of Sapienza and Timmons (1989) brings advancement to these findings by indicating that VCs assume three role types when engaging in entrepreneurial incentives: strategic, supportive and networking. Rosenstein (1988) indicated that next to assuming the key roles (for instance sounding board, financier, contact, management recruiter); venture capitalists also tend to act as mentors and confidants of entrepreneurs with less start-up experiences.

Sapienza (1992) in his study found that venture capitalists are more likely to bring the aforementioned benefits the new entrepreneurs that pursue innovations. He reasoned that ventures willing to gain competitive advantage through technological innovations face great information asymmetries and other impediments. In order to stay ahead of the competition, their product has to be original and achieve acceptance in the market. Venture capitalists are attracted to these types of incentives because they offer an opportunity of high returns. Moreover, VCs are aware of their boundary-spanning functions in a milieu with information deficiencies (Gomez-Mejia and colleagues, 1990). In such way they provide valuable knowledge and service to the entrepreneurship, used to create competitive strategy and performing market research (Sapienza and Timmons, 1989). Other than that, VCs provide credibility with suppliers and customers (Timmons and Bygrave, 1986).

Other than that, entrepreneurs are likely to benefit from venture capitalist's wealth and start – up experience. VCs offer insight on what to expect on different stages of firm-building and on how a venture is progressing (Sapienza, 1989). Because of their often mentoring role, VCs tend to choose informal and open relations with their portfolio companies which improve mutual trust between them and the entrepreneurs (Gupta, 1987).



To conclude, successful venture capital investing in innovative companies requires more than monetary investments. Entrepreneurs tend to seek for venture capitalists with remarkable reputation because of the opportunity for obtaining value-adding, non-monetary support (Timmons and Bygrave, 1986).

2.5.4 Innovation: Resource-Based View of the Firm and Dynamic Capabilities

As previously mentioned, stakeholders and especially financiers provide several important clues for an entrepreneurship, where resources form an important component. Therefore, this paragraph will focus on the role and meaning of these means in the innovations process.

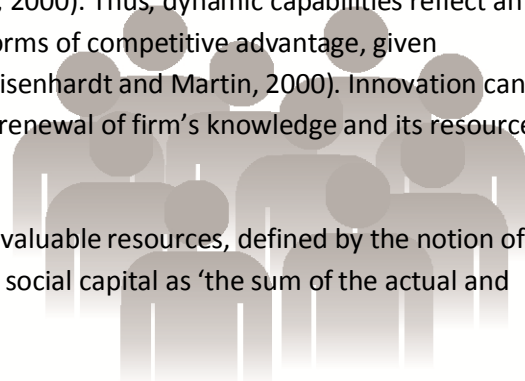
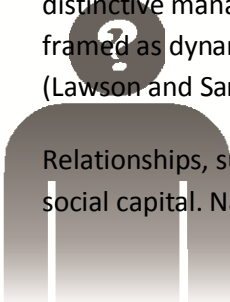
Resource – based view (RBV) has been developing towards a promising theory in strategic management field over recent years (Kraaijenbrink et al., 2010). Focusing on a firm-level analysis, RBV suggests that differences in firm's performance are primarily the result of resource heterogeneity across firms (Wernerfelt, 1984). Firms that are able to accumulate resources and capabilities that are valuable, rare, non-substitutable, imperfectly imitable and organizable (VRINO) will achieve a sustained advantage over competitors, assuming the resources are heterogeneous and immobile (Barney, 1991). Barney (1991) indicates that a competitive advantage can be achieved when a firm is implementing a value creating strategy that is not simultaneously implemented by any current or potential competitor. A firm has a sustained competitive advantage when competitors are unable to implement the strategy of the firm (Barney, 1991).

A distinction normally made is between resources and capabilities, where 'resources are stocks of available factors that are owned or controlled by a firm and capabilities are an organization's capacity to deploy resources' (Amit and Schoemaker, 1993, p. 35). Resources are usually tradable on markets and can be divided into tangible and intangible assets (Barney, 1986). By contrast, capabilities reside in routines that are intrinsically intangible and embedded in the firm, hence cannot be traded on markets (Kogut and Zander, 1992).

A firm can preserve sustained competitive advantage not by engaging in strategic planning, as this activity can be imitated by competitors (Barney, 1991), but by achieving a good reputation, which is valuable, rare, hard to imitate and non-substitutable. Firm's reputation is also a socially complex resource, which enhances the possibility of an entrepreneurship achieving a sustained competitive advantage (Barney, 1991).

Drawing from evolutionary theory of a firm, the dynamic capabilities approach emerged as an extension of the RBV. Dynamic capabilities are defined as 'the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments' (Teece et al., 1997, p. 516). These capabilities are considered as antecedent organizational and strategic routines by which managers acquire resources, modify, integrate and recombine them to generate new value-creating strategies (Eisenhardt and Martin, 2000). Thus, dynamic capabilities reflect an organization's ability to achieve new and innovative forms of competitive advantage, given distinctive managerial and organizational processes (Eisenhardt and Martin, 2000). Innovation can be framed as dynamic capability since it is crucial for the renewal of firm's knowledge and its resources (Lawson and Samson, 2001).

Relationships, such as one with stakeholders, are also valuable resources, defined by the notion of social capital. Nahapiet and Ghoshal (1998) define the social capital as 'the sum of the actual and

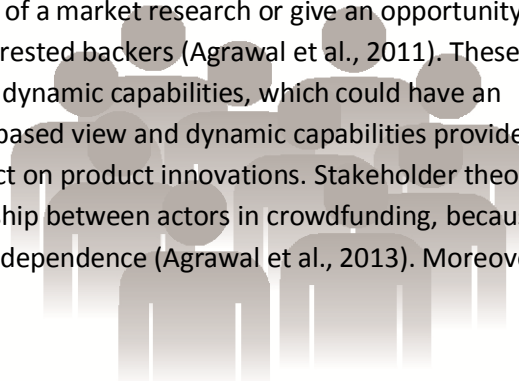
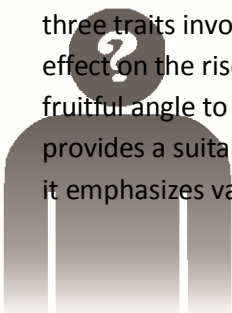


potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit (1998, p. 243). Svendsen et al. (2001) use this terminology to measure the quality of firm's relationships with its stakeholders. In their research, the most importance is put on mutual trust and reciprocity on the one hand, and shared understanding of goals, on the other. Moreover, Svendsen et al. (2001) argue that social capital, understood from the two aforementioned dimensions, creates value for the organization. Yet, the entrepreneurs, in order to capture this 'stakeholder capital' have to, usually, leverage knowledge.

Knowledge acquisition, networking and learning have been widely recognized in the academic literature as the main components in creating dynamic capabilities (Grant, 1996). Tsai and Ghoshal (1998) highlighted the importance of relationships and interactions for knowledge transfer both within and across the boundaries of an entrepreneurship, constituting the exchange of knowledge between a firm and stakeholders. Hence, increased stakeholder engagement can be seen as a source of knowledge, being the engine of innovation (Teece et al., 1997) and generating VRINO-resources, needed for the achievement of sustained competitive advantage, while it also bears the risk of disclosing important information towards the third party.

Despite that the aforementioned scholarly thoughts give a frame to understand how resources and capabilities affect innovation, they lack explication. The study of Danneels (2002) distinguishes between the development of technological and customer competences as key resources for better product innovation. The competences involve the ability to create something by using different resources, material or immaterial (Grant, 1996). Firms thus have to be able to develop technologies to make the product and attract customers who will purchase it. The customer competence involves performing a market research, where a firm gets to know the clientele and its preferences. Organizations often engage their stakeholders to create this type of knowledge (Freeman, 1984). The same is true for developing new technologies which give the means to physically make a product. Engaging is collaboration and co-innovation with suppliers is an example of how firms achieve this distinctive competence (Kaufmann et al., 2000). However, in order to develop valuable relationships with stakeholders, it is necessary to live up to their expectations (Donaldson and Preston, 1995). Effective strategy is stakeholder management enables to access knowledge, develop increased learning capability, resulting in increased innovation, better reputation and trust (Rodriguez et al., 2002), all being VRINO-resources, which recombined, give a foundation for competitive advantage (Barney, 1991).

Knowing these up-front, the resource-based view and stakeholder theory form appropriate perspectives to analyze crowdfunding and its effect on bolstering innovation. Crowdfunding offers the entrepreneurs the alternative mode of raising funds for the development of their incentives. Creators are bound to disclose the information of their project in an elevator pitch video. In return, funders provide small pecuniary contributions, and as the monetary goals are reached, the campaign is successful. Besides, crowdfunding may imply a form of a market research or give an opportunity to the creators to discuss their business models with interested backers (Agrawal et al., 2011). These three traits involve the resources and development of dynamic capabilities, which could have an effect on the rise of innovations. Hence, the resource based view and dynamic capabilities provide a fruitful angle to analyse the crowdfunding and its effect on product innovations. Stakeholder theory provides a suitable framework to analyze the relationship between actors in crowdfunding, because it emphasizes values such as participation and mutual dependence (Agrawal et al., 2013). Moreover,



Rodriguez et al. (2002) suggest that strengthened stakeholder relationship can lead to significant competitive advantage, in the form of trust, reputation and innovation, all important for a successful crowdfunding campaign (Agrawal et al., 2013). Besides, as crowdfunding involves interacting with many funders, effective stakeholder management can be a key element in obtaining the resources necessary to carry out a project.

2.6 A conceptual model

The objective of this section is to combine the available information on the subject of the crowdfunding and supporting the rise of innovations to underpin a theoretical model that links the elements indicated in the theoretical framework. To create a solid starting point for the methodology and data analysis, for each research question it is described which relationships between variables are studied in order to answer the central question. The main variables under study are:

- The resource acquisition – an independent variable
- The resulting success of innovation - a dependent variable

The relationship between the dependent and independent variable is influenced by two other notions: the stakeholder involvement and acquisition of innovative capabilities.

The relationships outlined above need to be investigated in order to answer the main research question: *'How can crowdfunding be best used to bolster successful technological product innovations?'* Figure 2-1 depicts the conceptual model, giving foundations for the upcoming chapter, where the research design will be described. The arrows connecting variable represent the linkages or relationships, not necessarily causal. Only the first relationship, between the acquisition of finances and the success of an innovation can be stated as causal, due to rich literature background available in this specific field. Other causality – related assumptions are rather conservative, which is brought on by the novelty of the studied area. The results of the study will indicate the possibilities for future research, where potential causal relationships could be established. Further, the graphically outlined relationships will be described in the context of the study.

The above indicated relationships will be investigated in the following sub-questions.

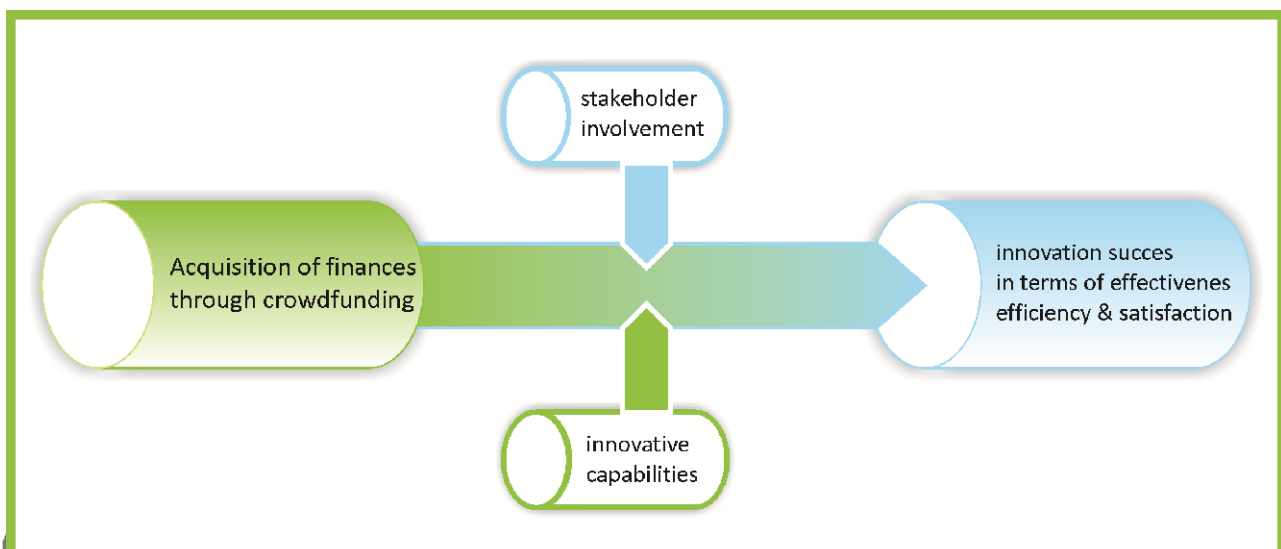


Figure 2-1 Theoretical model: financial resource acquisition and innovation success through crowdfunding influenced by stakeholder involvement and acquisition of innovative capabilities.

1. What are the characteristics of stakeholders and resource exchange process in the crowdfunding?
2. What are the motivations of project creators and funders to engage in crowdfunding?
3. How does stakeholder involvement influence innovation in the process of crowdfunding?
4. How can innovative capabilities in crowdfunding be exploited in such a way that they contribute to the success of technological product innovations?

Crowdfunding is an initiative undertaken to raise money for a new project proposed by someone, from– the crowd, hence the process involves many possible funders. The resource- based view perspective advocates that firms with VRIN resources and an organization in place to handle them have a sustained competitive advantage (Barney, 1991). Frankelius (2009) translates the notion of competitive advantage as an enhancement for innovation. Hence, the first, crucial relationship in the model above: between the resource acquisition, thus attainment of pecuniary and non- pecuniary resources, and how innovation’s success is affected by it in the process of crowdfunding. This relation is also reflected in the first sub-question above.

There are two major parties with stakes in the crowdfunding process: project creators and project backers. Thus, the innovators willing to succeed in financing their crowdfunding campaigns need to satisfy the expectations of many stakeholders (Ordanin et al., 2009), by providing them with updates and adequate, timely rewards for their contributions, which is a complex process. Following the concept of stakeholder management, Hall and Martin (2005) observed, that reconciling different demands from various interest groups is an important factor when dealing with product innovations. Because introducing original inventions is a complex, uncertain process, Tipping et al. (1995) underline that the importance of having all vital interest groups on board in a valid contribution to its success. Including stakeholders in innovation will be more likely to enhance trust in the entrepreneurship, enrich the social capital of the entrepreneur and deliver strategic knowledge necessary for product launch (Afuah, 1998). However, the right involvement of interest groups by using specific techniques is the key to better mutual understanding (between the organization and its constituencies) and establishing a value – exchange relationship between them which may lead to firm’s better performance (Freeman, 1994). The aforementioned relationship which is the influence of stakeholder involvement on the success of innovation is illustrated in the second and third sub-questions.

Although crowdfunding enables entrepreneurs to acquire new resources (Ordanini et al., 2001), it is not enough to ascertain that the necessary VRINO criteria will be satisfied (Teece et al., 1997). Resources need to be bundled and reconfigured in a creative way, so that they become a source of new, original capabilities (Eisenhardt and Martin, 2000). This notion is also known as developing dynamic or innovative capabilities (Teece, et al., 1997), which over time become a source of new ideas, embedded in developing novel products. The examples of dynamic capabilities also involve generating knowledge, absorptive learning and networking (Grant, 1996). The generation of these unique traits is also likely to have an effect on the success of an innovative project (Teece, 2007). Teece’s (2007) concept of dynamic capabilities essentially says that what matters for business is corporate agility: ‘the capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the enterprise’s intangible and tangible assets’ (2007, p. 1). According to Frankelius (2009), it capitalizes at possessing the strategic knowledge, necessary to innovate.

Hence, the assumption, that the possession of dynamic capabilities influences the relationship between resource acquisition and innovation's success, reflected in sub – question one and four of this study.

The conceptual model, derived from the theoretical deliberations in this chapter, will give the foundation for the subsequent chapters of this thesis. The model resembles a solid starting point for the research plan, since for each research question it is described which relationships between what variables are investigated in order to answer the central research question.

2.6.1 Operationalization of the variables

Operationalization is an important part of the empirical research process, as it relates the most important variables and relationships to the conceptual framework (Babbie, 2007). Moreover, it indicates the measurement of the variables under study. This section will explain the operational definitions of the concepts used in the aforementioned conceptual model and derived from theoretical framework. It will oscillate among defining the fuzzy concepts indicated by the literature in order to transform them to the theoretical concepts which then become measurable and understandable in terms of empirical observations (Babbie, 2007). Table 2-1 lists the units of measurements and source used for collecting the data for each of the variables involved.

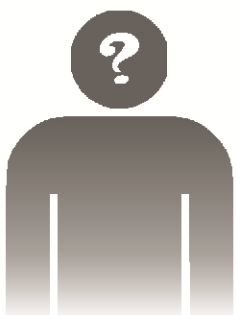
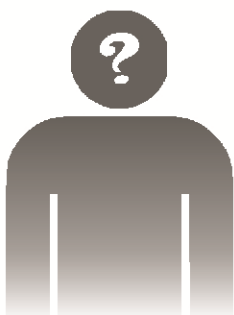


Table 2-1 Operationalization of the conceptual model.

Variables:	Measurement:
Independent Variables:	
Acquisition of Finances through Crowdfunding	<p>Acquisition of sufficient financial means through crowdfunding:</p> <ul style="list-style-type: none"> - The exact amount pledged or an amount exceeding the pledge <p>Measured in terms of currency units</p>
Stakeholder Involvement	<p>Performance of managerial activities related to stakeholders:</p> <ul style="list-style-type: none"> - Identifying stakeholders (Ansoff, 1956), - Performing stakeholder analysis (Pfeffer and Salancik, 1978), - Applying either buffering or bridging techniques in approaching stakeholders (Harrison and St. John, 1996), - Communicating with stakeholders (Freeman, 1984), - Involving stakeholders in the project on different levels than financial: empowering in decision making and establishing partnerships (Bryson, 2004). <p>Measured in percentages of cases displaying the aforementioned characteristics (yes/no)</p>
Innovative Capabilities	<p>The ability to integrate, build, and reconfigure internal and external competences (Teece, 1997):</p> <ul style="list-style-type: none"> - Successful networking - Generating useful knowledge - Learning capability - Coordination capability (assessing existing resources of any kind and defining new possibilities of reconfiguration) <p>Measured in percentages of cases displaying the aforementioned characteristics (yes/no)</p>
Dependent Variable:	
Success of Innovation in terms of efficiency and effectiveness	<p>Focus on technological product innovation:</p> <ul style="list-style-type: none"> - The incentive should include a creation of (technology-related) product representing either continuous or discontinuous innovation type, that is either an improvement of existing ideas or a breakthrough incentive - The innovation's success is assessed in terms of: meeting stakeholders' expectations as to the product delivery and its features; as well as founders' self-reflection on time and other resources involved in achieving these ends compared to eventual returns - Hereby the concepts of efficiency and effectiveness will be applied (Campbell et al., 1974). Efficiency is assessed as the extent to which the resources put into the project or task, translated into its satisfying execution from the perspectives of creators (time, money, other resources → receiving sufficient funding and immaterial resources) and funders (granting contributions and/or feedback → degree of involvement in the incentive and/or contentment with the reward). - Effectiveness will be measured as taking up actions leading to the achievement of a desired end, from the perspective of creators and funders (depending on expectations). For creators: involving their (or firm's) skills (experience, capabilities) and means (financial, non-financial) to manage the interests of backers and deliver a product, that gives contentment to them as well as the funders, in a timely manner, resulting in a sense of achievement. For backers: issuing financial and non-financial support adequate to the expected rate of involvement, in order to receive a sense of achievement from the reward and/or the degree of involvement (co-creation) in the campaign. <p>Measured in terms of percentages of cases displaying the aforementioned characteristics</p>



3 Research Plan

This chapter discusses the methodological approach of the study. The chapter will in the first instance outline the research design, methodology and case selection for each part of the investigation. In this paragraph the methods to carry out the research parts outlined above will be described. Following, the data collection methods and interview protocol will be indicated. The chapter will close with discussion on the validity and reliability of the study.

3.1 Research Design

Crowdfunding is a phenomenon that only recently gained the interests of academia (Ordanini et al., 2011). Therefore, most of the literature is rather young and there is ample room for research in any branch of the subject. In order to receive as much information as possible on the field itself and broaden the existing theories on crowdfunding, the qualitative study is appropriate where several cases will be analysed (Babbie, 2007). This method enables exploration of the phenomenon, using various data sources (Yin, 2003). Moreover, it facilitates the answering of 'how' and 'why' research questions (Babbie, 2007), adopted in this study. Besides, as the findings of this study shall give foundations for the establishment of a deeper understanding of the phenomenon with substantial implications for business practice, adopting multiple-case approach seems proper, as it facilitates greater generalizability (Yin, 2003). The detailed methodological approach is outlined below.

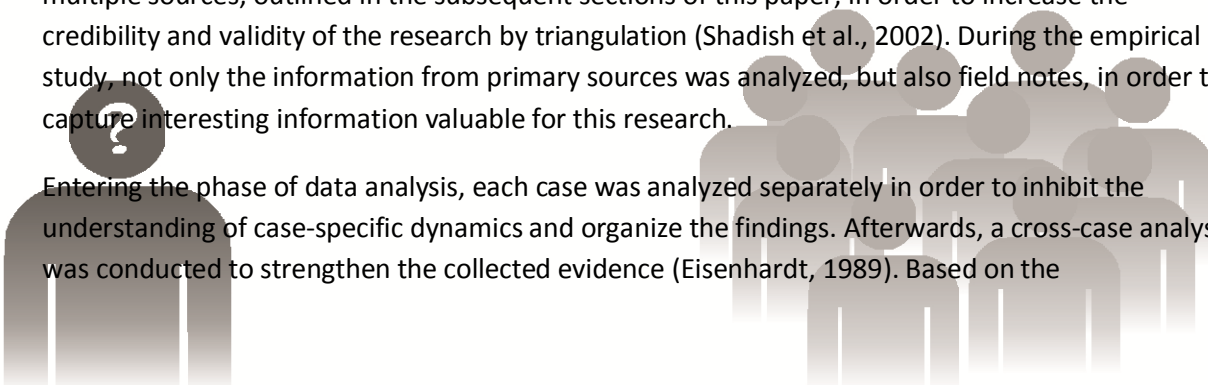
3.2 Methodology

This research will yield an empirical character. Here, seven cases of successfully crowdfunded projects will be analyzed based on primary sources, consisting of interviews among crowdfunding experts, project creators and project funders. The primary data will be enriched with secondary sources with information about the chosen projects.

Given the choice of theme and the inductive nature of the research questions, a qualitative, case-based approach is employed in this research. This technique is useful when the research objective is to achieve deeper understanding of a novel phenomenon, the concepts and contexts which are undefined because of a lack of previous theory (Eisenhardt, 1989), and when the phenomenon has not yet received adequate coverage in the extant literature (Yin, 2003). Crowdfunding exhibits the features above and, therefore the case-based approach is suitable for investigating it.

Following Eisenhardt (1989), generating a deeper understanding of a phenomenon is organized among eight steps, which will be briefly outlined here in the context of this study. The thesis oscillates among well-defined and focused research questions, which inhibit establishing constructs and measures (Eisenhardt, 1989). Secondly, the cases were selected based on purposive sampling, to gather useful information, which connect with the variables under study and whose in-depth research will ideally lead to extending the existing theory on crowdfunding. Data were collected from multiple sources, outlined in the subsequent sections of this paper, in order to increase the credibility and validity of the research by triangulation (Shadish et al., 2002). During the empirical study, not only the information from primary sources was analyzed, but also field notes, in order to capture interesting information valuable for this research.

Entering the phase of data analysis, each case was analyzed separately in order to inhibit the understanding of case-specific dynamics and organize the findings. Afterwards, a cross-case analysis was conducted to strengthen the collected evidence (Eisenhardt, 1989). Based on the



mentioned, propositions were built in order to ground the case-based evidence for the purpose of extending available theory, deepening the understanding of the phenomenon under study and increasing internal validity of the research.

In the last two steps, the information from case studies was compared to the literature gathered in the previous chapter to enhance generalizability and construct validity of the research (Eisenhardt, 1989) and acquire new insights in the studied matter. Finally, the project is closed by issuing conclusions and implications for managerial and academic practice.

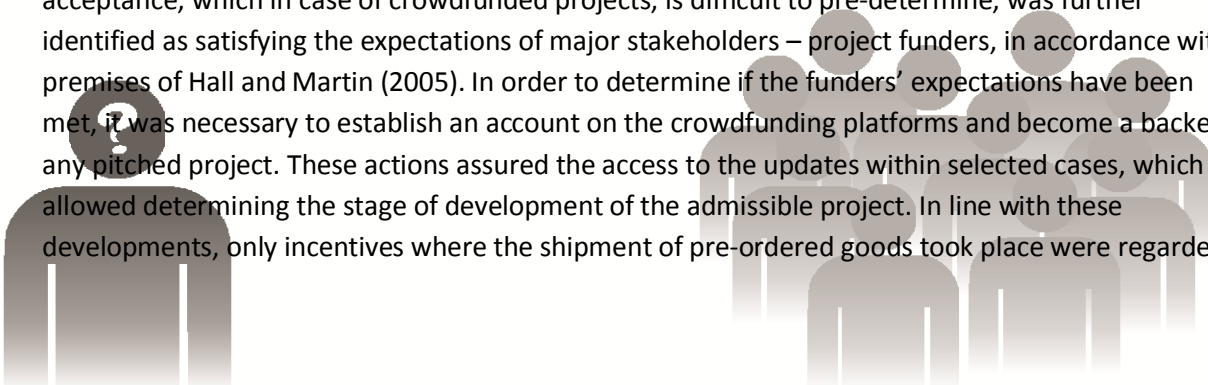
3.2.1 Sampling

In order to properly select the cases upon which the research will be carried out, it is necessary to first identify the units of observation and units of analysis. The former involves the entity upon which information is received (Babbie, 2007). The latter capitalizes on defining who or what is being studied (Babbie, 2007). Hence, for this study the units of observation are individuals who will be approached for an interview, as mentioned before: stakeholders in crowd-funded projects, who are entrepreneurs and project funders. The units of analysis however will be the seven projects pitched on online platforms indicated below. The obtained data will be enriched by information provided by a crowdfunding consultant.

Since this study aims at generating deeper understanding of crowdfunding's effect on product innovation, where the availability of expertise on the field is limited, the method of purposive sampling is appropriate (Babbie, 2007). Patton (2002) mentions that purposive sampling is widely used in qualitative research, due to several constraints, such as availability of time and other resources. The author also mentioned that in case of purposive sampling, it is important to select cases different on a range of dimensions, since it enhances the possibility of identifying important common patterns that cut across variations. The data in this sampling procedure is collected from any individual or group of people who can provide the appropriate and relevant data for the purpose of the research (Babbie, 2007).

In order to determine which cases are eligible for the purpose of this study, it was necessary to determine several sampling criteria (Shadish, Cook and Campbell, 2002). These essential elements were selected upon the chosen research problem and its operationalization. Hence, the pre-determinants of the sample were the condition of successfully conducted crowdfunding campaign and project's presence in technology category on the crowdfunding platform.

Innovation and its success are defined according to the premises developed by Frankelius (2009) who saw innovation as developing an original idea, whose success depends on providing value to people interested in it through market acceptance. However, to explicate this concept for the purpose of this research, only projects resembling technological product innovations were admitted. The market acceptance, which in case of crowd-funded projects, is difficult to pre-determine, was further identified as satisfying the expectations of major stakeholders – project funders, in accordance with premises of Hall and Martin (2005). In order to determine if the funders' expectations have been met, it was necessary to establish an account on the crowdfunding platforms and become a backer of any pitched project. These actions assured the access to the updates within selected cases, which allowed determining the stage of development of the admissible project. In line with these developments, only incentives where the shipment of pre-ordered goods took place were regarded



as admissible. This decision is justified by the fact that projects only then could be considered as successful, not only in the financial, but also in the operational term.

As Argawal and colleagues (2011) indicated, crowdfunding is not a local, but worldwide phenomenon, as fundraising is not geographically constrained. Therefore, the sample of seven cases of successfully crowdfunded projects was driven from the technology category from the most known crowdfunding platforms: Kickstarter and Indiegogo. The choice of the most known crowdfunding platforms can be validated by the fact that they offered the highest opportunity to spot the undertakings interesting for this research. For instance, since the launch of Kickstarter in 2009, more than 4.8 million people have pledged over \$781 million, funding more than 48,000 creative projects through this platform (Kickstarter, What is Kickstarter), giving the platform a success rate of 44% (Crowdfunding Industry Report 2012). Indiegogo, on the other hand holds the 25% success rate, according to the Crowdfunding Industry Report from 2012.

In order to draw the final sample, the creators of fifteen projects successfully fulfilling the sampling criteria from the Kickstarter platform and eight from Indiegogo platform were approached. The selection was based on the recommendations given by the platforms, which listed projects on base of their popularity. Because of time constraints of this research, the 'first come, first choice' principle was applied. Therefore, the sample was drawn from the cases where the reaction to the interview request was positive. All the selected projects were pitched on Kickstarter and have been successfully crowdfunded. In the sample, the three well-known crowdfunded projects (Pebble Watch, Diaspora, Oculus Rift) were included, because of the availability of the secondary data, important for rich content analysis.

The presence of these cases allowed further disambiguation on whether the amount of funders or obtained financial resources (over the initially requested amount) could have an influence on the success of the introduced innovation. Deeper inquiry in the selected projects revealed that these amounts are difficult to generalize or divide in criteria. Therefore, they are outside of the scope of this project.

In order to extract the necessary information from the units of observation, the major stakeholders of the projects were approached. These were in the majority of cases, the entrepreneurs directly engaged in crowdfunding, or, in cases where it was not possible, press spokesmen with good and detailed information of the crowdfunding campaign.

Due to the fact that all the projects have been supported by many funders, another group of stakeholders, they were approached as well. However, drawing random samples would be outside the time constraints of this project. Hence, it was decided to approach at least five backers from each project. To achieve this purpose, the entrepreneurs were requested to identify the most important backers. In case of no response or lack of first-hand information, the researcher selected the five respondents from this stakeholder group were selected in the mode of purposive sampling. In this sampling procedure, the participants are selected by the researcher because they have particular characteristics that are interesting to the researcher (Babbie, 2007). Under this study, the participants were chosen upon the criterion of having supported more than 30 projects, which indicates experience in crowdfunding. The aforementioned number was selected because of skewed distribution of supported incentives among backers. That is, some funders have more, or less rich portfolio. The choice of supporting more than 30 incentives fell in order to assure sufficient

saturation for respondent selection. Besides, this feature would guarantee rich answers for qualitative inquiry and the potential to discuss the particular projects in depth, which is important from the methodological point of this research.

Although the crowdfunding consultancies are not the stakeholders in this research, their involvement serves the purpose of generating more triangulation, enhancing the validity and reliability of data (Babbie, 2007). The consultancies were chosen on base of convenience sampling. Hereby, the location of the business and the language of communication played an important role in selecting. This first and most involved crowdfunding consultancy Polak Potrafi based in Warsaw, Poland, was established in 2011. Jacek Mikołajczak, the entrepreneur behind the incentive, explained that the main goal of his business is to spread the word of crowdfunding in order to stimulate the alternative mode of project financing in Poland and inform the people interested in crowdfunding. Polak Potrafi serves with advice on how to conduct a successful campaign, what projects to support and how to launch the production after the funding period has ended. Douw & Koren is a company that performs similar tasks to the aforementioned Polish counterpart. This Amsterdam-based company was involved in the beginning of the research project in order to shed the light on the challenges that crowdfunding brings to the process of innovation in terms of resource exchange and stakeholder management.

3.2.2 Case Selection

Below are the results of the sampling procedure performed under this study. They include the brief description of the main characteristics of the seven eligible successfully crowdfunded projects resembling technological innovations. It is also worthy to mention that the adopted sampling technique resulted in admitting seven cases, subjected to crowdfunding at different points in time, which vary in terms of overriding a funding goal and backer support. This satisfies Patton's (1990) recommendation of maximum variation in purposive sampling.

3.2.2.1 Pebble Watch

The Pebble is a smartwatch developed by Pebble Technology and released in 2013. The project was funded by raising money via the crowdfunding platform Kickstarter (Agrawal et al., 2013). After raising venture capital for the product, the company failed to attract traditional investors as they did not share the belief of the creators, that the product will gain



enough market share, so the watch was submitted for crowdfunding in April 2012 (Agrawal et al., 2013). The creator of the project managed to collect \$10,266,844 pledged by 68,928 people (Kosner, 2012). Since July 2013, Pebble has sold over 85,000 units (Charles, 2013).

The Pebble Watch was designed by Eric Migicovsky. The concept capitalized at creating a watch that can display messages from a smartphone (Agrawal et al., 2013). Migicovsky, in the first instance, successfully was able to raise \$375,000 from high profile investors, but this amount was not sufficient to launch the idea (Milian, 2012). The project failed in spite of Migicovsky's business experience (Agrawal et al., 2013). Migicovsky was not astonished by the modest interest in his product. As he told the Los Angeles Times *'I wasn't extremely surprised... Hardware is much harder to raise money*

for. *We were hoping we could convince some people to our vision, but it didn't work out*' (Netburn, 2012).

Migicovsky's company Pebble Technology launched a Kickstarter campaign in April 2012, with an initial fundraising target of \$100,000. Backers contributing \$115 would receive a Pebble when they became available, effectively pre-ordering the \$150 worth watch (Netburn, 2012). Two hours after going online, the project had met the \$100,000 goal (Agrawal et al., 2013). Within six days, the project had become the most funded project in the history of Kickstarter (Kosner, 2012), raising over \$4.7 million with 30 days left of the campaign (Netburn, 2012).

Because of increased interest, in May 2012 Pebble Technology announced the number of preorders was limited, in order to keep the production targets and shipments of orders feasible (Newman, 2012).

Pebble entered mass production in January 2013 with planned production of 15,000 watches per week. Pebble Technology was expected to begin shipping units in January, 2013, but failed to meet their goals (Agrawal et al., 2013). Despite the best intentions of Migicovsky and frequent updates about the progress company was making towards delivering the watches, funders involved in the crowdfunding campaign began to lose trust in the entrepreneurs. In order to raise the needed capital, Migicovsky made promises towards the backers which were too optimistic to carry out. However, due to delays and overall loss of trust among the backers, initially enthusiastic about the idea (Agrawal et al., 2013), Pebble did not multiply its successes. Only seven months later, in July 2013, Pebble Technology was able to make deliveries and has sold over 85,000 units (Charles, 2013).

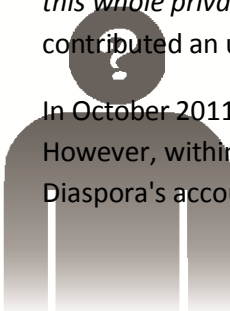
3.2.2.2 Diaspora

Diaspora is a nonprofit, user-owned social network that is based upon the open-source Diaspora software. As of September 2013, Diaspora estimated to have gathered more than 405,000 account (DIASPORA, How many users are there in the DIASPORA network?). The Diaspora project was founded in 2010 by four Ilya Zhitomirskiy, Dan Grippi, Max Salzberg, and Raphael Sofaer (Wortham, 2012) and involves the establishment of a distributed social network (Agrawal et al., 2013). The project is currently administered by Eben Moglen (Diaspora). To obtain the necessary capital, the project was launched in April 2010 on Kickstarter. The creators initially aimed at collecting \$100,000, however, the initial funding target was accomplished in in just 12 days (Wortham, 2012).

diaspora*

The project, to the surprise of the creators, raised more than \$200,000 from more than 6000 backers (Taylor, 2012). Grippi said: *'We were shocked. For some strange reason, everyone just agreed with this whole privacy thing'* (Weise, 2012). Among the donors was Facebook CEO Mark Zuckerberg who contributed an undisclosed amount, saying 'I donated. I think it is a cool idea' (Weise, 2012).

In October 2011, Diaspora announced that it was starting another fundraising campaign (Diaspora). However, within days of commencing the campaign over \$45,000 had been raised when PayPal froze Diaspora's account without explanation, which hampered the success of the second campaign



(Wortham, 2012). The project took off right after the second campaign was closed (Decentralize the Web with Diaspora, Kickstarter). However, the team faced a great pressure from the side of the backers, who demanded frequent updates, which proved time consuming and did not leave the entrepreneurs much time to build the social network.

Max Salzberg described his team's experience as *'so consumed with things like answering e-mails and making T-shirts for their contributors that they had little time to build the software'*(Wortham, 2012). Thus, Diaspora was launched with a considerable delay.

3.2.2.3 Oculus Rift

The project, popular in the media, is a considerable innovation in the field of gaming. This virtual reality headset collected \$2,437,429, while the founders pledged for \$250,000, from 9,552 backers through a Kickstarter campaign. Following the demonstration of the Oculus Rift prototype at the E3 in June 2012, on 1 August 2012 the company announced a Kickstarter campaign to further development of the product. Within four hours of the announcement, Oculus secured its intended amount of \$250,000, and in less than 36 hours, the campaign had surpassed \$1 million in funding (Lang, 2012). The developer version of the device was expected to start in May 2013, but started arriving around March 30 (Oculus VR, News). The Oculus Rift Team is currently working on the consumer version of the device.



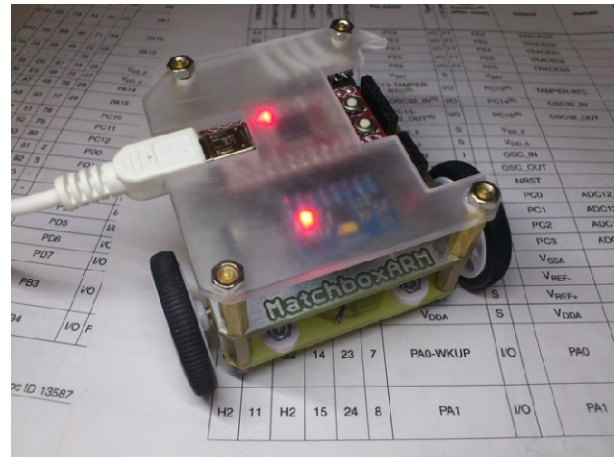
3.2.2.4 Spiri

It is the programmable autonomous flying robot. It is a versatile, airborne Linux device with sensors, cameras, Wi-Fi, cloud support, development tools and more. The project pitched on Kickstarter and supported by 361 backers obtained the sum of \$134,607, 7% more than pledged. The project creator Patrick Edwards – Daugherty has already shipped first releases of the units to the funders and is currently proceeding with a larger-scale production, which is to take off from January 2014 on.



3.2.2.5 Matchbox ARM

This Kickstarter based project supported by 226 backers has met the target with £8,641, 23% more than pledged. It is a robotic platform especially made for balancing robots and line follower robots development. Its creators also shipped their first units to the involved backers, while proceeding with further operations.



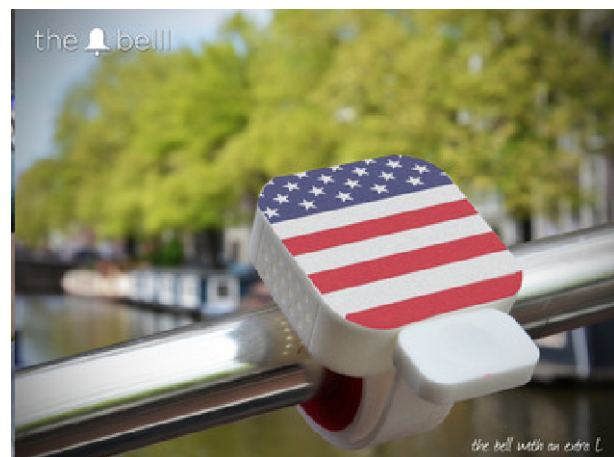
3.2.2.6 Micro Phone Lens

This is a device which allows taking and sending microscopic pictures through a mobile phone. This Kickstarter based project acquired \$91,524 from 5,092 backers, exceeding the financial target with 1,830%. The creator – Thomas Larson already accommodated the backer eligible for the product. He is currently occupied with larger-scale production of the Micro Phone Lens.



3.2.2.7 The Bell

This Kickstarter – based project is a bicycle bell, which changes colors and sounds. The product is made from durable materials and can be easily customized. The Bell attracted contributions from 817 backers and collected £28,851, while the creators pledged for £25,000. Shortly after the crowdfunding campaign ended in July 2013, the founders Peter Veldhoven and Jelmer Riemersma had already shipped the bicycle bells to the backers and are in the process of setting up large scale production.



3.3 Data Collection

The qualitative data collection was organized from several different data sources, following Yin (2003). Using multiple data sources is a vital aspect of the analysis because it ensures the variety of perspectives required by the constructivist principles on which qualitative analyses are based (Babbie, 2007). The data analyzed include both primary data, gathered through in-depth interviews, as well as secondary data taken from existing academic literature, crowdfunding related web sites, press releases and other published sources, such as working papers. Table 3-1 summarizes which data sources were applied towards studying specific variables under this research, as outlined in Chapter 2.

The extensive desk research was performed in part one of this study and aimed to collect secondary data studied to gain a good understanding of the crowdfunding phenomenon in general as well as the main features of the crowdfunding incentive subjected for inquiry. The documentation from the secondary research allowed adopting a theoretical angle which was also helpful in designing the interview protocol used in primary data collection and provided context for interpreting the empirical data.

Detailed semi-structured interviews with open-ended questions with spokesmen from crowdfunding platforms, project creators and funders formed a lion share of the data collection effort. However, crowdfunding consultants were involved as well, in order to gain expert view on the studied area and underpin the findings. The respondents were selected based on their involvement in and knowledge about the crowdfunding initiatives. As to the project funders (backers), the entrepreneurs were asked to identify five most important backers, who proved the most supportive to the project. These funders were approached for an interview. In case such funders could not be identified, purposive sampling was applied. This procedure has been applied because of the large numbers of contributors, the goal of obtaining rich and in-depth information and in order to increase the likelihood of the research efforts' productivity. The total number of respondents and interviews exceeded 15 to achieve saturation (Glaser and Strauss, 1967). When possible, the primary data in the empirical research was enriched with the information from Kickstarter updates and relevant press-releases to increase triangulation.

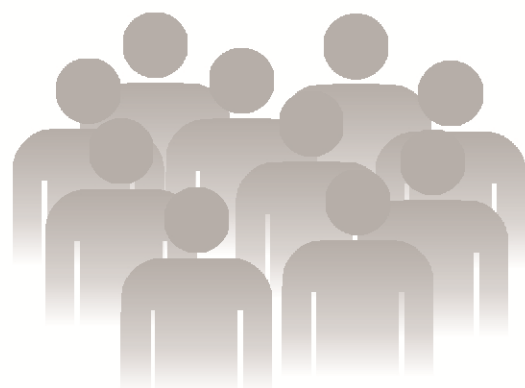
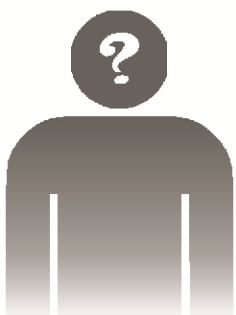


Table 3-1 Indication of data sources used for analyzing studied variables.

Variables:	Sources:
Independent Variables:	
Acquisition of Finances through Crowdfunding	Crowdfunding Platform profile of the incentive Secondary sources (press), if necessary
Stakeholder Involvement	Interviews with Project Creators Interviews with Project Funders Secondary sources (press), if necessary
Innovative Capabilities	Interviews with Project Creators Interviews with Project Funders Secondary sources (press), if necessary
Dependent Variable:	
Success of Innovation in terms of efficiency and effectiveness	Crowdfunding Platform profile of the incentive Interviews with Project Creators Interviews with Project Funders Interview with crowdfunding consultant Secondary sources (press), if necessary

3.3.1 Interview protocol

Consistent with recommendations in the literature (Yin, 2003), the protocol was designed to cover the main topics under study, at the same time leaving room to both the respondents and the researcher to extend the discussion to other phenomena if necessary. It is important that the respondents are free to interpret each question from their perspectives as required for this type of study (Yin, 2003).

Since qualitative inquiry is an iterative process, the question's wording changed slightly over the course of the interviews and evolved over time. Moreover, some of the questions were added to capture additional issues that emerged during discussions in the early interviews. The designed interviews are only semi-structured, in order to accommodate better discussions and understanding among topics which might emerge during the interviews. In some cases there were deviations from the ordering of questions shown in the Appendix A. To inhibit a chance for more interesting and varied answers, the interviews consist of open-ended questions (Babbie, 2007).

To ensure a deep inquiry into the presented topics, each interview is designed to last approximately one and a half hour in a face to face setting. Interviews were conducted tête-à-tête, online and by Skype in the period from September 2013 to December 2013. Table 3-2 shows the shares of different modes of interviewing in this research. The interviews were tape recorded to minimize data loss and enable better inquiry into the conducted discussions. The recordings were transcribed for subsequent analysis and are available for request to achieve greater controllability of the research (Van Aken et al., 2007). Informal, open ended follow-up questions were sent by e-mail to some

respondents to clarify issues that emerged during the transcription. The full profiles of the spokespersons are also available in the Appendix B. Since ethical issues are important to develop a high-quality research, the interviews were conducted along the principles of informed consent and guaranteeing confidentiality (Babbie, 2007). These principles are crucial from an ethical point while conducting research. They involve the provision of appropriate information to enable people to make informed decisions about participation in a research project, as well as a promise made to the participants that only the researcher and supervisors will have the access to the information extended in an interview (Babbie, 2007).

To enhance the reliability of the information derived from the interviews and to strengthen support for the constructs and relationships emerging from the analysis, the crowdfunding platform websites and websites of project creators were continuously monitored. Throughout the project it was important to keep track of news published about crowdfunding in general and about the particular projects under analysis. Consistent with the recommendations of Eisenhardt (1989), the researcher spent considerable amount of time on reviews with supervisors and fellow students achieve a consensus view on the matters involved in research questions. Discussion sessions consisted of face-to-face meetings.

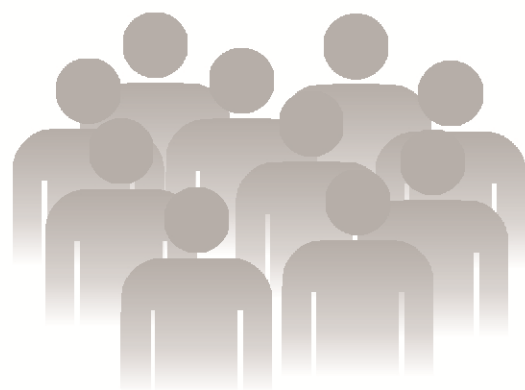
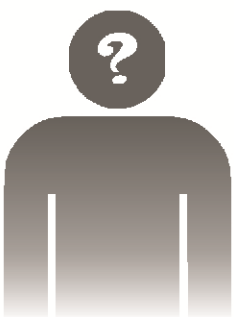
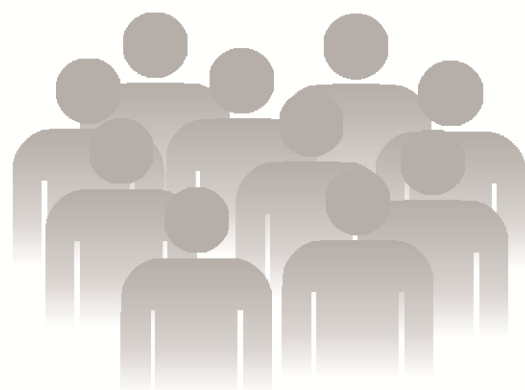
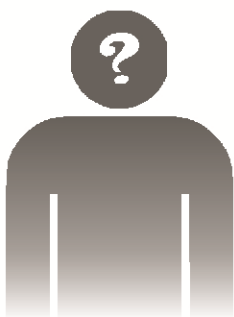


Table 3-2 The modes of interviewing among respondents

Project / Organization:	Participants:	Description:
Pebble Watch	Press spokeswoman - Ally Khantzis Selected project backers (5)	A questionnaire sent by e-mail Questionnaires sent by e-mail
Diaspora	Eben Moglen – current project manager Selected project backers (5)	An interview in a form of e-mail chat Questionnaires sent by e-mail
Oculus Rift	Press spokesman – Jim Redner Selected project backers (5)	A questionnaire sent by e-mail Questionnaires sent by e-mail
Spiri	Patrick Edwards – Daugherty – project inventor Most important project backers (3), selected funders (2)	A questionnaire sent by e-mail Questionnaires sent by e-mail
Matchbox ARM	George Emmanuel Vladu and Bogdan Sebastian Nedelcu – project inventors Most important project backers (2), selected funders (3)	A joint interview via Skype Questionnaires sent by e-mail
Micro Phone Lens	Thomas Larson – project inventor Most important project backers (3), selected funders (2)	A questionnaire sent by e-mail Questionnaires sent by e-mail
The Bell	Jelmer Riemersma and Peter Veldhoven – project inventors Most important project backers (3), selected funders (2)	A questionnaire sent by e-mail Questionnaires sent by e-mail
Douw&Koren	Gijsbert Koren – the co-owner of the consultancy	A face-to-face interview
Polak Potrafi	Jacek Mikołajczak – the owner of the consultancy	A face-to-face interview



3.4 Data Analysis and Coding

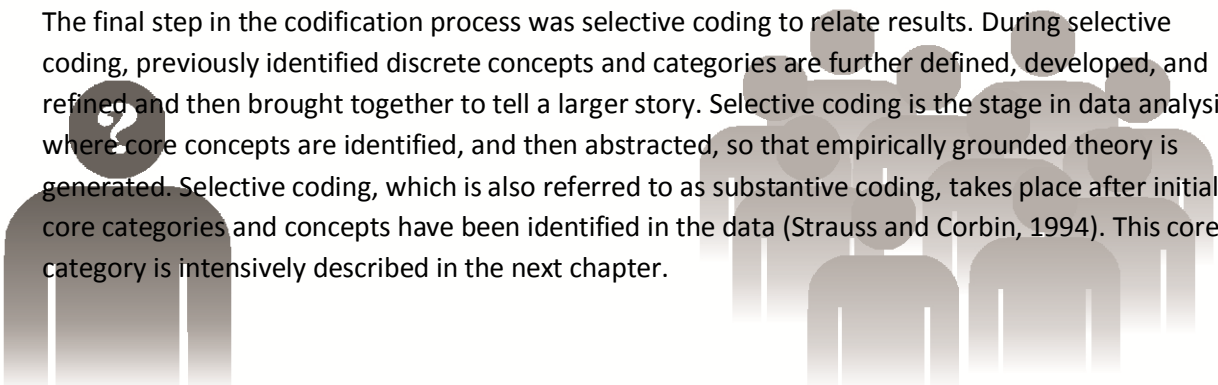
This paragraph will focus on the methods applied to analyzing the gathered data. According to Patton (2002) *'Qualitative analysis transforms data into findings. No formula exists for that transformation. Guidance, yes. But no recipe. Direction can and will be offered, but the final destination remains unique for each inquirer, known only when—and if—arrived at'* (p. 432). Because of the magnitude of collected data, which in majority comes from in-depth, open-ended interviews, the analysis will oscillate among qualitative techniques, which will help to organize and review the large body of information (Babbie, 2007).

According to Pope and Mays (1995), qualitative data analysis focuses on three dimensions: understanding context of the phenomenon, understanding people and interactions. Therefore, the technique applied in the process of analysis should be one that best includes the three aforementioned dimensions (Pope and Mays, 1995). According to Patton (2002) and Yin (1994), analyzing data is a process of examining and categorizing information, which address the statements brought on in an investigation. Yin (1994) proposed three main strategies which facilitate this process: pattern – matching, explanation – building and time – series analysis. While the two latter approaches either result in difficulty to focus or are best suited for research designs other than case study, the pattern – matching method seems the most suitable for the purpose of this research. According to Yin (1994), this analysis strategy is valuable in case studies as it compares patterns discovered in empirical investigation with the forecasted ones. The match between these patterns inhibits better understanding of a studied phenomenon and positively affects the internal validity (Patton, 2002). Besides, Eisenhardt (1989) mentioned that multiple case studies are best conducted when the researcher performs a cross – case comparison, trying to reveal the cross – case patterns and match them.

However, the applied technique did not solve the issue of extensive body of data; hence it was decided to exert the process of coding. Firstly, open coding was applied in order to establish data categories. Here, the purpose was to find labels that closely fitted the data. This was done on base of transcripts of the interviews and interview texts obtained by other means. The coding was based on marking the sentences / words in the text in colours, in order to find the matching colours afterwards, to create the categories, after the state of saturation was achieved. Although the majority of categories were found on cross – case basis, there were deviations in categories being present in only a few cases.

After performing the open coding, axial coding was applied, which focused on finding relationships between the established categories (Turner, 1981). The conceptual model indicated in chapter 2 of the thesis has already made propositions towards the relationships between variables that came back during the open coding process, however, at times the direction of the relationships varied.

The final step in the codification process was selective coding to relate results. During selective coding, previously identified discrete concepts and categories are further defined, developed, and refined and then brought together to tell a larger story. Selective coding is the stage in data analysis where core concepts are identified, and then abstracted, so that empirically grounded theory is generated. Selective coding, which is also referred to as substantive coding, takes place after initial core categories and concepts have been identified in the data (Strauss and Corbin, 1994). This core category is intensively described in the next chapter.



3.5 Validity and Reliability of the study

The choice of the aforementioned research design has its consequences in terms of validity and reliability of the study. This paragraph will discuss both issues.

Eisenhardt (1989) underlines that the main strength of adopting this research plan is the high chance of obtaining clear understanding of cross case and case specific dynamics. By studying multiple cases, analyzing each in-depth and performing cross-case investigations, the gathered evidence is reconciled. By establishing a link between existing literature and empirical evidence, the findings from this research are likely to be reframed into a new premise. Other than that, data triangulation minimizes the chance for any bias from the researcher (Van Aken et al., 2007). Furthermore, theory generated in such a way can be tested and falsified or confirmed, while the constructs are likely to be measurable. Clear operationalization of the main variables in the conceptual model specifies the constructs under analysis and explicates the large body of theoretical background in this research. The sampling procedure applied in the study enhances this strength, by providing a better understanding of constructs and ways to assess them. Besides, the sampling validity is increased by the fact that measures adopted by the study result from theory and were adopted in selection procedures and hence guarantee the broad coverage of the areas within the concepts under study (Shadish and colleagues, 2002).

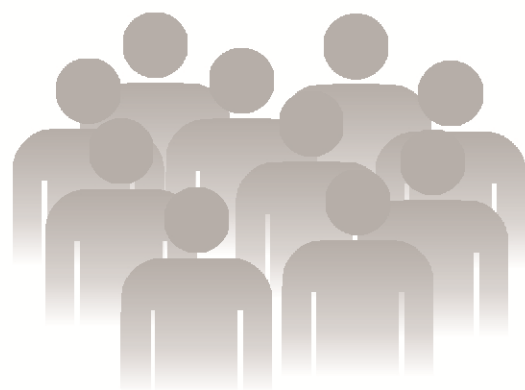
Adopting purposive sampling for this qualitative study respectively reflects controlling whether the phenomenon under study is understood adequately (Miles and Huberman, 1994) in a timely manner. The described procedures are advantageous for internal validity, as the dependent variables are adequately measured (Babbie, 2007). Moreover, this approach has a positive effect on construct validity (Shadish et al., 2002). Furthermore, as Yin (2003) indicated, the use of 6 to 8 cases increases the external validity of the study. Another benefit from adopting this research approach is empirical validation of the rising theory (Eisenhardt, 1989). The validity is positively affected by the fact that the theory-building process and evidence are closely intertwined, providing consistency of observations. In other words, the internal validity is enhanced, as the observed relationships are likely to be non-spurious (Babbie, 2007).

However, it is also necessary to mention the weaknesses of such research design. Eisenhardt (1989) warns for creating a complex theory, which lacks overall perspective and therefore may be difficult to apply for future references. The very same approach can lead to generating a theory too narrow, threatening external validity of the study (Shadish et al., 2002). Bearing the aforementioned in mind, it is important that the researcher carefully draws the discovered relationships and strives to inquire if the crafted linkages are truly important or are only idiosyncratic to an individually analyzed case (Eisenhardt, 1989). Another shortcoming is in the fact that the sampling procedure did not occur in the random manner, which may lead to admitting cases that may not be representative from the whole body of successfully crowdfunded incentives from the right category. This poses a threat to external validity of the study (Babbie, 2007). Another drawback relates to the sampling technique adopted towards selecting potential interviewees among the project funders. Convenience sampling, although advantageous in terms of time and resource commitment, does not produce representative results and therefore, the results obtained from such a sample are difficult to replicate (Babbie, 2007). This could possibly have a negative influence on the external validity of the findings from this study (Van Aken et al., 2007). However, the large number of studied incentives and in depth data is likely to subdue the issues flowing from the adopted sampling mode. This threat is also rather minor,

because the qualitative design focuses on understanding the particular phenomenon and not on generalizing, unlike to the quantitative counterparts (Shadish et al., 2002).

Applying two methods of data collection in the research design has a positive influence on the reliability of the study. By involving a desk research in the first step, the likelihood of obtaining the same data during a different investigation, increases (Babbie, 2007). Controlling for relationships resulting from this investigation also positively influences the reliability of the empirical study. Yet, it is important to underline that case-specific dynamics may have an adverse effect on reliability of the study (Babbie, 2007). However, this observation has to do with the specifics of a qualitative study and only modest actions can be taken to minimize this effect (Shadish et al., 2002).

To sum up, bearing in mind the character of the theme of the study, the methodological choices are suitable for conducting a conclusive and robust research (Yin, 2003). If the research is conducted according to the outlined scheme, its validity ought to be high and reliability should not be compromised either.



4 Empirical Results

In the period of September to December 2013 interviews were conducted among several groups of participants to answer the main research questions investigated in this study. The purpose of this chapter is to analyze and uncover the character and dynamics of the variables and relationships between them, presented in the conceptual model in Chapter 2 of this document. This is carried out through an empirical and desk research on the selected seven successfully crowdfunded projects. The analysis is enriched by the inclusion of expert opinions on the studied matter. Data is analyzed by means of methodology outlined in the previous chapter.

4.1 Seven successfully crowdfunded projects

This section will provide in depth descriptions of empirical data gathered through interviews with project creators and project funders involved in the following cases of successfully crowdfunded projects: Pebble Watch, Diaspora, Oculus Rift, Spiri, Matchbox ARM, Micro Phone Lens and The Bell. The data will be revealed in the aforementioned order and enriched with the information coming from Jacek Mikołajczak, a crowdfunding consultant as well as press releases.

4.1.1 Pebble Watch

This case is possibly the most known through the media, due to its extraordinary successful crowdfunding campaign. The Pebble is a smartwatch for Android and iPhone, developed by Pebble Technology and released in 2013. After raising venture capital for the product under their former name inPulse, the company failed to attract traditional investors under their new brand name, Pebble. Hence, the inventor – Eric Migicovsky, pitched the device on Kickstarter in April 2012. The Kickstarter campaign also featured Andrew Witte, Rahul Bhagat, Steve Jones, Martijn The, Sarah Otten, Matthew Zulak, Nichoals Ford, Bradley Murray and Ryan Case. At the end of the funding (37 days), Pebble was awarded with \$10,266,844 pledged by 68,928 people. The inventor pledged for \$100,000, which was awarded in only two hours from launching the project online. As of July 4th 2013, Pebble has sold over 85,000 units.

In the signature video available on the Kickstarter page of Pebble, Migicovsky explains the application and marketing advantages of Pebble. The watch can be customized and runs plenty of apps, and can be connected to a smartphone via Bluetooth. Further, the whole Pebble team elaborates on the idea behind the project. Firstly, the entrepreneurs released a smartwatch for Blackberry under the name inPulse and because of rising demand for a similar device for other smartphones, the team started working on Pebble. At the end of the video, Migicovsky admits the design is finalized and the watch is ready for production, however they welcome any support from potential funders to get the project off the ground.

The project ran on the reward-based system, where every backer was provided with a non-monetary reward for their contributions, for example a product, or an acknowledgment. This way, for each \$1, the funder would obtain updates on the project (2615 backers) and each donation of \$99 would be awarded with a black Pebble (200 backers), free shipping would come at the price of \$16 extra (40799 backers). Funders contributing with \$125 would receive a watch in any possible color (14350 backers) and for \$220 – two black Pebbles (3800 backers). Each contribution of \$235 would be granted with an early prototype of Pebble, ready for coding (100 backers) and for \$5 more, a funder would obtain two Pebbles in any color (4925 backers). An office pack of five watches would come at the price of \$550 (900 backers) and for each \$1000 one would receive ten watches (482 backers).

The contribution of \$1250 would be awarded with a customized interface of Pebble and five color watches (20 backers) and the donation of \$10,000 (31 backers) was rewarded with 100 Pebbles in any color.

Despite the enthusiasm and thorough preparation of the entrepreneurial team, the Pebble watch was not delivered to the backers by the end of September 2012, signified as the goal at the Kickstarter website. However, due to some technological challenges and problems with accommodating funders during a busy period of production, visible in the updates available on Kickstarter, Pebble entered into the production phase only in January 2013, and the first arrivals were reported six months later.

The interview with Pebble spokesmen below sheds light on the developments during and after the crowdfunding campaign of Pebble.

4.1.1.1 Conclusions from interviews with Pebble's spokeswoman and project backers

Below are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

Stakeholder Involvement

Due to crowdfunding's nature and Kickstarter's policies, potential backers and actual backers were identified as the most important stakeholders in Pebble's campaign. According to Khantzis, the engaged as well as prospective backers were seen as powerful individuals, because of their decision to grant the funding that would take the project off the ground. Another important factor was the backers' power reflected in 'spreading the word', thus allowing Pebble entering a wider network of potential buyers or developers, and doing a very effective word-of-mouth marketing. As the spokesperson told, an important ingredient to Pebble's success was great networking: *'it is essential in crowdfunding. You need to go beyond your small, known network and start engaging with the crowd. And make them feel engaged, like they are a part of the campaign'*.

According to Khantzis, the efforts invested in encouraging backers, as well as engaging them into a Pebble community, were more effective than using the company's contemporary network. Khantzis admitted that being truthful certainly helped to raise the necessary capital and contributed to creating a community around the product.

Furthermore, according to Pebble's spokeswoman, the most important information the company strived to acquire from the crowdfunding backers, was preliminary market research. This end, labeled in business literature as a buffering technique, would be achieved together with sufficient funding. Although the market research function of a crowdfunding campaign has been assessed by Khantzis as successful, she mentioned that the interest in stakeholders became deeper. At some point, Pebble team streamlined the updates of the campaign and its aftermath, as well as the reward scheme (by changing colors and adding more functions to the smartwatch) with the preferences of the funders. This mechanism responds to the bridging technique, aiming at creating a deeper relationship with stakeholders through co-development.

In the interview, Ally Khantzis underlined that interest in stakeholders' preferences was the most important highlight of Pebble's crowdfunding campaign. The communication through updates and e-

mails was extensive, which is also mentioned by Pebble's backers. Because of the magnitude of campaign's supporters, the original Pebble team has been expanded by employees who managed correspondence with the funders. These gate-keepers' task was to filter the e-mails as to their content in order to pursue either a private message-exchange with some funders or issue a general update directed at all interested crowdfunders. The e-mail selection was done by screening of content, first manually, then by using software. Migicovsky and team decided to apply these procedures because of the amount of messages they had to respond to. As Wortham (2012) reports, they came close to 10,000 mails on weekly basis.

Although the team aimed at engaging the stakeholders in developing Pebble and actively exchanging their points of view on the campaign at the Kickstarter forum, not all the funders were content with the course of the campaign. Although the interviewed Pebblers recognize and appreciate communication and update rewards made by the entrepreneurial team, they also express the disappointment with the information on the terms of shipping, which appeared as insincere. On a positive note, the backers felt actively involved in the project and their feedback was accepted and usually seen through, which contributed to a sense of creating value and exchanging value, which are an important factor in effective stakeholder management. However, the funders did not get to feel that their *'efforts and involvement have been appreciated or rewarded enough'*.

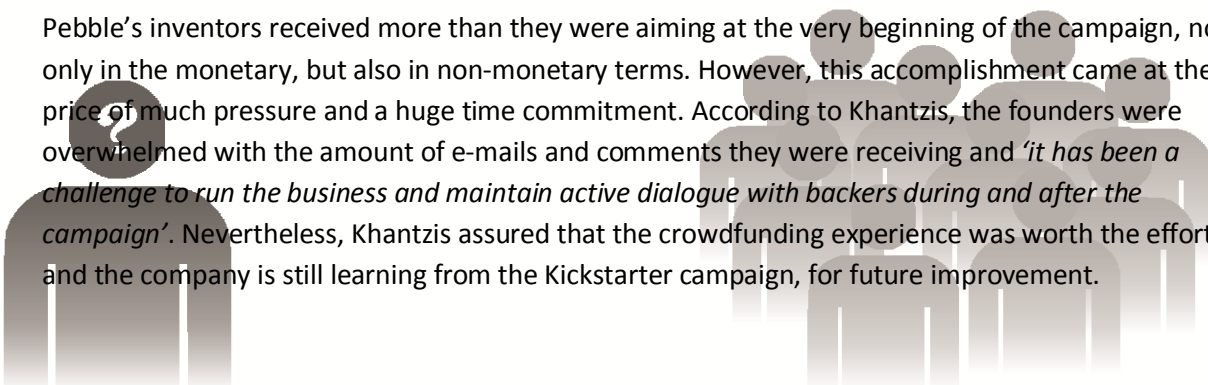
Innovative capabilities

Although the crowdfunding campaign has taken Pebble lots of effort, Ally Khantzis admits that the Kickstarter pitch was a great learning experience. The team was offered an opportunity to acquire more interpersonal skills and more insight to competences needed in running a business. This process was expressed in achieving more practice in the communication techniques, as well as, experiencing first-hand how to manage operations with high – intensity stakeholder involvement process. Besides, the Kickstarter campaign has been fruitful in terms of networking. As Khantzis admitted *'some relations with backers were effective in terms of crowdsourcing, whereas others still are managed on ongoing basis, as a prospect of cooperation in the future'*.

Although the interviewed funders admit that Pebble team had been developing during their crowdfunding campaign in terms of showing more entrepreneurial experience, the delays and misinformation were seen as a testimony of amateurism and lack of meritocratic preparation. As one of the interviewees commented: *'although the team has been working as a company before, it completely misjudged the operations of the business, its complexity, and other externalities, connected to the crowdfunding. They tried to desperately save their image by posting positive stories of ones who received Pebble or tested it, but the damage was done. It came a few months too late'*.

Resources and innovation success

Pebble's inventors received more than they were aiming at the very beginning of the campaign, not only in the monetary, but also in non-monetary terms. However, this accomplishment came at the price of much pressure and a huge time commitment. According to Khantzis, the founders were overwhelmed with the amount of e-mails and comments they were receiving and *'it has been a challenge to run the business and maintain active dialogue with backers during and after the campaign'*. Nevertheless, Khantzis assured that the crowdfunding experience was worth the effort and the company is still learning from the Kickstarter campaign, for future improvement.



However, the sincerity of the campaign has been undermined by lack of proper preparations of the project upon launching and the fact that most of the funders had to wait nearly a year to receive their smartwatch, while some still did not receive the watch. Statt (2013) comments the Kickstarter campaign of Pebble and its aftermath with the following, bitter words: *'Pebble drew a line in the sand over its intentions as a company with the Best Buy deal, basically saying: We don't care who we have to spurn on our path to becoming a legitimate business'*.

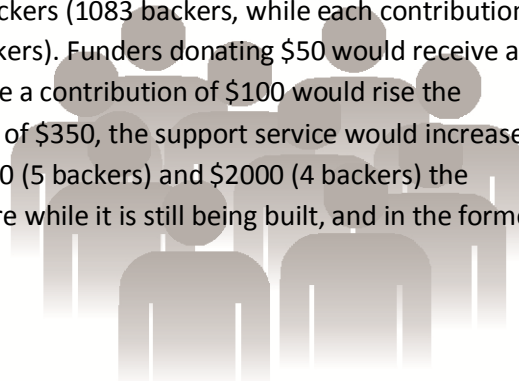
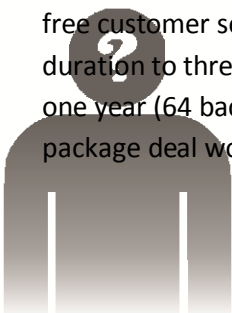
This statement may not be necessarily the right one, when it comes to the combined experience of the company and the funders in terms of stakeholder involvement. The founders have been able to understand the role and power of their crowdfunding constituency and turn it into collaboration and forecasting of watch's market leverage. In these terms, Pebble team has successfully pursued bridging and buffering techniques towards the funders. However, the team has clearly not been able to transfer this knowledge into outputs responsible for better operations. Hence, in Pebble's case one can speak of a crucial meaning of mutual dependence between involving the stakeholders and generating dynamic capabilities resulting from that involvement. Because this component has been insufficient throughout the Kickstarter campaign, the resulting success of Pebble's product is also rather modest.

4.1.2 Diaspora

Diaspora project concerned addressing the problem of centralized social networks and data ownership. The original funders, Dan Grippi, Maxwell Salzberg, Raphael Sofaer and Ilya Zhitomirskiy, students at New York University's Courant Institute of Mathematical Sciences, aspired to create a software where everyone would be able to use a free personal server and own his data, creating an open source social network – Diaspora. The student entrepreneurs initiated the Kickstarter campaign in April 2010, which in just 39 days was supported by 6,479 backers with the sum of \$200,641 (where the funders pledged for \$10,000).

In their video elevator pitch, Grippi and colleagues begin with introducing the idea behind the project. The main advantages of the software were its high protection of privacy and personal control over data. The installed network node would be encrypted and everyone would be able to re-design the software (in line with the idea of open source innovation). With Diaspora software, sharing and privacy would have become no longer exclusive. The team appears very enthusiastic and willing to commit to the idea and working on it. The entrepreneurs mention their experience with software writing and time commitment being the cornerstones of trusting that Diaspora would be launched on time, that is, by August 2010. Eventually, the first version of software was released in November 2010.

In return for the contributions, the potential backers would be awarded with the following rewards. For each donated \$5, the funder would receive the software on a CD (1473 backers). For \$10, the package would be complemented by Diaspora logo stickers (1083 backers, while each contribution of \$25 would be awarded with an extra t-shirt (2606 backers). Funders donating \$50 would receive a free customer service, for a month (394 backers), while a contribution of \$100 would rise the duration to three months (223 backers). For each sum of \$350, the support service would increase to one year (64 backers), while for the donations of \$1000 (5 backers) and \$2000 (4 backers) the package deal would rise to obtaining access to software while it is still being built, and in the former

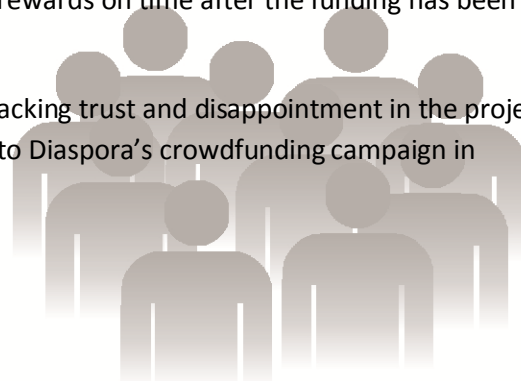
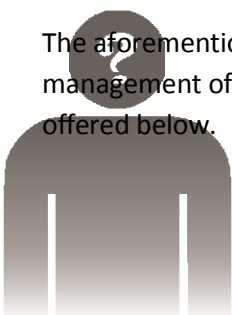


case – a new computer with installed software. The project’s tremendous success has largely echoed through the media and initially collected positive appraisal (Wortham, 2012).

Until August 2013, Diaspora team, now lead by Eben Moglen, released 18 project updates. Since the original entrepreneurial team was not available for an interview, first of all, the relevant updates on Diaspora’s progress will be analyzed as a context for interview conducted with Mr. Moglen. In the update from 08-05-2010, the team expresses their gratitude towards backers for obtaining not only financial support, but also much valuable feedback. From the comments coming from funders, it is derivable that the backers extended also non-monetary resources, such as moral support to the idea, advice on commercializing the software and open call for joining the open source process of designing software. In the following notification, the entrepreneurs admit they are being overwhelmed by the amount of interest from the backers and are striving to keep up with preparations to run the project and extending necessary information to all interested funders. From the comments, it seems that several backers are in doubt whether the goal of releasing Diaspora in August 2010 will be achievable, giving the tremendous interest and necessary commitment to accommodate the backers with the promised rewards. The team dismisses this concern by assuring of their enthusiasm and time commitment to the software building process. In the last update from the funding period, the team admits that extending a CD with Diaspora software to everyone will not be possible. Hence, they propose sending a link to instant download instead, once the software is ready. The reactions of backers were affirmative, with referring to reduced shipping costs and advising to move the available budget towards merchandising and hiring a project manager to run the crowdfunding related tasks, so that the team can focus on timely development of the software. This advice came from funders active in business and ICT sectors, as visible in their Kickstarter profiles. Yet again, Salzberg from Diaspora team assures it will not be necessary.

In the next available update, from the period after the Kickstarter campaign has been terminated, the team sheds light on project’s progress. Despite the being busy with reacting to backers’ messages and designing the rewards, they assess the progress as *‘going nicely’*. Although the funders appreciate the information, they express their discontent with having received no further indication on when the rewards will be send out. Again, their advice is to employ a project manager to speed the work up. This time, the entrepreneurial team issues no reaction. In the notification from September 2010, the team requests the backers to spread the word on Diaspora and ensures that the software is nearly ready. However, the backers have not been rewarded on time, which is reflected in their discontent in the comments. Some admit bitterly that if the team cared to take their advice on running the business successfully, the project would not have been delayed. This discontent is also visible in the following updates from 2010. While some funders were granted with the promised CD and gadgets, others were omitted. The latter group issued comments in which it can be read that they have lost interest in Diaspora. The joint opinion is that the entrepreneurs were not genuine about their intentions of sending out the rewards on time after the funding has been achieved.

The aforementioned background information signals lacking trust and disappointment in the project management of Diaspora. However, the closer look into Diaspora’s crowdfunding campaign in offered below.



4.1.2.1 Conclusions from interviews with Diaspora's spokesman and project backers

Subsequently, there are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

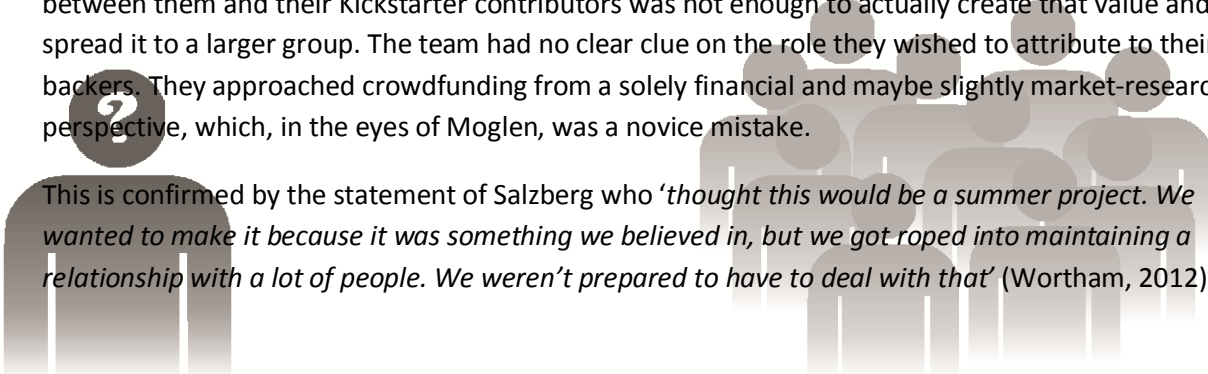
Stakeholder Involvement

In the Kickstarter elevator pitch, Diaspora's inventors issue an open call towards the potential funders with a request for feedback and co-development of the software. The team promises to update the Kickstarter backers frequently and, until the finances have been collected, the notifications are frequent. This trend does not continue in the aftermath of the fundraising period. Moreover, communicating with over 6,000 backers proved challenging to the entrepreneurs as well, as they did not really attend to backers' e-mails and did not issue updates with answers to frequently asked questions. Instead, the students established another website with information concerning the progress of Diaspora project. However, as it was not properly announced on Kickstarter, the interviewed backers indicated they had no knowledge of such a possibility. Although the interviewed funders did express the willingness to engage in Diaspora's development, they only had a chance to do so through Kickstarter comments. Unfortunately, these comments have been insufficiently handled by the Diaspora team which contributed to rise of frustration.

These moods are also reflected in an interview with Max Salzberg (in Wortham, 2012) who tried to explain why the team did not show much engagement with the backers and how the blasting funding success turned into an operational nightmare: *'since we were one of the first Kickstarter successes, there wasn't much information about best practices. Around December 2010, after we were finished shipping out the rewards for the project, we thought to ourselves: we have a nice mailing list, two blogs, an active GitHub project... we've grown so much than just our Kickstarter... surely our Backers will keep track of us there. We were wrong. For all of you aspiring Kickstarter successes, learn from our mistake and always update your Kickstarter updates, even if you have two blogs and do all of your work in a public place'*. Wortham (2012) writes that despite good initial intentions, the team did not realize that accommodating over 6000 backers is a challenge. Because the entrepreneurs ignored feedback from experienced businessmen backing Diaspora and were willing to save more money by doing the work on their own, the project did not achieve the desired large merchandise (Wortham, 2012).

In the interview with Eben Moglen it becomes clear that the Diaspora team did not have a clear understanding of the role of the backers in the crowdfunding process. Moglen explained that although the students realized that the crowdfunders are the first clientele, they did not see through that supporters of crowdfunding campaign also require a deeper involvement in the project. Moglen also sheds light on the fact that the young entrepreneurs did not realize that the match in values between them and their Kickstarter contributors was not enough to actually create that value and spread it to a larger group. The team had no clear clue on the role they wished to attribute to their backers. They approached crowdfunding from a solely financial and maybe slightly market-research perspective, which, in the eyes of Moglen, was a novice mistake.

This is confirmed by the statement of Salzberg who *'thought this would be a summer project. We wanted to make it because it was something we believed in, but we got roped into maintaining a relationship with a lot of people. We weren't prepared to have to deal with that'* (Wortham, 2012).



The hardest part, according to the entrepreneur, was the perception that the team had squandered the money. *'It sounds like a lot of money, and people were like, 'Where did it go?' But the reality is that for four guys for two years, we scrounged'* (Wortham, 2012). The finale of Diaspora, which eventually was sold to Eben Moglen is a logical continuation of the aforementioned moods. Although the interviewed crowdfunders appreciated that the project will be extended, they had a feeling of *'being left alone by ones they were trying to support and motivate from the beginning'*. The backers had lots of faith that the project will be successful and the current state of the art left them with a bitter taste and feeling of having wasted the efforts.

Nevertheless, the developments in Diaspora contributed to the rise of a positive externality. Since the project gathered attention of more than 6,000 internet users, who regardless of their discontent with campaign developments, decided to pitch the idea within their networks. As Moglen and interviewed backers explain, this circumstance has risen only due to the fact that the crowdfunders shared a strong perception of the need to stop privacy infringements online. Therefore, even though the entrepreneurial team did not put a considerable effort in establishing a network while crowdfunding, the Diaspora community has developed because of the backers' belief of the added value the project may have not only to them, but also to the others.

All in all, it is clear that not only that the entrepreneurial team did not understand the stakeholder involvement process in crowdfunding, but also failed to effectively define their most important stakeholders and engage them in the project properly. However, the fact that Diaspora responded to rising concerns of privacy and data ownership questions in the digital world, the project has gained an online community with shared values that currently sees to re-invent the original idea under the aegis of Moglen.

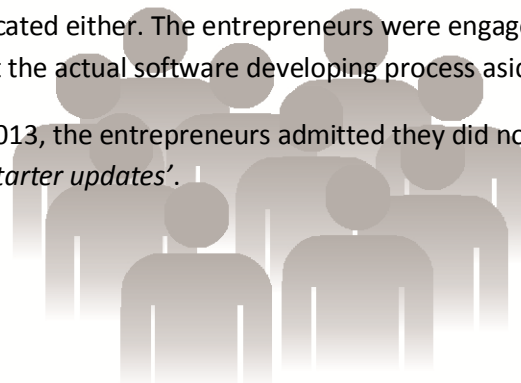
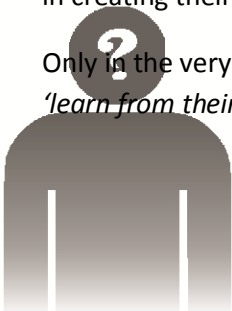
Innovative Capabilities

Although the management of the crowdfunding campaign would in the eyes of the original entrepreneurial team be an excellent opportunity to improve their software building skills as well as help them develop an insight in running a business (according to the Kickstarter updates), the aftermath of the campaign revealed that it has been achieved with a moderate success.

Since the team could not effectively exploit and explore the material and immaterial resources provided by their crowdfunding stakeholders, their project did not achieve the leverage they required. By not assimilating feedback and catching up with Kickstarter comments too late, in terms of dialogue and action, the entrepreneurs did not see the chances through that they were granted by their supporters. Moglen as well as the interviewees confirmed that mismatch between the team's intentions and its actions.

Further inquiry into the interview with Salzberg, described by Wortham (2012) indicates that the team's entrepreneurial efforts were not correctly allocated either. The entrepreneurs were engaged in creating their rewards, such as t-shirts, but they put the actual software developing process aside.

Only in the very last Kickstarter update from August 2013, the entrepreneurs admitted they did not *'learn from their mistake and did not update the Kickstarter updates'*.



Resources and success

Diaspora project achieved a remarkable success in rising capital on Kickstarter. However the resources were not used according with their full potential, as the team eventually lacked entrepreneurial spirit and the motivation to bring out the software in the requested state. Although in the interview with Salzberg (Wortham, 2012), one can read that the students tried to commit all the necessary efforts in accommodating their backers and rewarding them properly, the magnitude of responsibilities brought about by the campaign, were overwhelming.

Therefore, it can be concluded that the entrepreneurs assess their involvement against Diaspora's finale as disappointing. However, the developments throughout the duration of the project show several entrepreneurial shortcomings in involving the stakeholders in the incentive and carrying out the business operations properly, which, as indicated by the interviews with Eben Moglen and Diaspora's crowdfunding backers, definitely did not improve Diaspora's chances of passing the crowdfunding test.

4.1.3 Oculus Rift

This project, developed by Oculus VR, has been financed by venture capital and crowdfunding. The Kickstarter campaign, launched in August 2012 had raised \$2,437,429 (\$250,000 pledged) from 9,522 funders. The entrepreneurial team, consisting of Palmer Luckey and John Carmack, both novice entrepreneurs with technological background, managed to successfully collect the finances in only 30 days. Traditional sources of capital contributed nearly \$14 million to the Oculus Rift project.

The elevator pitch video features both entrepreneurs who talk about the interface and commercial application of the Rift. This device was designed for gaining a better experience while gaming. The wide field of view and high resolution display are named as the core specifications leading to enhanced virtual gaming experience. Both entrepreneurs are passionate about gaming and their hobby brought them towards the idea of creating a different headset. In the video, the creators indicate that they turned to crowdfunding in order to build development kits of the Rift, so that they can reach the developers faster. Further, John Carmack states that *'Kickstarter has proven to be an amazing platform for accelerating big and small ideas alike. We hope you share our excitement about virtual reality, the Rift, and the future of gaming'*. Moreover, the video features the contemporary developer of gaming consoles who mentioned the high technical quality of the Rift and its high market and merchandise potential. The entrepreneurs end their pitch with an open call to backers requesting their feedback on the developer version of the headset, to help them improve the current product and work on a consumer version of the Rift in the near future.

The funders were rewarded for their contributions in different manners, where the estimated delivery time varied between October 2012 and May 2013. According to the information on Kickstarter, the deadlines were successfully met, as the last devices were sent out to backers around March 2013. Since August 2013, it is possible to order the Rift headset through a company website. The Oculus Rift team awarded each \$10 pledge with frequent updates (1009 backers), for \$5 more the funders would be granted a poster (209 backers) and each donation of \$25 would be awarded with a t-shirt (434 backers). Poster and t-shirt would come as a package to people offering \$35 or more (179 backers), and for an autograph on both, the funder would have to pay \$75 or more (106 backers). The unassembled Rift headset would come at the price of \$275 (100 backers) and the standard, assembled device was sent to funder who contributed \$300 (5640 backers). For \$35 more,

the assembled device would be complemented by a poster and t-shirt (859 backers), while funder would need to contribute \$500 to receive a signed set (66 backers). For \$75 more, one would receive two assembled headsets (216 backers) and the third one would come at the price of \$850 (40 backers). Each donation of \$1400 (20 backers) was awarded with five headsets and for each \$3000 a funder would obtain a package of ten Rifts and support kit (7 backers). Finally, for \$2000 extra, a funder would receive the aforementioned package and an opportunity to visit the company and experience the development process.

Besides, the facts that the project was successful in terms of fundraising and deliveries to backers, the updates on Kickstarter show that the entrepreneurial team experienced it as a 'rewarding challenge'. The interview below, given by the spokesmen of the Oculus VR explains the development during and after the crowdfunding campaign in depth.

4.1.3.1 Conclusions from interviews with Oculus Rift spokesman and project backers

Subsequently, there are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

Stakeholder Involvement

From the interview with Oculus Rift's spokesman, Jim Redner it is visible that the entrepreneurial team took the effort in order to identify their stakeholders and understand their role and preferences in the crowdfunding campaign. The team's notifications have been timely, complete and explicit throughout the campaign and in its aftermath.

As Redner clarified, the funders have been overwhelmed by the amounts of correspondence they had received during the Kickstarter fundraising period. They have been aware of the fact that some backers' may be able to give an interesting feedback. Therefore, they employed additional personnel to screen the e-mails on their content. The mailings have then been selected for either updates or more attention, where the Rift team would answer in person. Redner admitted that although the e-mail gate-keeping was rather time consuming and, especially in the beginning, very iterative, it definitely paid off.

Interviews with Oculus Rift backers confirm this statement. The backers who admitted to have had personal interactions with the entrepreneurial team see the correspondence as satisfactory. In these two cases, the supporters shared their ideas on display functions of the headset and proposed a slightly amended reward scheme. These changes have been adopted by the team, which has led to more contributions high enough to pre-order the headset.

The backers, who did not require any other assistance than through e-mail, were satisfied with the content of the updates and the possibility to exchange their experience on a Kickstarter forum. They mentioned that *'Luckey and Carmack were very eager to engage in a dialogue'* and *'the possibility to interact with other gamers has grown to a community, present on other gaming forums, outside the Kickstarter'*. All in all, the respondents agreed that this has occurred because the Rift has offered the gaming community a better product and a unique gaming experience, which has not yet been available to them.



According to Redner the successful networking of Oculus Rift team was the result of their entrepreneurial experience with potential customers and the fact, that next to asking crowdfunders to spread the word, Luckey and Carmack made use of the existing connections to popularize their idea and gain more leverage, either in the media or through Kickstarter. The fact that the headset has evolved outside the Kickstarter and made it to other gaming communities was the result of *'backers spreading the word and that the headset was a different product'*. He admitted that the entrepreneurial team recognized the gap in the gaming market and designed a product worth attention. Kickstarter has made it possible to introduce the innovation online, in the *'natural milieu of an average gamer'* and the understanding of the backers, as well as entrepreneurial experience, made it possible to *'interact with funders in a more direct way, through personal contact with those offering feedback'* and *'engage more people through own network'*.

Innovative Capabilities

The vast contribution to Rift's Kickstarter's success can be attributed to the development of team's dynamic capabilities. In the interview, Jim Redner already admitted that the team Luckey and Carmack has already had some entrepreneurial experience prior to the crowdfunding campaign. This has enabled a successful assessment of the gaming market and recognition of gamer's interests before the headset was developed. This procedure enhanced team's learning capacities and enabled better networking, which has brought considerable harvest during the fundraising period.

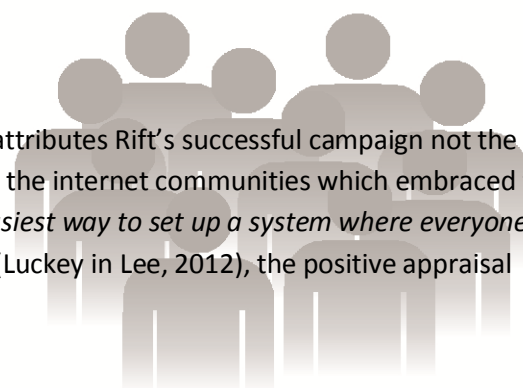
By interacting with backers, the entrepreneurial team has been able to advance the aforementioned skills, which have helped them to transform the raised finances into product's success. This notion is also found in the interviews with Rift's supporters, who indicated their satisfaction with the headset. As they explain, this is partially attributable to the co-creation opportunity they received while the project was pitched online. Another contribution to the positive reception of the Rift was team's considerable efforts in delivering a good quality device on time.

Redner explained that the successful deliveries were possible because the company had been able to make a thorough assessment of necessary operations and, because a part of the funding was available through venture capital, they also could find proper suppliers and manufacturers. Hence, the effective transformation of resources obtained through crowdfunding has occurred in this case because of team's ability to learn and apply the technological and business knowledge during the campaign and in its aftermath.

The evidence for the assimilation of learning is also present in the fact that the Oculus Rift team has been actively brainstorming with backers on the user version of the headset. This notion is visible in Kickstarted updates and confirmed by Redner who stated that *'our company is currently developing another [user] version of the headset where we use clues given to us by gamers, also involved in our crowdfunding campaign'*.

Resources and success

In the interview for Aaron Lee (2012), Palmer Luckey attributes Rift's successful campaign not the involvement of the crowdfunding platform, but to the the internet communities which embraced the gaming innovation. Although the platform was *'the easiest way to set up a system where everyone could collaborate, get updates and set up pre-orders'* (Luckey in Lee, 2012), the positive appraisal



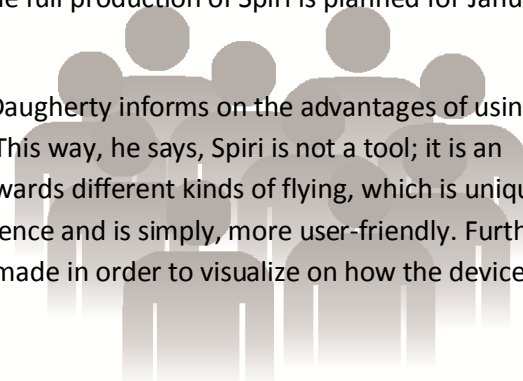
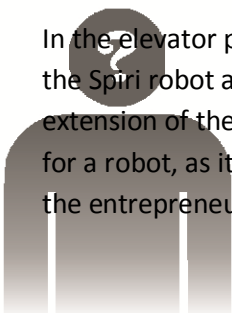
around the Rift campaign depended on the active engagement in the dialogue with project backers. Luckey strengthened this notion with the following sentence: *'I think the fact that there's a huge ecosystem of tech sites, social media and news aggregation sites that make it really easy for people to find out about new technologies does a lot more than any one particular funding platform'* (Lee, 2012). Luckey admitted that it is necessary to create a bond of trust between the creators and funders, because they are the community most likely to spread a (good) word and provide more people with knowledge on the introduced technology. Luckey also mentioned that crowdfunding was a *'hectic, but fun opportunity that brought rewards, worth any effort'*. However, as Redner adds, one has to be prepared to give up a daily routine to make crowdfunding a large scale success and avoid disappointments.

4.1.4 Spiri

Partick Edwards – Daugherty has been the owner of a high-tech company Pleiades, operating since 1999. The business has offices in the United States, while its headquarters are located in Halifax, Canada. Edwards – Daugherty is an experienced entrepreneur. The projects he worked on in the past included the development of e-learning systems, online games and improving the technology applied in both. The motive behind the development of a Spiri came through the involvement in gaming platforms. Edwards – Daugherty saw the potential of the application of flying robots in gaming and beyond it. The purpose of the Spiri is to bring about a different sense of location and extend real interaction with the world, both physical and digital. The flying robot was invented by the team consisting of experienced entrepreneurs, with different backgrounds.

Spiri needed only 30 days to raise the necessary funding in its Kickstater campaign, which ended on September 12, 2013. The entrepreneurs received a notable sum of \$140,623 from 382 backers, while they pledged for \$ 125,000. Funders were granted different forms of rewards for their pledges. The ones contributing with \$1 or more (142 backers), would be compensated by project updates. People funding for \$25 (40 backers) or more would receive a gadget tote bag, miniature Spiri posters or a t-shirt. For a contribution of \$65 or more, a full-size Spiri poster came as a reward to 6 backers. Funders contributing \$520 or more (68) were promised a Spiri 1.0 and for \$50 extra they would receive an education kit with their flying robot (23 backers). The contributions higher than \$575 were rewarded with a Spiri 1.0 and a poster (4 backers), Spiri 1.0 or a developer kit preview (57 backers). Funders with \$775 contribution or higher were promised an early-release of the product (4 backers) which has been shipped out in September 2013. For \$1,775 or more, the early-release of Spiri would come with a lab-tour (7 backers) and for contributions higher than \$5,775 the Spiri and lab-tour would be enriched with staff helping out in using the flying robot (5 backers). In his Kickstarter pitch, Edwards – Daugherty informs that the compensations in a poster, T-shirt form would come as soon as the campaign is terminated, which was confirmed in an interview. The early releases of Spiri would be shipped out in the period of September to December 2013, and according to the entrepreneur the backers eligible for it are currently being rewarded. The full production of Spiri is planned for January 2014 on.

In the elevator pitch video on Kickstarter, Edwards – Daugherty informs on the advantages of using the Spiri robot and the holistic picture of the project. This way, he says, Spiri is not a tool; it is an extension of the user. The device is programmable towards different kinds of flying, which is unique for a robot, as it provides the user with greater experience and is simply, more user-friendly. Further, the entrepreneurial team informs on how the Spiri is made in order to visualize on how the device



will bring about all named advantages. A Spiri can be programmed through an app and accessorized. The team also advocates for the wide-range of possibilities for Spiri to succeed on the market. The robot is expected not only to have a practical use in gaming, but also in case of building inspections with a benefit for property managers. Spiri could also help out in taking care of roof-top gardens popular in North America. Moreover, the entrepreneurial team's ambition is to commercialize Spiri. Therefore, they ask the potential backers for feedback and cooperation in order to make the robot more user-friendly and use word – to – mouth marketing. Edwards – Daugherty even mentions creating a Spiri community where the robot is actively used and co-created by the entrepreneurs and users interested in this experience.

4.1.4.1 Conclusions from interviews with Spiri's creator and project backers

Below are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

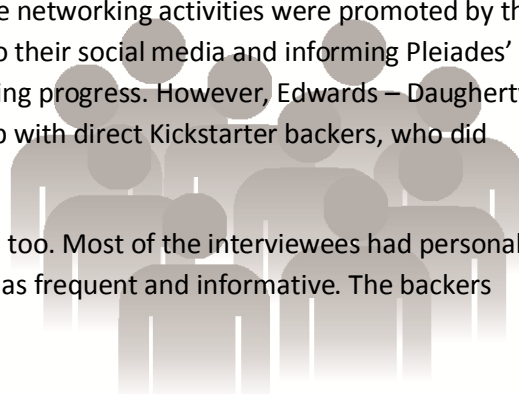
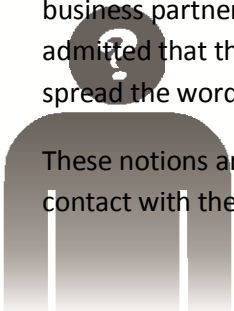
Stakeholder Involvement

From the interview with Spiri's founder, it became clear that the major project stakeholders – backers, were seen not only as project financiers, but also as co-creators and customers. Further inquiry into the Kickstarter notifications revealed that the roles attributed to the stakeholders were adequately understood and actively developed, and shaped by the entrepreneurial team. According to the funder, this task was managed through active and careful e-mail gatekeeping and frequent communications by means of updates and dialogue on project's Kickstarter page. The e-mail screening was performed in order to see through which supporters would be interested in co-creating Spiri and what value both parties would be able to exchange.

According to Spiri's inventor, Patrick Edwards – Daugherty crowdfunding was *'a way to engage with researchers, developers, professional investors and others whose feedback and whose own projects could add value to Spiri and influence our next development steps'*. Hence, the purpose of the Kickstarter campaign was to engage with backers in a deeper level, by means of creating a partnership, for instance. Enlarging the entrepreneurial network by means of bridging was thus the core activity performed by Edwards – Daugherty and his company Pleiades during the fundraising period, however, as the entrepreneur admitted, the mere interest in Spiri has served the company as an indicator of market interest in the product.

According to Edwards – Daugherty, the team was able to *'show backers that we were on a track that was both technically interesting for them and achievable for us, and, since almost half of our backers are also developers, that Spiri was a medium they would be interested in using'*. Therefore, Spiri succeeded to raise the necessary financial goal and attract a larger network, useful in further business operations. As the entrepreneur clarified, the networking activities were promoted by the company itself, by pitching the Kickstarter campaign to their social media and informing Pleiades' business partners of the company's recent crowdfunding progress. However, Edwards – Daugherty admitted that the successful connections were built up with direct Kickstarter backers, who did spread the word and attract more funders.

These notions are largely supported by Spiri's backers, too. Most of the interviewees had personal contact with the entrepreneurs, which they described as frequent and informative. The backers



indicated their contentment with the way that the company was willing to adopt their feedback and get engaged with proposed business partners. Furthermore, they also appreciated up-to-date notifications and the possibility to chat with other Kickstarter supporters of Spiri. The interviewees also indicated that the engagement in crowdfunding was not determined by possible rewards granted for their contribution, but the opportunity to show some own, personal entrepreneurial input into the incentive.

Innovative Capabilities

From the interview with Edwards – Daugherty, it can be concluded that the other major stake the company had in the campaign was the opportunity to learn, especially at the level of engineering. Due to the fact that the funders also provided non-pecuniary feedback on the technology applied, design, user interface and organizing the operations after the campaign is terminated, that goal had been achieved. Edwards – Daugherty supported this notion with an example of brainstorming session with three backers, which resulted in adjusting the functions of Spiri and changing the type of lens, which would save the costs and improve the accuracy of observations.

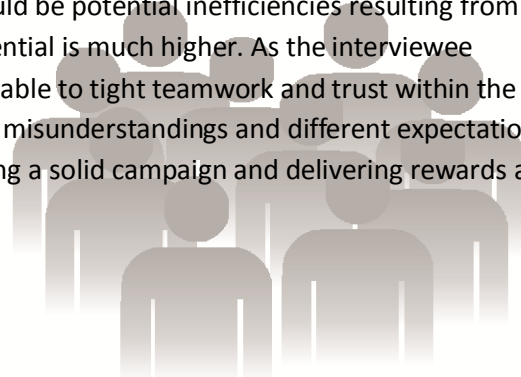
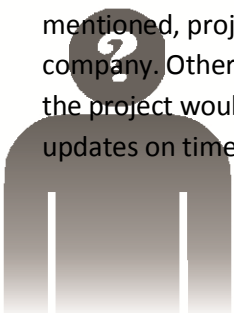
However, it should also be mentioned that Edwards – Daugherty is an experienced entrepreneur and his company has some successful accounts in its portfolio prior to the crowdfunding campaign. As the funder mentioned, the experience in running a business, as well as experienced gained from applying for bank loans have been helpful in understanding the benefits one can collect during a crowdfunding campaign and allowed the company maximization of the potential leverage.

The fact that the Pleiades gained a larger network also counts as having successfully developed dynamic capabilities. As the funder mentioned, some of the Kickstarter connections are still very vital to Spiri's development and the company is thinking of engaging in creation of another robot, also with the help of the Kickstarter supporters.

Drawing on the aforementioned information, it can be stated that the successful re-development of financial resources and use of connections developed by involving the stakeholders into the project, have had a positive impact on Spiri's success not only in terms of fundraising, but also beyond it. However, it should be stated, that there was certain interdependence between these two variables.

Resources and success

Although Edwards – Daugherty was positive about his crowdfunding experience, he admitted that it also took lots of time, energy and commitment to finalize the campaign positively and leave the backers at least remotely satisfied with the course of the project. The most time consuming activities were ones related to stakeholder involvement. Here, especially the e-mail gate-keeping proved challenging, that, according to the entrepreneur could have been managed more efficiently. None the less, Edwards – Daugherty accepted that there could be potential inefficiencies resulting from engagement in crowdfunding, but he saw that its potential is much higher. As the interviewee mentioned, project's success in these terms is attributable to tight teamwork and trust within the company. Otherwise, as he indicated, in the course of misunderstandings and different expectations, the project would be likely to fail in terms of conducting a solid campaign and delivering rewards and updates on time.



4.1.5 Matchbox ARM

This project, initiated by two entrepreneurs settled in London and originating from Eastern Europe - George Emmanuel Vladu and Bogdan Sebastian Nedelcu needed 45 days to achieve the funding goal of £7,000. The final result, closing the Kickstarter campaign in September 2013 by the sum of £8,641 collected from 226 funders came as a surprise to the duo. The creators, both graduates of a Technical University in Bucharest, Romania and close friends, were witnessing the revolution in microcontrollers. Their invention – the Matchbox ARM is an improvement to existing controllers – it is easy to use and programmable by a computer dummy.

In the elevator pitch video, the advantages and application of a Matchbox ARM are clearly visible. However, the surprise is the fact that none of the entrepreneurs is taking part in the short film. According to George, it is because they wanted their invention to speak for itself. Further, the Kickstarter page contains lots of technical details and features of the robotic platform, which gives a clue of the entrepreneurs being acquainted with the technology applied and professional towards the potential backers. Further, the team proudly informs, that prior to launching the crowdfunding campaign, the design, as well as technology were completed, which allowed building and testing prototypes for the period of seven months. This thorough preparation ensures that the device can be easily and inexpensively made and send out to backers on time, as of September 2013.

Naturally, each contribution had to be rewarded. Each backer donating £1 or more would be met with frequent updates (6 funders), while for each £15 or more the reward would be a device (73 backers). Ones who donated £2 would also be granted a CD with instructions (117 backers) and for a donation of £40, customer service was added (4 backers). For a £70 donation, the package would contain five devices and the other features (13 backers) and each sum of £120 was rewarded with a robotic platform kit for Matchbox ARM (7 backers) or a package of ten devices plus complements (2 backers). Each donation of £400 was awarded with a customized design project using a Matchbox Arm through Skype conferences and personal contact with the entrepreneurs (2 backers) and finally, the largest donation of one person - £1000 was granted a partnership in the venture.

In the section below, George and Bogdan share their crowdfunding experience.

4.1.5.1 Conclusions from interviews with project creators and backers

Below are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

Stakeholder Involvement

In the joint interview, George and Bogdan admitted that they did not have any plan or strategy in the communication or involvement of their backers. However, the entrepreneurs stated that they followed some crowdfunded incentives and saw that their elevator pitch has to be clear and understandable, and they had to give frequent and precise updates. The funders did not take into account the possibility of receiving many e-mails, which in their eyes, was the biggest challenge throughout the whole campaign.

In order to accommodate the interested backers with timely replies, one of the entrepreneurs, Bogdan, was immediately answering the messages. However, after a week, he decided to manually screen them and select ones which can be answered by a general update, and reply only to those,

which included a deeper question, request or feedback. This has saved some time, but left the entrepreneurs with the idea that most of their effort was devoted to managing the communication.

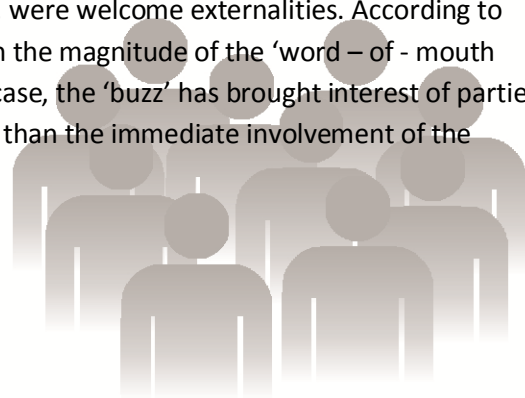
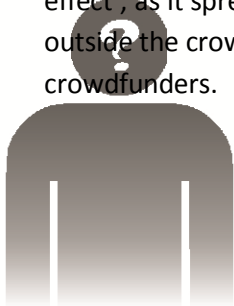
The large interest, expressed by messages, has been an engine towards understanding the role of stakeholders, thus backers, in the crowdfunding process. George and Bogdan did not have any entrepreneurial experience, so they had to learn fast. As George said: *'if you fail to engage the backers in your project in other way than by fancy background, the support will be minimal and the disappointment will be large'*. Relatively quickly, the entrepreneurs realized that the supporters are not only their financiers, but also the first customers, a networking mechanism and co-creators.

The backers' interest in the pitched incentive has spread over the internet, as George and Bogdan requested the crowdfunders to popularize their project in the backers' social media tools. As effect, the contributions had risen, and there was increased need for a dialogue with financiers under each notification.

Although the team did not expect it, the controller has gained quite remarkable attention outside crowdfunding. The most interesting and lucrative benefit from the efforts they had undertaken was an interest of another firm (not involved in the crowdfunding campaign) in the Matchbox ARM. According to George: *'we were offered a chance to cooperate with a well-known technical company, interested in our idea. So far, we have been to several meetings to see where the partnership will go exactly, none the less, it is a fascinating learning experience. For us, two guys from Romania, it is a great opportunity and a way to gain entrepreneurial skills, training, and benefit from the experience of others, already established on the market'*. At the moment the entrepreneurs are negotiating the partnership in terms of new product development and shares in sales.

According to the interviewed backers of the incentive, the entrepreneurs were really engaged in the campaign and devoted to reacting to each e-mail. The team accepted feedback and worked on its inclusion in the project. According to one of the respondents: *'some creators do not care about contact with backers. It's sad because some of us, like me, want to be a part of the idea, bring some value, outside of the money. Fortunately, George and Bogdan were different. They came up with questions and wrote personal e-mails. These actions encourage you to support their invention in all the possible ways'*. However, the communication with backers has not been smooth from the beginning. One of the interviewees admitted to have received an answer disconnected from the question. Although it left an impression of *'sloppiness'*, this backer got the answer eventually, through dialogue with other Kickstarter funders.

From the interviews it became clear, that the effects of a crowdfunding campaign can be more far-reaching than the Kickstarter or immediate backers' networks. Although the Matchbox ARM campaign showed that the entrepreneurs were occupied with trying to communicate with their backers, eventual partnerships or market information, were welcome externalities. According to Bogdan, the offering one pitches makes a difference in the magnitude of the *'word – of - mouth effect'*, as it spreads in different communities. In this case, the *'buzz'* has brought interest of parties outside the crowdfunding, which seem to count more than the immediate involvement of the crowdfunders.



Innovative Capabilities

Despite project's successful campaign, the entrepreneurs admitted that, with current knowledge and experience, they could have benefitted more from the Kickstarter fundraising period. Although they recognize the financial and non-financial gains from crowdfunding, the team believes it could have done more to harvest even bigger perks. According to Bogdan: *'the backers were enthusiastic to obtain something useful, that they could apply in their daily work and at home [...]. We owe all the gains to the idea we had, and a minimal percent to our own input'*.

Although the simple networking scheme was successful and the backers were largely satisfied by the output, the entrepreneurs wonder if a different engagement in the campaign would have been more beneficial, such as engaging own network. However, crowdfunding brought some harvest too, in form of assimilating the English language better and incentive to read more management literature, in the light of upcoming business partnership. The fact that the deliveries of the controller are timely, the founders attribute to their thorough preparations in terms of product testing and the manufacturing prior to the campaign, as well as the simplicity of the product itself. Besides, funders were often offering advice as to how to conduct a business, in terms of taxes and administration. This support was extended by backers who had entrepreneurial experience or venture capital background.

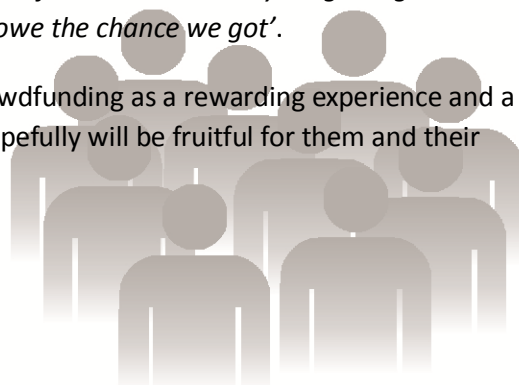
All in all, in spite of lack of explicit evidence for dynamic capabilities being helpful in achieving crowdfunding's goals, the interview with George and Bogdan allows making implicit assumptions that if there had been more engagement in stakeholder involvement incentives, the team could yield more profits from the Kickstarter campaign, in terms of learning or networking, which could have had more far-reaching implications than the current relations with backers.

Resources and Success

The entrepreneurial team has a general feeling of contentment with the way they conducted the crowdfunding campaign and how the business is currently operating. George and Bogdan's major achievement, in their eyes, is the ability to gather sufficient financial means to get the project off the ground. As another ingredient for success, they mention the business opportunity, flowing from the publicity the entrepreneurs gained through crowdfunding, but not directly from crowdfunders.

Nevertheless, the interviewees reckon that an idea is finalized with a great sense of achievement, only after one has done everything to maximize the gains for the stakeholders and self, in secondary order. Although the campaign was a hectic experience, the team's advice to other novices is to prepare better and be even more attentive to backers' questions or feedback. Despite that it was a lot to handle for both of them, Bogdan said: *'there was no complaining. These people trusted us their money, on distance, and the best we could do was to comfort them that everything will go as planned. These are our very first customers whom we owe the chance we got'*.

Ending on a positive note, George and Bogdan see crowdfunding as a rewarding experience and a way to embody their idea into a real project, which hopefully will be fruitful for them and their customers.



4.1.6 Micro Phone Lens

Another case of a successfully crowdfunded project is the incentive of Micro Phone Lens brought out by Thomas Larson. This 22 year old entrepreneur from Seattle has been developing the device for over a year, which over time has become his career. Initially, Larson tried to raise \$5,000 in his Kickstarter campaign, however the 5,092 funders interested in the project granted the young entrepreneur with \$91,524. This tremendous sum was gathered in just 21 days, and marked the end of the crowdfunding campaign on September, 10 2013. Larson admits, he did not expect his campaign to turn such a success.

The funders were granted with rewards for this contribution to the Micro Phone Lens project. The ones who contributed \$1 or more (43 backers) were promised frequent updates. Backers pledging \$12 or more were promised a Micro Phone Lens (100 funders) and for pledges of \$15 the product would be shipped for free (4896 backers). The ones who contributed \$59 or more would be granted the Micro Phone Lens, a carrying case and a T-Shirt, with free shipping (30 backers) and for \$249 or more, the previous package would be complemented with autographed design sketches of the device (1 backer).

In the elevator pitch video, Larson enthusiastically advocates the technological and market advantages of his invention. He demonstrates the application of the lens in a real-life setting and gives an open call towards the potential backers to support his idea and get involved in bringing the invention to the market. Larson optimistically promises to start shipping the units in October 2013, which has so far been successful, according to the novice entrepreneur.

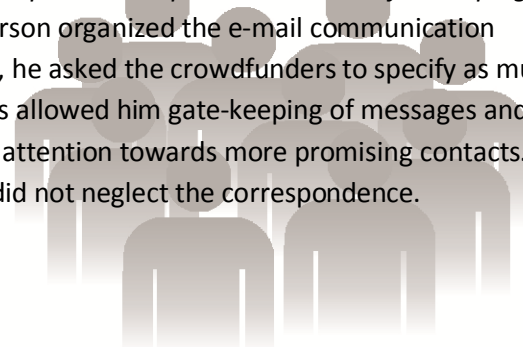
4.1.6.1 Conclusions from interviews with project creator and backers

Subsequently, there are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

Stakeholder Involvement

In the interview, Thomas Larson admitted that the gross effort in the crowdfunding campaign he devoted towards creating a trustworthy, communicative and understandable elevator pitch. Afterwards, he attended his backers by posting notifications frequently.

However, the preparation towards the Kickstarter fundraising started for Larson with brainstorming over the roles of potential backers. The freshly graduated entrepreneur has prepared for it by reading over popular crowdfunding campaigns, such as one of Pebble. Then, he outlined the possible manners of involvement with backers. Although his primary goal was to monitor market interest in the lens, he also strived to communicate and co-create other ideas (he already has sketched) with more engaged crowdfunders: *'backers can be divided into two rough groups: those that care about supporting you and your project, and those that want to pre-order a product. A successful campaign has to address both of these interests'*. Henceforth, Larson organized the e-mail communication which he handled himself. In one of the early updates, he asked the crowdfunders to specify as much and contained what the subject of the message is. This allowed him gate-keeping of messages and designing updates, as well as devoting more time and attention towards more promising contacts. Although the activities were time consuming, Larson did not neglect the correspondence.



Furthermore, the entrepreneur was prepared to make changes during the crowdfunding campaign that attracted more Kickstarter investors: *'for example, immediately upon launching I received a number of messages asking to enable international shipping. I allowed international shipping within 24 hours, and international backers accounted for 40% of my funding. A similar project, the Illumoscope, received similar messages but took weeks to enable international shipping. Sadly they were not successful. I think it is very important to remember that the project creator is serving the backers, not the other way around'*.

Other than that, Larson used the backers' interest in order to build up a network, relevant for the venture's business future. The entrepreneur did not engage in other networking activities than asking his funders for word-of-mouth commercials: *'approximately 60% of my funders found the project through the Kickstarter interface. For \$0 I received an amount of publicity that marketing companies would charge tens of thousands of dollars for'*.

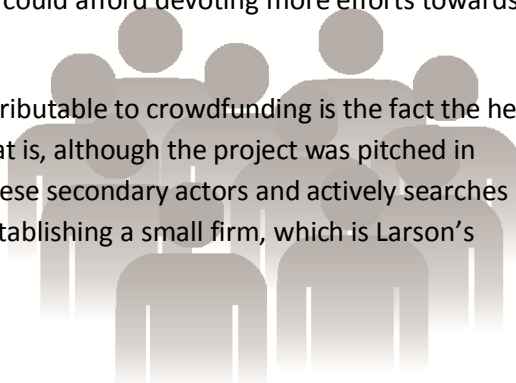
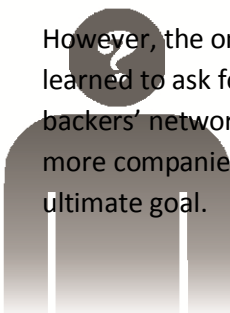
The relative simplicity behind the success of Micro Phone Lens's is also confirmed throughout the interviews with project's backers. All interviewees expressed their contentment with the communication with Larson, and ones who looked for deeper involvement, admitted the entrepreneur devoted time and attention to their feedback and came up with questions, which enhanced the dialogue. The more involved backers offered technical tips, as well as practical information on how to extend the idea into a more coherent business plan. The supporters, who did not engage in any personal communication, admitted there was enough room to discuss the incentive with other backers.

Innovative Capabilities

Prior to setting up the Kickstarter campaign, Larson made thorough preparations of the project in operational terms. He had several prototypes ready, tested them and found long term suppliers and manufacturers. As the entrepreneur admitted, he strived to design a simple, yet functional device, which would save time and costs in production. Larson gained these entrepreneurial skills during the university classes. He also mentioned that his prior contact with banks and other instances directed at helping entrepreneurs were the sources of information on how to successfully introduce the idea through Kickstarter or any other capital-generating institution. However, the extent to which crowdfunding affected the rise of innovative capabilities in this case is modest, funders were often offering advice as to how to conduct a business, in terms of taxes and administration. This advice came from backers who were experienced entrepreneurs.

In Larson's case, crowdfunding did not explicitly contribute to re-shaping or developing of unique entrepreneurial skills. The founder admitted he owed the smooth operations and fundraising period to rigorous and methodical planning of the activities he would undertake during the crowdfunding. As he further elaborated, it saved him time, so that he could afford devoting more efforts towards the communication and involvement of the backers.

However, the one benefit that Larson recognized is attributable to crowdfunding is the fact the he learned to ask for help and he learned networking. That is, although the project was pitched in backers' networks, Larson is currently involved with these secondary actors and actively searches more companies or people who could contribute to establishing a small firm, which is Larson's ultimate goal.



Resources and success

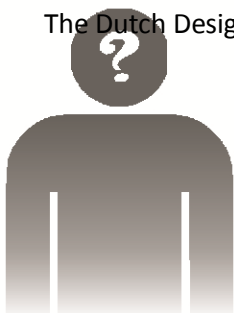
All in all, Larson comments that the key to success in a crowdfunding campaign is through effective communication with the backers and efficient planning of operations. He did not use social media to support his campaign, but committed the energy to communicating the needs of the funders towards the project, customizing it towards the wishes of the 'crowd'. The success of the project capitalizes on the novelty of the idea, potential market interest in it and offering backers attractive returns for their engagement. According to Larson *'if you have a good idea, crowdfunding is a way to go very far with little resources. I think the full potential of crowdfunding has yet to be realized. However, behind the success there is always a tremendous time commitment'*. Furthermore, the campaign also ended in successful deliveries of the lenses to ones who pre-ordered them. All interviewed backers who obtained the gadget, were glad with the fact that it was delivered on time.

4.1.7 The Bell

Another incentive financed through a Kickstarter campaign is The Bike Bell with an extra L by Dutch Design. The project initiated by Jelmer Riemersma and Peter Veldhoven needed 45 days to receive £28,851 from 817 backers, whereas the goal stated by the entrepreneurs was estimated at £25,000. The campaign, which took off on June 6, 2013, ended on July 21.

The Bell is also pitched with a lively video on a Kickstarter page, with references to the company's website. Both entrepreneurs name advantages of the gadget, the bike bell, and advertise its main edge as being a 'fun product'. According to Riemersma and Veldhoven, The Bell stands out because of its unique design, high quality and functionality. Further, the inventors underline that they established a company – Dutch Design which employs six designers who jointly worked on the interface of the Bell. The team already had prototypes and manufacturing organized prior to the launch of the Kickstarter campaign. In the video pitch, Riemersma also indicates that The Bell was introduced to the target group as a preliminary market research tool directly after the prototype was designed. On the final note, Veldhoven gives an open call to potential backers with the request for any kind of help that would bring the product towards a larger audience.

For their involvement, funders were also met with some rewards. The ones contributing with £2 or more would be frequently updated (9 backers). For a contribution of £4 or higher, a funder would be able to propose a color for the bike bell (8 backers, while for £12 or more a funder would be granted with a black or white bike bell (513 backers). Contributing £2 more, one would be able to choose from the following color palette: orange, green, pink or yellow (195 backers), whereas for donations of £19 or higher, would be rewarded with a black bike bell with an original design twist (42 backers). Each funder issuing £29 or more would get the product with either a USA or United Kingdom's flag (13 backers) and for £39 the bell would be inscribed (5 backers). Donating £10 extra, a backer would be rewarded with a customized bell (6 backers). The highest donations of £250 (14 backers), £1000 (3 backers) would be respectively met with a corporate pack of bike bells and a distributorship of the bell. The bike bells were expected to get delivered in the period of September – October 2013 which The Dutch Design effectively achieved.



4.1.7.1 Conclusions from interviews with project creators and backers

Below are the results of data collection and analysis, conducted accordingly with previous sections of this document. The section is organized among dynamics relevant to each variable or relationship, as indicated in the conceptual model in Chapter 2.

Stakeholder Involvement

Dutch Design, the company behind the successful bike bell project, has already been a well-functioning entrepreneurship in the Netherlands. The owners, Jelmer Riemersma and Peter Veldhoven admitted they approached the crowdfunding campaign with a careful planning and thorough preparation. The same counts for managing or involving their stakeholders, the backers, in the course of the project.

The entrepreneurs admitted that the primary goal of the Kickstarter fundraising were not the finances, but gaining publicity and the ability to do a preliminary market research. . As Riemersma explains *'you need to reach as many people as possible with your story. And when you reach them you need to convince them to give you money (real money) based on your story. So your intentions need to be sincere and you need to be open about everything surrounding your project. Remember that people who you never met before need to trust you'*.

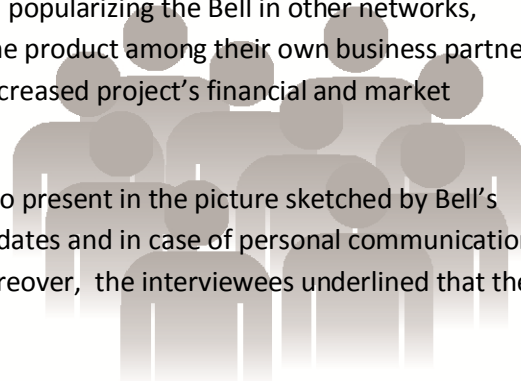
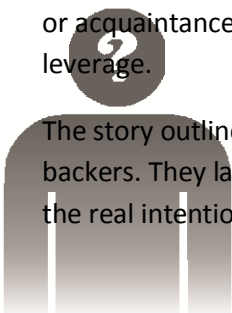
Furthermore, the team has gained the understanding of the role of crowdfunding backers, by having read articles about prior crowdfunding campaigns. Citing Veldhoven *'backers are now your customers. But they are committed customers who love staying involved. We ask them for feedback on all kinds of things. And yes, keeping them all up to date takes time, but it's definitely worth it'*. Yet, in order to accommodate backers' preferences, the team has been actively posting updates with details on project's progress. Besides, in order to see if there are possibilities of any closer partnership with funders, the incoming mails were scanned and sorted either as viable for general update or more personal attention.

The gate-keeping was performed by an extra employer and controlled by another member of the Dutch Design team. Riemersma further explained that the incoming mails were very valuable in terms of clues of Bell's potential in overseas markets, such as Asia, and some of the communication even resulted in setting up franchises abroad, that are currently working on introducing the bell in for instance Switzerland.

Veldhoven explained that the Bell had to represent a value to the backers, in terms of environmental and health consciousness. Because team's updates, as well as their elevator pitch underline these core virtues behind the project, it attracted backers' deeper interest, as it responded to their personal beliefs.

The crowdfunders were also an important mechanism popularizing the Bell in other networks, however Dutch Design was also engaged in pitching the product among their own business partners or acquaintances, which in the eyes of Veldhoven, increased project's financial and market leverage.

The story outlined by Riemersma and Veldhoven is also present in the picture sketched by Bell's backers. They largely appreciated the frequency of updates and in case of personal communication, the real intention of involvement in the incentive. Moreover, the interviewees underlined that the



entrepreneurs were not afraid to ask for feedback, in terms of bell's colors or clipping system, and for most of them, the decision to finally pitch the project in own networks, was done due to value compatibility.

Innovative Capabilities

The business experience and thorough preparation of the bell prior to its online pitching on Kickstarter were recognized by the entrepreneurs as the most important ingredients to success, outside the attention devoted to stakeholders.

Because the company has been functioning well before crowdfunding, and had a user-friendly website, the team overcame as trustworthy, which in turn attracted more contributions. According to Riemersma, the experience in business assured the supporters in the potential of the project outside Kickstarter. This way, the backers were more eager to pre-order, because they felt that the delivery will match the promised period. Other than that, the company pursued the contemporary tasks as a regular pace; the crowdfunding was a side activity. This information was actively spread among backers in order to show that Dutch Design is a serious incentive, where effectiveness and efficiency do not exclude each other.

The entrepreneurs did not mention the crowdfunding being responsible for developing more skills, or knowledge, but it convinced them that their entrepreneurial experience has been valuable and can be applied properly outside the regular operations.

Resources and Success

All in all, Dutch Design managed to deliver the bicycle bells in a timely manner to the backers who pre-ordered it. Although it required lots of time and resources, the entrepreneurs, as well as the backers expressed their contentment in this case. On the final note, Riemersma and Veldhoven share the opinion that crowdfunding is a very sensible way to introduce a new product to the market. They also recommend engaging in crowdfunding campaigns. A sincere campaign, even if financially unsuccessful, can lead to acquiring lots of valuable feedback. This may later contribute to project's success. Veldhoven finishes with the following *'if you only expect it to be a quick and easy way of getting money, don't do it. That will not work. It's the wrong mindset for building trust with a big group of people'*.

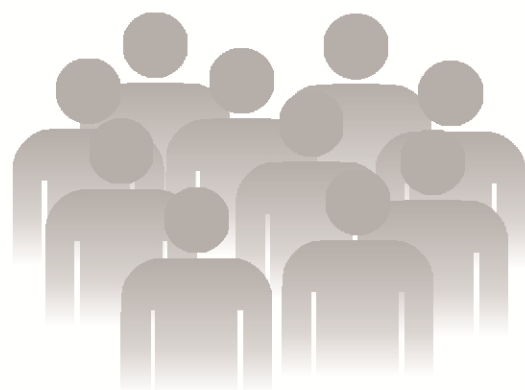
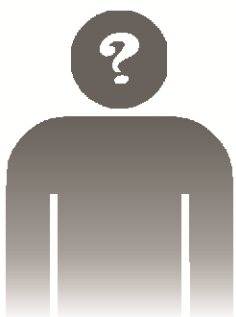
4.1.8 Crowdfunding in practice: insights of a consultant

The interview with Jacek Mikołajczak, Poland's first crowdfunding consultant confirmed the findings from the analysis of the seven projects. The owner of Polak Potrafi underlined that crowdfunding is not a fundraising mode for every ambitious entrepreneur, but for one with excellent people skills and rigorous time management capacities. Managing the campaign, as well as business operations involved in manufacturing the product and shipping it to the backers are time consuming. However, crowdfunding has a complicating factor that is dealing with backers, which by plenty of aspiring project creators is still misunderstood or even downplayed. Mikołajczak admitted that the first point on his agenda while advising an entrepreneur is to pinpoint that involving stakeholders shall not be marginalized, but well worked out and planned prior to the campaign. The costs of managing the interests of funders is always very high, in each single crowdfunding involvement, and in some cases,

it does not comply with the monetary resources people are able to acquire. So, the nature of resource exchange in crowdfunding is a double – sided investment where balancing preferences and drawing boundaries have a crucial meaning.

Moreover, Mikołajczak explained why many incentives, despite their crowdfunding success, do not reach any larger market share, outside the primary clientele. As he continued, many entrepreneurs confuse crowdfunding with market research. Of course, the process allows tapping backers' creativity and listening to their ideas, but the project usually attracts a specific interest group, which may not necessarily be representative to the samples one would like to appeal to. Therefore, he assists aspiring creators with drafting a market research before starting the campaign, to monitor the real interest and if necessary, adjust expectations from the campaign.

Furthermore, the consultant concludes that despite all these externalities, a campaign is usually more valuable, regardless its outcome, than engaging in a traditional fundraising alternative. Therefore, even experienced entrepreneurs may find it intriguing and more valuable than using traditional capital sources. Next to the fact that crowdfunding in Poland has expanded in times of economic downturn where banks are not eager to extend loans and bootstrapping can not provide with enough resources either, the non-monetary part to crowdfunding is extremely important. While this mechanism can provide with excellent ability to network and co-create products with an interesting group of backers, entrepreneurs should try to extent its effects towards enriching own social capital. As Mikołajczak elaborated, crowdfunding often brings out innovations unseen in the stores, because of these extraordinary possibilities. However, this fundraising scheme has a lot more growth potential, if it is approached in a structural way, with a strategy, that embraces the advantages, and buffers the risks.



5 Cross – Case Comparison

This section of the thesis presents the results of combined analytical efforts introduced in the previous chapter. The aim of the comparison of the seven crowdfunded cases is to create an overview of the dynamics within stakeholder involvement, enhancement of innovative capabilities and the nature of resource – exchange process, specific to the crowdfunding phenomenon. This chapter will offer two strategic approaches towards crowdfunding, which embrace the case-based evidence.

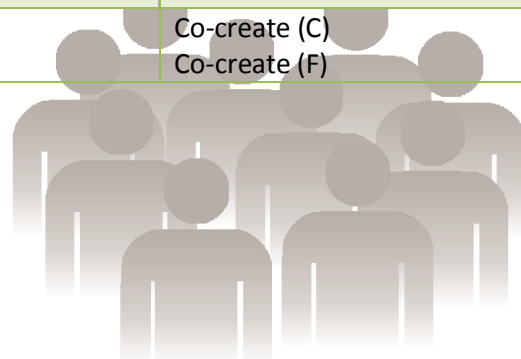
The pervious chapter revealed that in order to bring out a successful innovation through crowdfunding, it is necessary to achieve both – sufficient monetary resources and, even more importantly, manage the non-monetary component. Although pecuniary resources in large allow the funders of creative projects to capitalize their efforts, the absorption of the innovative capabilities and the involvement of project backers provide the true sense of achievement.

Although the success of a crowdfunded incentive in terms of effectiveness from the perspectives of creators and backers was accomplished in most of the studied cases, the efficiency component was not satisfactory, especially for entrepreneurs. The achievement of timely product deliveries as well as involving or managing the stakeholders in a proper manner, were rather difficult to accomplish, because of the time pressure of the short period of fundraising and meager stakeholder analysis prior to the beginning of the fundraising. In short, despite the financial success of the analyzed projects, both parties with stakes indicated that the crowdfunding challenge could be carried out in such a way that the gains for creators and backers would have been maximized. Therefore, the focal point of this section is to give an impression on how to commit the efforts in a more straightforward manner, so that more crowdfunding campaigns result in stakeholders' contentment.

The core element of achieving effective and efficient crowdfunding campaign oscillates around the motives that funders and creators have to engage in this mode of fundraising. This research revealed that former group participates in a campaign in order to either pre-order an offering or co-create, whereas the latter party strives to achieve solely the finances or funding combined with co-development with backers. Table 5-1 presents the possible reconfigurations of these aims. However, here it is important to bear in mind, that for each campaign, one will find supporters with both characteristics. However, a creator is able to attract a larger share of either type of backers, depending on his goals and the character of a crowdfunded incentive. This can be achieved by following the steps indicated below, and gathered in Figure 5-1, representing a flow-chart model.

Table 5-1 Combinations of motives to engage in crowdfunding: creators and funders

Creators' Motives		
Funders' Motives	Financial (C) Product (F)	Co-create (C) Product (F)
	Finance (C) Co-create (F)	Co-create (C) Co-create (F)



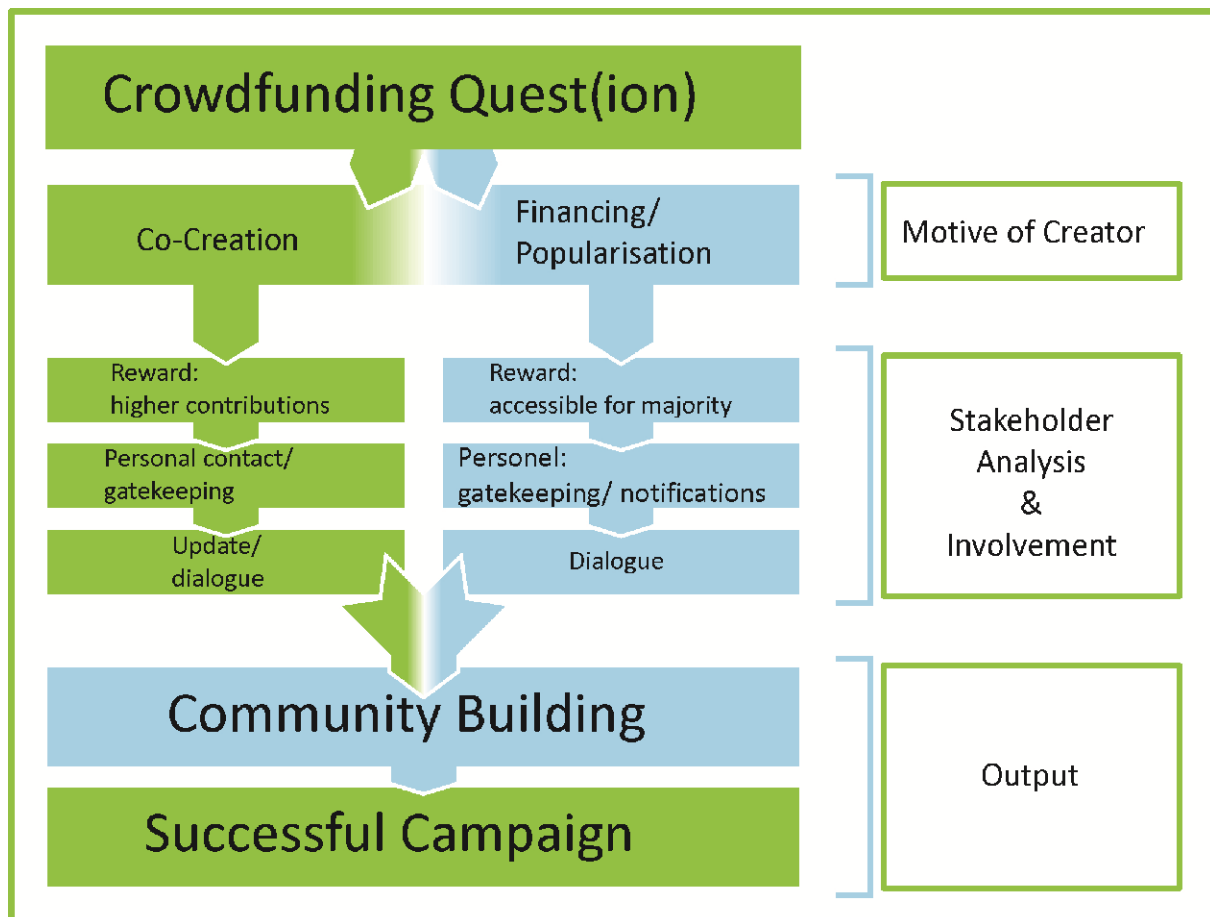


Figure 5-1 Crowdfunding strategies for stakeholder involvement

First of all, prior to engagement in crowdfunding, the entrepreneurs has to make several crucial choices, that is analyze the incentive and define which motive will be the most suitable and achievable. After these decisions are made, it is necessary to carry out a stakeholder analysis, which will be helpful to gather an insight into the potential expectations that various backers' groups participating may have. As mentioned before, there are two major clusters of potential backers. An entrepreneur can influence the mere engagement of either of the groups by designing the crowdfunding campaign and especially, imposing a suitable reward scheme. If the goal is to collect sufficient monetary resources and carry out a preliminary market research (buffering technique of stakeholder involvement) for the pitched product, a creator may decide to go for a system, where the offering will be available against a relatively small contribution. This will make a product accessible to more backers and increase the chances to ship larger quantities. The feedback will then most likely serve as a tool of assessing whether to pursue the project beyond the frames of the crowdfunding platform. However, if the motive is to co-develop (bridging stakeholder involvement technique) and raise funds, the entrepreneur will rather be better off if he manages to attract backers with knowledge and resources, interesting for the development of an incentive and creating a richer network. Such a choice can be facilitated by offering the product against higher donations. This way, crowdfunding enthusiasts will be granted other rewards (t-shirts, posters, etc.), which are easily manageable, while the most powerful stakeholders will be able to purchase the offering and receive developer privileges. This exclusivity may especially apply to projects which expose a high rate of technological complexity, or incentives issued towards a specific group of proponents.

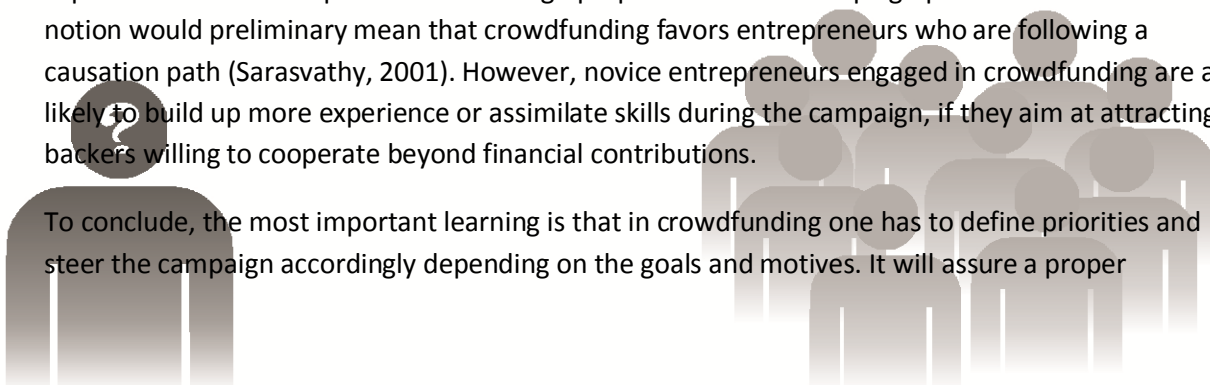
The degree of involvement of backers interested in pre-ordering, as well as ones oriented at co-creation, differs. The former group will rather ask for notifications and product specifications, whilst the latter will be more likely to discuss, technology, design and business operations, requiring a deeper engagement in communicating. In both cases, entrepreneurs will be required to perform a task of e-mail gatekeepers. This will help to differentiate between messages that involved repetitive, general questions and ones with different, deeper propositions. This task will prove efficient since it will allow the co-creating entrepreneurs to put more attention towards the more personal contact with backers. Besides, funders interested in collecting money and popularizing the product, will receive orientation towards posting general updates or establishing a Frequently Asked Questions section, in order to avoid the overwhelming amounts of messages. Although these tasks may seem complex, their application in the campaign will bring relief and allow prioritizing efforts towards stakeholder involvement and carrying out necessary operations to assure that project is carried out within acceptable timeframes. These proceedings will also be likely to facilitate the transition of the primary purpose of buffering stakeholders into bridging, which may be of mere importance for incentives with a considerable degree of co-development, notwithstanding also vital for the purpose of performing a market research through crowdfunding.

Nevertheless, both clusters have one end in common: they are willing to become a part of a community. This community building is closely intertwined to presence of shared values between creators and financiers and will be likely to lead to campaign's success in case the motivations expressed by stakeholders are compatible. Community – building occurs most effectively by designing a forum and a possibility of dialogue between crowdfunders and creators, which brings both parties closer together and stimulates horizontal contact between crowdfunders.

The community – building, as well as keeping tight track of project backers willing to participate beyond financing, is also likely to positively contribute to networking activities. Generally speaking, backers of all studied incentives were eager to pitch the projects in own networks and spread the word, yet this notion was stronger in projects that evolved to a community and ones aiming at co-development. In these cases networking activities also continued beyond Kickstarter. Typically, the word-of-mouth experience was intensified when project funders who were content with their degree of participation. In cases where no co-development is desired, network-building is a process which needs more entrepreneurial involvement, that is coverage in own networks and social media during and after the crowdfunding campaign.

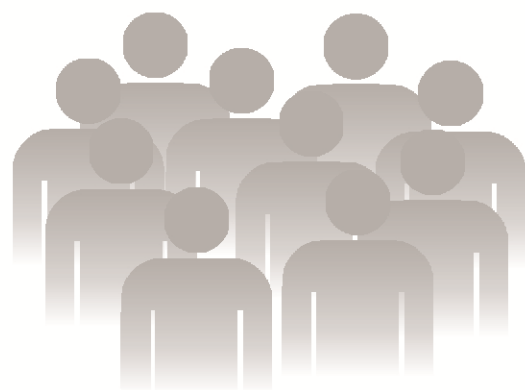
Relating to innovative capabilities, on the hand of the case-based evidence, it can be stated that they could have been enhanced by proper use of resources given by stakeholders and proper exploitation and exploration thereof. Therefore, there is a biconditional relationship between these two variables. The optimal learning from the crowdfunding experience was usually enhanced by the previous experience of the entrepreneur or thorough preparation of the campaign prior to the launch. This notion would preliminary mean that crowdfunding favors entrepreneurs who are following a causation path (Sarasvathy, 2001). However, novice entrepreneurs engaged in crowdfunding are also likely to build up more experience or assimilate skills during the campaign, if they aim at attracting backers willing to cooperate beyond financial contributions.

To conclude, the most important learning is that in crowdfunding one has to define priorities and steer the campaign accordingly depending on the goals and motives. It will assure a proper



involvement of backers on the satisfactory level and lead to more efficient use of the campaign time, as well as provide a direction of development after the campaign terminates. Although the hereby presented model will not diminish the fact that conducting a crowdfunding campaign will be a challenge, by the adoption of either of the proposed strategies, the entrepreneurs will be more likely to commit more efficiently, and therefore also facilitate their backers' needs in a more satisfactory manner. The proposed strategies will also positively affect the absorption and application of dynamic capabilities, while dealing with major interest groups will become a less complicated and more rewarding experience.

All in all, it seems clear that the more knowledge there is about crowdfunding, the better the understanding of this financing practice. Hence, it is important that the phenomenon remains compelling for the means of broadcast, or science, so that more crowdfunded projects become successful and provide a sense of achievement for backers and creators. Henceforth, if crowdfunding is to be popularized among novice entrepreneurs, or companies, it is necessary to provide them with information on how to maximize the benefits and minimize undesired externalities. The strategies offered in this research show that crowdfunding can be effectively and efficiently used as a fundraising mechanism, where the monetary and non-monetary gains are high. This potential may appeal not only to novice entrepreneurs, but also to the experienced ones. Offered approaches may motivate seeking funding outside the mainstream means, in order to seize the opportunity of 'engaging with the crowd' and escape the strict policies and complicated regulations applied by the banks or venture capitalists.



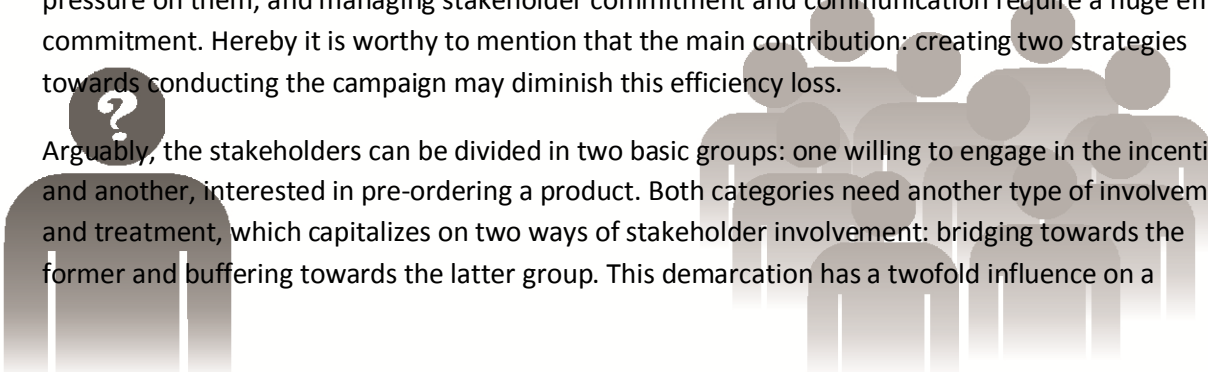
6 Conclusions

This paper develops a qualitative analysis of the emerging crowdfunding phenomenon, for the purpose of understanding its relationship with innovation and the role of backers as the most important stakeholders in the crowdfunding model, and discusses the implications of crowdfunding for service organizations. The inductive investigation of seven successfully crowdfunded projects facilitates a clearer, more comprehensive understanding of this phenomenon, by offering two strategies towards approaching crowdfunding. Findings from the investigation contribute to several novel concepts and theoretical frameworks of the business administration literature that can guide both managerial practice and future research pertaining to crowdfunding.

The above-mentioned discussion of the findings of this study has offered several important insights into the role of the stakeholders in crowdfunding. First of all, this rather novel method of fundraising seems to be a process, where both parties: project creators and backers offer important investments. This nature is evident in the light of the fact that crowdfunding is not only important from the perspective of extending financial resources, but also non-financial contributions, made by these actors. A vast majority of interviewees indicated that gaining optimal amount of pecuniary resources in crowdfunding largely depends on involving the stakeholders, thus project funders, in the co-creation of the incentive. As it appeared, the non-financial contributions in crowdfunding are even more valuable than actual finances. Following this line of thought, stakeholder involvement inhibits the resource re-configuration and exchange process, where creators show their capability to successfully carry out their incentive and accommodate backers' with their rewards, while maintaining the complex body of stakeholder interests. This process, which is found as a complicating factor, can be optimized by defining the goals behind the incentive, which will lead to attracting the desired group of backers and engaging them in the proper way. Besides, crowdfunding extends beyond the actual platform campaign, as only the deliveries of offerings form a cut-off point in this process.

This body of findings interestingly relates to the role and nature of stakeholders in the crowdfunding process. Accordingly with the writings of Agrawal et al. (2013), funders' most important motive to engage in crowdfunding is highly dependent on the willingness to participate in a community, access new products and investment opportunities, as well as express the support towards a value embedded in the project. However, the preliminary inquiry into this notion showed in addition, that the backers in crowdfunding are slowly experiencing a transition towards more responsible roles of investors and co-creators, which indicates initial, moderate merging of the concepts of crowdfunding and crowdsourcing. Project creators are by all means willing to accept this transition, as they see that crowdfunding offers additional resources, for acquisition of which founders are willing to compromise the financial benefits. However, contrasting with Agrawal et al. (2013), the cost of capital is becoming increasingly high for entrepreneurs, as involving the backers poses lots of pressure on them, and managing stakeholder commitment and communication require a huge effort commitment. Hereby it is worthy to mention that the main contribution: creating two strategies towards conducting the campaign may diminish this efficiency loss.

Arguably, the stakeholders can be divided in two basic groups: one willing to engage in the incentive, and another, interested in pre-ordering a product. Both categories need another type of involvement and treatment, which capitalizes on two ways of stakeholder involvement: bridging towards the former and buffering towards the latter group. This demarcation has a twofold influence on a

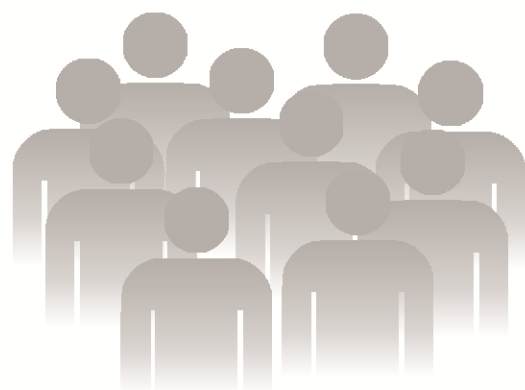
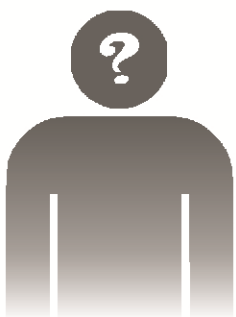


crowdfunded project. For one thing, it offers an opportunity for the creators to prioritize their efforts by adjusting the campaign's rewards scheme and engaging in discussion in the group of the backers interested in co-creation. On the contrary, this prioritization of efforts may leave the other group of backers improperly accommodated, as each form of stakeholder involvement is likely to draw attention from operation towards digressions. Nevertheless, proper involvement of stakeholders has a generally speaking positive influence on innovations, because the founders get the opportunity to discuss the product, alter its features, and develop or exploit (existing) innovative capabilities.

This notion slightly alters the model addressed in Chapter 2 of this document, in a way where, stakeholder involvement extends innovative capabilities in crowdfunding. As to the effect the capabilities have on the success of a campaign, the evidence is not unanimous. Even though crowdfunding extends networking capabilities of an entrepreneur and contributes to learning process, the interviewees could not specify the latter. Arguably, they indicated that the previous experience or entrepreneurial training play a key role in project development and management. Further, the process of exploration or exploitation of innovative capabilities is iterative and dependent on case-specific dynamics. Inductively, these two factors may have been crucial in reaching this specific conclusion.

En masse, crowdfunding is an investment intensive process, which no longer 'involves an open call, mostly through the Internet, for the provision of financial resources either in form of donation or in exchange for a future product or some form of reward and / or voting rights' (Belleflamme et al. 2011, p. 7). It is a process with way more far-reaching expectations towards co-creation, which is left out of the current definition of the phenomenon. Crowdfunding is a resource exchanging process, where the initial investors (project backers) are engaged not only to finance an incentive, but to percolate a non-monetary influence. This process is costly in terms of efforts and time of both parties in crowdfunding: creators and backers.

Although the stakes are high and engagement in crowdfunding bears much risk, with the gradual rise of crowdfunding literature and practice, entrepreneurs and backers have several information sources to fall back on in their decision-making during the campaign. Henceforth, crowdfunding is yet again an undertaking, where knowledge is (becoming) power. With this thought, crowdfunding can be used as a mechanism for financing innovations in the aforementioned terms of engaging stakeholders and developing entrepreneurial skills, however their proper application remains a challenge, until more research is conducted.



6.1 Discussion

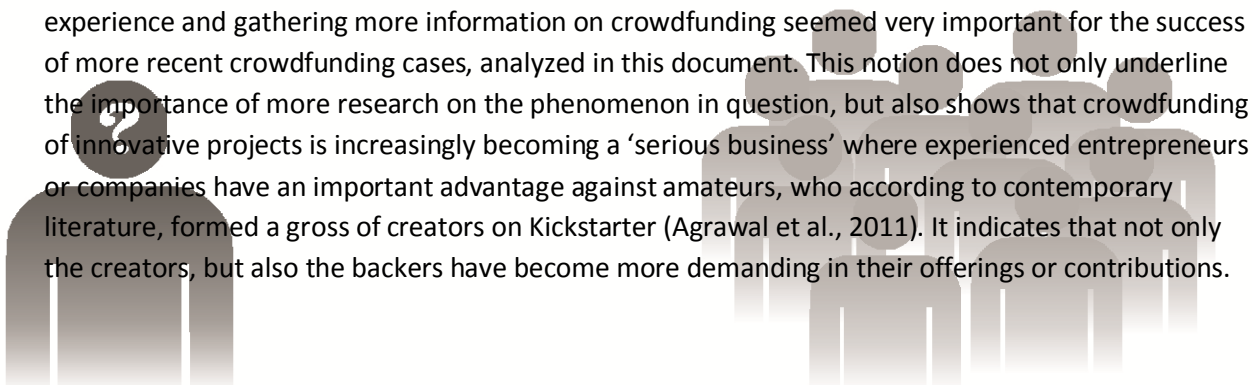
This study offers a deeper inquiry into the crowdfunding phenomenon. It is a small step into answering the most crucial open questions asked in the papers of Belleflamme et al. (2011) and Agrawal et al. (2013), by analyzing crowdfunding's ability to influence innovations from popular and widely-used business literature frameworks. The main conclusions derived from the investigation consider crowdfunding as an investment intensive process, whereby the creators, as well as the backers face risks and unintended externalities against high stakes. While financing an innovative project through crowdfunding, stakeholder involvement remains a crucially important and complicating factor, enabling resource acquisition and its reconfiguration.

Nevertheless, it is important to address several questions, such as: *'what can these findings about crowdfunding phenomena add to existing literature?'* Before discussing this paper, it is important to note the limitations of the analysis.

The theoretical contributions of the findings and their practical relevance will be extensively discussed along the theme of managerial and theoretical implications. Hence, in this divagation, the focus will be shifted towards two unexpected notions that have become important in the investigation. To start with, the study revealed that accurate stakeholder involvement in the process of crowdfunding is likely to positively affect the (re)development of innovative capabilities. Thus, in the crowdfunding setting, the innovative capabilities do positively influence the success of an innovation, only when they are aligned with proper involvement of backers in the project. In turn, entrepreneurs with developed dynamic capabilities are more likely to have an advantageous position while dealing with interest groups. This is in contradiction with the model indicated in Chapter 2 of this document, where the two variables were not seen as related, but separate entities. Hence, the early proposed model should take the shape as in Figure 6-1, where these variables are in a bidirectional relation, for the use of future research, for instance.

The possible explanation for this rather critical result could be that, all in all, crowdfunding is increasingly being used not only as a fundraising scheme, but also as an opportunity of co-creating offerings with the financiers who at the same time are the very first customers in this particular case. Over time, different theoretical paradigms have portrayed consumers as targets, information sources, co-producers and value co-creators, as depicted in Figure 6-2 below. This investigation of the crowdfunding reveals a new potential role for consumers – namely as powerful investors with opportunities to contribute to an incentive in a monetary and, more importantly, non-monetary way. This twofold role has not yet been expressed in any literature stream extensively, yet, with this important insight, this research, unexpectedly, may contribute to the notions of consumer role and service logic literature in the future.

Another important observation was depicted by the fact that planning, previous entrepreneurial experience and gathering more information on crowdfunding seemed very important for the success of more recent crowdfunding cases, analyzed in this document. This notion does not only underline the importance of more research on the phenomenon in question, but also shows that crowdfunding of innovative projects is increasingly becoming a 'serious business' where experienced entrepreneurs or companies have an important advantage against amateurs, who according to contemporary literature, formed a gross of creators on Kickstarter (Agrawal et al., 2011). It indicates that not only the creators, but also the backers have become more demanding in their offerings or contributions.



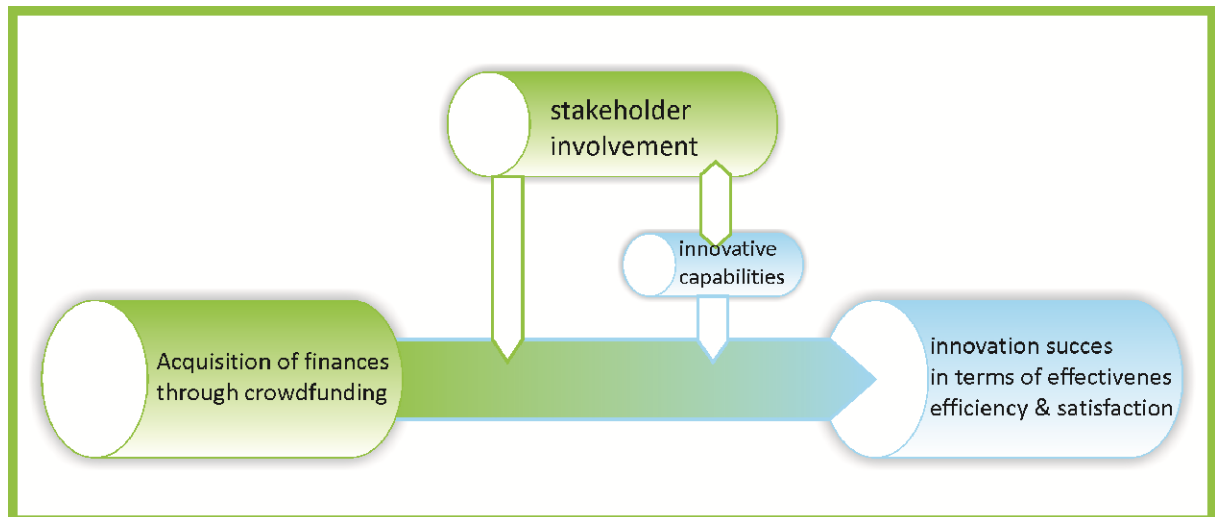
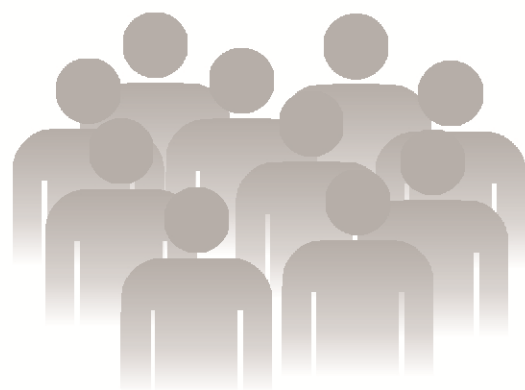


Figure 6-1 The altered nature of relationships in the conceptual model.

Therefore, crowdfunding, which already offers interesting products, may further promote the rise of breakthrough innovations, meant for backers 'connoisseurs' aware of the value of the incentive. The findings confirmed by this investigation in this scope may form an interesting notion for future research on this novel perspective. Further emphasis on the future research is located in the following chapter of this paper.

All in all, this study brings the investigation of crowdfunding further in perspective with more mainstream theoretical perspectives in a variety of business literature. By advancing the knowledge of crowdfunding's impact on innovation from the perspectives of resource-based view and stakeholder theory, this section shows that the findings tackle a gross of marketing literature and can be broadened by including an entrepreneurial perspective. These vast contributions show that, in spite of methodological inclinations and trade-offs flowing from the very nature of the research, this thesis may be seen as a step forward towards getting to understand crowdfunding better and contribute to its promotion and availability



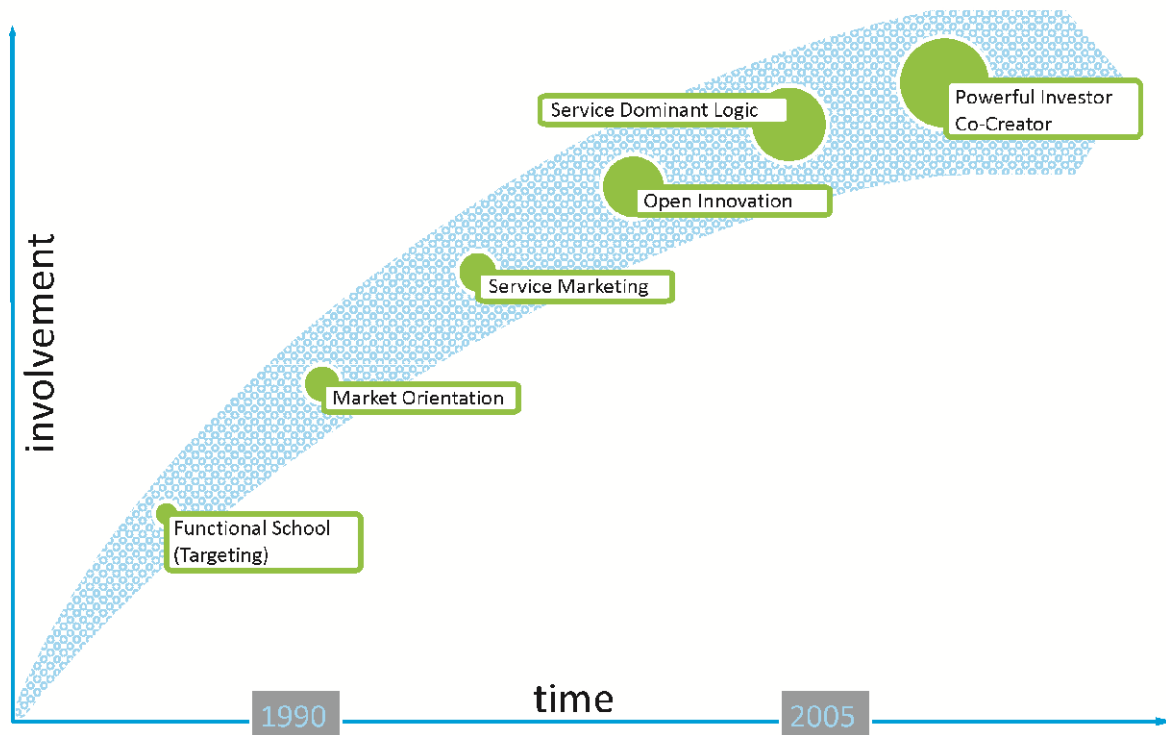


Figure 6-2 The roles of consumers in marketing literature and the emerging role of consumers as investors (based on Ordanini et al., 2011).

6.2 Implications

Findings from this research have several important implications for the literature, as well as crowdfunding practice. The contributions from this study reach towards business and crowdfunding literature, whereas the practical input stretches towards establishing foundations for a ‘handbook for successful crowdfunding’ for creators, backers and platforms. In any way, the research suggests that there is an actual need and value in creating more academic insight in crowdfunding, as it actually has a positive impact on the popularization of the practice and helps preparing an accurate campaign.

Theoretical contributions: Crowdfunding’s definition and role

First of all, the findings from this study contest the definition of crowdfunding given by Belleflamme et al. (2011). In the view of the authors, crowdfunding is a mechanism of raising funds through the crowd, organized in a platform, in turn for a reward. Although this resource-exchange process still remains a core of the discussed phenomenon, the process of transferring resources towards a creative project, has more far-reaching implications. Firstly, it requires investment laid by project creator’s vis-à-vis their backers, which enables co-creation activities, which links the phenomenon to crowdsourcing. Further, the non-monetary component of resource-transfer is very important in crowdfunding, as it develops networks, allows conducting first-hand market research by getting in touch with the prospective customers and develops innovative skills, which is not sufficiently stressed in current crowdfunding literature. Henceforth, this study may contribute to creating a new, more specific and accurate definition on crowdfunding, where the focus is shifted towards this twofold nature of resource exchange.

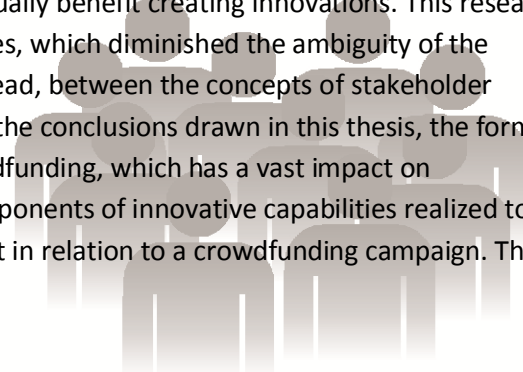
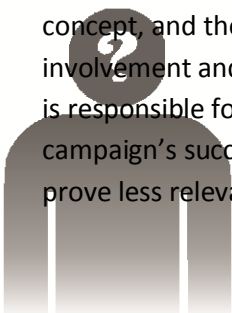
Furthermore, this research contests an assumption made by Agrawal et al. (2013), who suggest that the process involves very low cost of capital. The picture drawn by entrepreneurs and backers however, revealed that crowdfunding is an incentive that requires commitment from both parties, in terms of time and other resources, which weighs heavily against the predicted success of an incentive. Although crowdfunding does not require any formal preparations, unlike other forms of capital raising, the campaigns prove intensive and challenging to the founders, who, in general, undergo a 60-day period of learning to manage their constituencies and operate as a semi-professional business.

Theoretical contributions: Business literature

The focus of this study has been largely concentrated on two important variables: stakeholder involvement and innovative capabilities. Although the research on both themes is extensive, this study offers some interesting nuances towards both. In this light, current literature underlines the importance of stakeholder analysis in the process of successful stakeholder management (Freeman, 1984). However, in relation to crowdfunding, this undertaking proved irrelevant, as neither of the project creators engaged in activities deeply defining the exact role, power, background or interests that their potential stakeholders may have. Therefore, the efficiency of the campaigns was usually diminished, as the proper stakeholder involvement proved to be a time-consuming challenge. Hence, by applying either of the outlined strategies, where stakeholder analysis is embraced, entrepreneurs willing to crowdfund their innovations could be able to optimize their campaigns, by clarifying stakeholders' characteristics and possible motivations, in order to generate chances to benefit from these efforts in the actual engagement of the funders. Therefore, this study shifts the emphasis towards joining the stakeholder analysis efforts with actual involvement strategies, in relation to crowdfunding.

The research of Sapienza and Timmons (1989) indicated that venture capitalists assume three role types when engaging in entrepreneurial incentives: strategic, supportive and networking, whereas Rosenstein (1988) emphasized that venture capitalists also tend to act as mentors and confidants of entrepreneurs with less start-up experiences. This investigation confirmed that in crowdfunding, backers' involvement, especially regarding networking activities, has the same positive impact on campaign's success. Another confirmed role of backers' was their mentoring function, as in case of the Matchbox ARM or Micro Phone Lens, for instance. It can thus be concluded, that compared to the aforementioned literature, crowdfunding also positions backers as investors, not just consumers, and that positioning has considerable benefits.

Arguably, the study also suggests that innovative capabilities in crowdfunding are strongly related to the successful involvement of stakeholders in the project. In the existing literature, stakeholders, by means of networking, are likely to contribute to enriching entrepreneur's social capital (Nahapiet and Ghoshal, 1998), it does not specify the way it may actually benefit creating innovations. This research has specified the components of innovative capabilities, which diminished the ambiguity of the concept, and thereby proposed establishing a red thread, between the concepts of stakeholder involvement and innovative capabilities. Referring to the conclusions drawn in this thesis, the former is responsible for (re)discovering of the latter in crowdfunding, which has a vast impact on campaign's success. However, surprisingly, other components of innovative capabilities realized to prove less relevant to creating a sense of achievement in relation to a crowdfunding campaign. This



notion is contradictory to Grant's (1996) assessment of the influence of dynamic capabilities on innovation. In the perspective of crowdfunding, planning and experience were more likely to positively affect the innovation process, as they triggered the use of existing capabilities, not creating new ones.

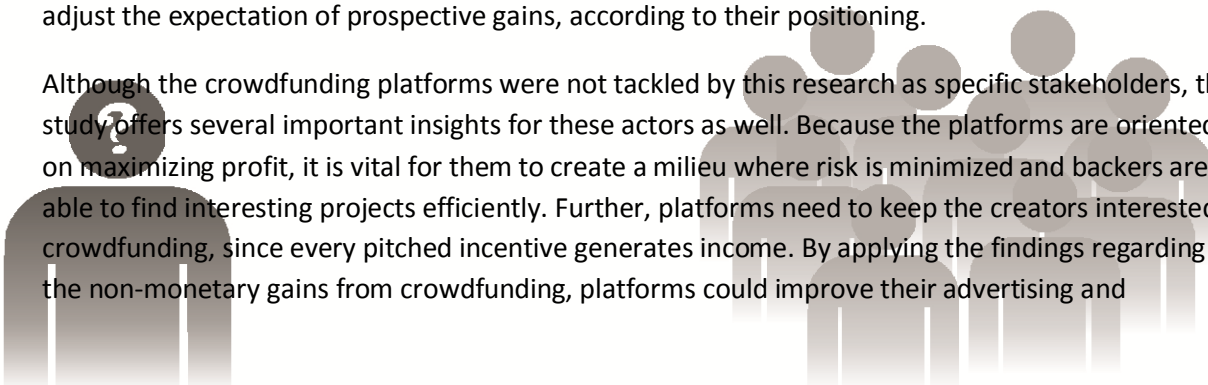
The findings from this study also contribute to the literature on networks (Coviello, 2006) by extending the theoretical notions that deal with the organization of activities through dispersed networks. Project creators responsible for crowdfunding initiatives serve as a 'network orchestrators'. In that way, they do not execute specific networking activities, but create the necessary systems and conditions for resource integration among other players (backers, or actors outside the crowdfunding, interested in the incentive). However, this research extends the aforementioned perspective, in that project creators arrange a unique type of network, in which the key activator is a group of project backers and not the entrepreneur. Crowdfunding is thus a phenomenon that has the potential to significantly alter the roles of service organizations in value networks.

Managerial Implications

The paper also addresses several valuable propositions for entrepreneurs interested in crowdfunding and project backers. The important insight offered by this study mentions the importance of preparing the campaign before engaging in it. In that way, aspiring crowd-founders may increase their chances for a successful crowdfunding campaign by reading existing press releases or scientific articles about the phenomenon. This created awareness among creators as to where to focus the attention. It remains important to arrange business operations before engaging in the campaign, as well as prepare a scheme involving the backers. As to the elevator pitch, it should be short and genuine, and contain a call for co-development with backers. The findings from this research also underline the advantages of non-material resources that crowdfunding has to offer, which may be an important point to consider while choosing the most appropriate mode of financing a venture. Besides, the resulting flow-chart model offers an overview of possible approaches and strategies towards exploring and exploiting resources offered in crowdfunding and creates an insight in possible expectations towards prospective gains in crowdfunding.

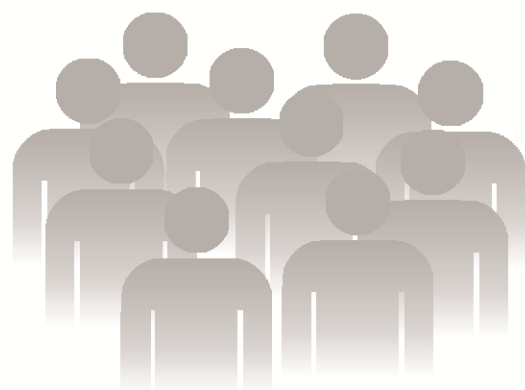
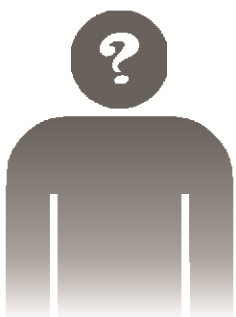
The crowdfunding backers on the other hand, are offered the opportunity to function as hubs connecting important actors in a network, which may carry benefits of centrality and closeness (Coviello, 2006). This notion increases the value backers may derive from crowdfunding process, as the larger network and more central position, bring authority and implicate a greater feeling of community, important for crowdfunder (Agrawal, et al. 2013). Furthermore, the results from this investigation offer the crowdfunding backers an opportunity to prioritize their efforts towards either supporting an initiative in both monetary and non-monetary way, or choose either of these and adjust the expectation of prospective gains, according to their positioning.

Although the crowdfunding platforms were not tackled by this research as specific stakeholders, this study offers several important insights for these actors as well. Because the platforms are oriented on maximizing profit, it is vital for them to create a milieu where risk is minimized and backers are able to find interesting projects efficiently. Further, platforms need to keep the creators interested in crowdfunding, since every pitched incentive generates income. By applying the findings regarding the non-monetary gains from crowdfunding, platforms could improve their advertising and



encourage prospective creators towards the use of this form of fundraising. Other than that, they could apply a different, more user-friendly interface, which will allow a long term dialogue between creators and funders, without the necessity of establishing a forum. Moreover, by trying to find out what goals a project aims at during the admission, the platform could propose a system in which funders and founders matched, with propositions of contacting these two actors.

The aforementioned benefits towards crowdfunding practice were assessed by Mikołajczak as very crucial for creating a more serious sphere around this mode of fund-raising. By strengthening the value-proposition to backers and importance of preparations, amateurs may be discouraged from taking up a campaign, sparing mutual disappointment and stress. By these means, crowdfunding would attract genuine incentives and aware backers, which would result in better matches between backers' interests and projects, as well as lead to some deal of exclusivity of belonging to this community.



7 Limitations

As mentioned before, this study offers valuable insights towards the theoretical and practical from the theoretical and practical perspective. However, due to several constraints, there are several limitations which have to be mentioned, in order to avoid biased judgments of the hereby presented results.

First of all, this section will assess the methods applied with a critical eye. To start with, all findings should be viewed in the light of the qualitative and exploratory character of hereby presented inquiry. Although the nature of the research provides a clear rationale for sample selection, and great care was taken in adhering to well-established procedures during data collection and triangulation, this research is only the beginning of upcoming discussion on crowdfunding's impact on innovation or entrepreneurship. Moreover, in the light of time limits within which the research was conducted, the efforts were prioritized towards gaining more case-based evidence and including project backers in the respondent sample. These efforts did not oscillated in crowdfunding literature before, which is a major milestone achieved in this particular study. These considerations do not compensate for possible shortcomings in validity or reliability. However, due to the aforementioned qualitative nature of the investigation and necessity to create a proper inquiry into the presented problem, the methodological imperfections do not weigh heavily on the impact of hereby given conclusions.

Another important constraint is also of methodological nature and involves sampling procedures. In order to facilitate a timely data collection on seven cases involved in this project, the sampling procedure was not random, which poses a potential threat to the external validity of the conclusions (Shadish and colleagues, 2003). Other than that, the case selection procedures, driven by recommendations made by the crowdfunding platforms, may not have brought sufficient variations into the studied area. Furthermore, the sample of crowdfunders was not chosen with one, uniform procedure, which in turn threatens study's internal validity (Shadish et al., 2003). However, it is important to bear in mind, that these imperfections are largely a consequence of conducting a qualitative, unfolding case-study,

Turning to the applied theory, because crowdfunding is a relatively young subject for academia, there were many possible theoretical paradigms to select. However, in order to diminish the complexity, facilitate operationalization of concepts and avoid conducting a marketing-oriented research (already performed by Ordanini et al in 2011), the choice fell on well-known and largely applicable concepts.

The limitations of this research indicate that there is ample room from further investigation of crowdfunding, which could build on the results and concepts applied in this research. Nevertheless, future studies may approach the methodological area differently, in order to facilitate a more robust discussion, without balancing the validity of the research.



8 Future Research

Based on the aforementioned discussion and limitations of the current research, this section presents several ideas on furthering the undertaken study field. Although this thesis enriches the understanding of crowdfunding's dynamics and provides a handful of information for actors engaged in the process, there is ample room for further exploration of the subject. These propositions are just a slight impression on the numerous opportunities for studies of crowdfunding, which build up on the findings of this study.

8.1 Crowdfunding and Innovation

Following the notion of product innovations contained in this document, the research revealed that crowdfunding is conditionally likely to inhibit more creativity in product development. From this perspective it would be interesting to investigate if this finding is strengthened for the case of radical product innovations. To examine this proposition, a cross-sectional comparative case study between continuous and discontinuous crowdfunded incentives would be suitable.

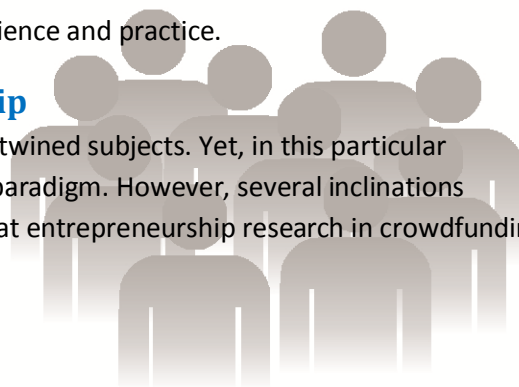
The research of Robert Veryzer (1998), who distinguishes two major categories of innovation: continuous and discontinuous forms an excellent starting point towards the proposed research idea. The first type of aforementioned innovations considers product or service improvements, which are rather a logical extension of already existing alternatives, where the changes are incremental (Veryzer, 1988) and the aim is at bringing about efficacious linkages between exploitation and exploration processes (Boer and Gertsen, 2003), which do not involve concerns of customer familiarity with the product or its application. The second type, the discontinuous innovation, refers to a product or service that is a radical novelty and involves a game-changing development within the industry (Veryzer, 1998). The discontinuous or breakthrough innovation usually involves the application of a new technology, which may result in unfamiliarity of use among customers (Veryzer, 1988). This type of innovation thus involves a high dose of uncertainty, which is usually not the case when it comes to continuous innovations (De Bertani and Reid, 2011).

The notion proposed by Veryzer can be enriched by combining his perspective with expectancy theory of Vroom (1964), to generate more insight in whether there is a difference in how innovative projects attract which groups of backers, and how this relates to creator's motive to engage in crowdfunding. This proposition extends the current research, where it was found that innovative incentives attract two types of crowdfunders: ones interested in co-creation and others, willing to pre-order a product.

Henceforth, the researcher could determine the samples based on the distinctions in the innovation types. The proposed research question could sound: *'In what way is crowdfunding likely to stimulate the development and adoption of radical innovations?'*. The conclusions drawn from here introduced future study would deepen the undertaken investigation in this master thesis and contribute to further development of the crowdfunding theme in science and practice.

8.2 Crowdfunding and Entrepreneurship

Entrepreneurship and innovation are two closely intertwined subjects. Yet, in this particular document, the focus was shifted towards the former paradigm. However, several inclinations presented in the analysis of gathered data showed, that entrepreneurship research in crowdfunding



is a scientifically interesting field to explore and build up on further. Hereby two themes are presented which combine the findings of this investigation and the aforementioned field of research.

8.2.1 Crowdfunding and Networks

The present study revealed that crowdfunding is a mechanism that inhibits network-building activities. Project creators get involved with backers, who extend the network by pitching the crowdfunded incentive in their social media or by spreading the word. However, the current research does not analyze entrepreneur's networking dynamics in more depth. The interviews with creators and funders give several clues to what the network dynamics may look like, who is involved and how. Yet, as the interview with Mikołajczak, a crowdfunding expert reveal, the analysis would require a longitudinal study of several successfully crowdfunded ventures. Besides, the theme elaborated below will for a great continuation on a finding from the current research, where the stakeholder involvement would be likely to help assimilate innovative capabilities in crowdfunding.

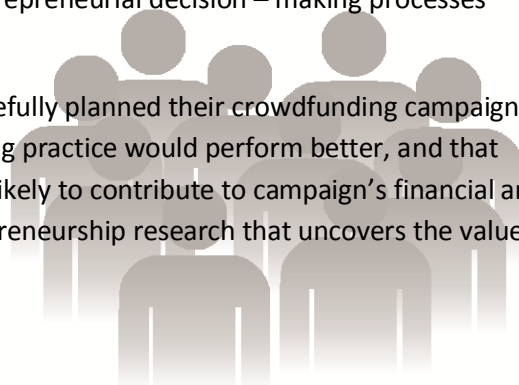
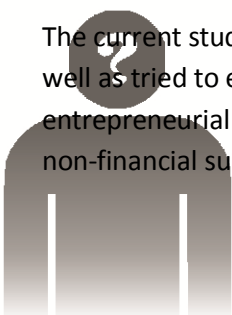
Therefore, it is proposed that the future research focuses on analyzing networking patterns in crowdfunding and beyond, by building up on a study of Coviello (2006), who examined entrepreneurial networking throughout organizational stages proposed by Kazanjian (1988). By analyzing changes in network's structure prior to the campaign (stage one: concept, resources, technology), during the fundraising period until the rewards have been delivered to the supporters (stage two: production and commercialization), towards the final stages of organizational growth in sales and profitability, until the firm reaches operational stability, one could define the number of ties and the role of the entrepreneur and backers in the network. Coviello (2006) analyzed three ventures over a period of three years. The research building up on crowdfunding could also be conducted in a similar manner, by further exploration of crowdfunded projects already involved. The conceptual research question stated in such a study could be: *'What are the network dynamics of a crowdfunded venture in terms of structural and interactional patterns at various stages of evolution?'*

The conclusions from the proposed research activity would indicate whether networks built up while crowdfunding really contribute to growth of entrepreneur's social capital or if the project creator increasingly becomes a more important actor connecting other ties, as a spider in the web. One of the forthcoming statements would also include the effects networking in crowdfunding would have on the growth of an entrepreneurship, in terms of higher efficiency, faster growth, increased competitive advantage, new intellectual capital or even improved organizational learning.

8.2.2 Crowdfunding and Decision Making

Extending the notion of entrepreneurship and crowdfunding in one of the possible future research options, the chosen path could build on an interesting conclusion from the current investigation: the value of planning in crowdfunding and the type of entrepreneurial decision – making processes crowdfunding is likely to favor.

The current study implies that entrepreneurs who carefully planned their crowdfunding campaign, as well as tried to enrich their knowledge of crowdfunding practice would perform better, and that entrepreneurial experience or training would also be likely to contribute to campaign's financial and non-financial success. Building on two paths of entrepreneurship research that uncovers the value of



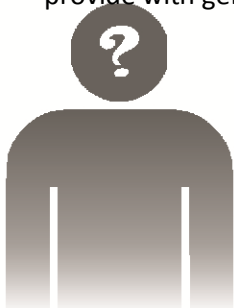
planning and categorizes the entrepreneurs to two types: favoring causation or effectuation would form an interesting notion for future research proposition.

Sarasvathy (2001) distinguished between two means by which entrepreneurs make decisions: causation reasoning and effectuation strategizing. The first process takes a particular effect as given and focuses on selecting between means to create that effect. It is a process building up on intensive analysis and forecasting gains and losses. The other reasoning type on the other hand, effectuation, takes a set of means as given and focuses on selecting between possible effects that can be created with that set of means. This approach requires more entrepreneurial creativity and less planning capacity (Sarasvathy, 2001), since not all environmental contingencies can be foreseen.

Gruber (2006) in his research strived to uncover the value of planning for venture performance. In his study, Gruber (2006) mentions several theoretical arguments for and against the usefulness of the formal planning model. In terms of the benefits, strategy scholars argue that planning improves decision making because it allows individuals to spot missing information, to conduct thought experiments, and to examine their (implicit) assumptions without first expending resources. Planning also helps to develop an orientation to the unforeseen environment of the future, to match supply and demand of resources to estimate the timing of resource flows, and to minimize bottlenecks across the value chain. These arguments are challenged by proponents of an incremental paradigm in strategy formulation. One of their main propositions is that formal planning reduces the responsiveness of organizations to environmental change, due to lengthy decision processes across multiple levels of organizations. Formal planning is thought to hinder flexible, adaptive learning processes that are required in uncertain business environments. Also, formal planning can create a false illusion of control and can stifle much-needed creativity because it channels attention and behaviour in organizations. Furthermore, formal planning may run the risk of becoming a meaningless ritual instead of an activity that serves a specific purpose. After examining these conditions, Gruber (2006) found that use of secondary data sources and planning of customer relationships have a positive effect on venture's performance. Planning would also be more beneficial in environments with less dynamics. On the other hand, the use of primary sources for marketing planning proved to be unrelated to venture's success and planning would not be useful in environments with high rates of change.

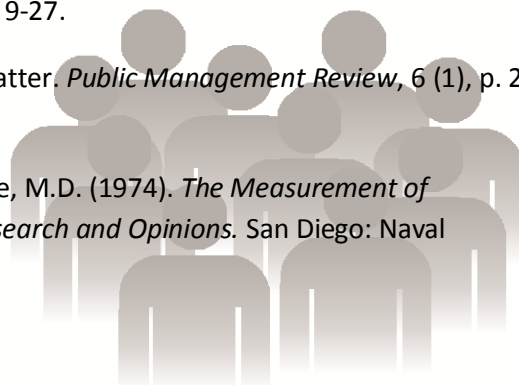
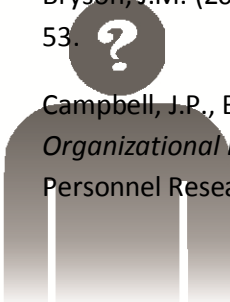
Although the aforementioned literature would suggest that entrepreneurs following causation reasoning, thus planning activities, would perform better (Gruber, 2006), effectuation approach would prove more useful in dynamic environments, where entrepreneurial experience is valued (Sarasvathy, 2001), such a crowdfunding, in some cases.

The goal of the proposed research would be to differentiate between the line of the current study by determining whether planning or experience prove more valuable in crowdfunding and why. This research could possibly be conducted in a quantitative manner, in order to survey more cases and provide with generalizable findings.



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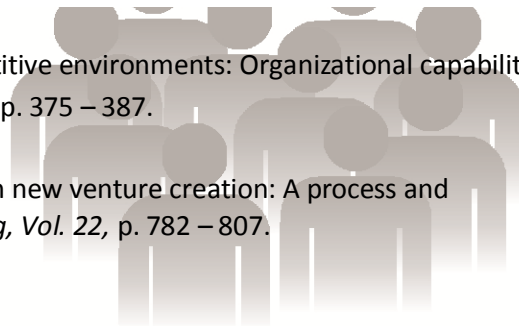
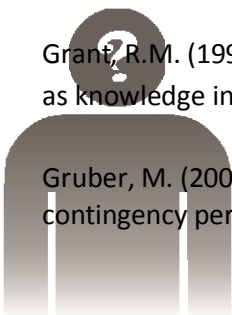
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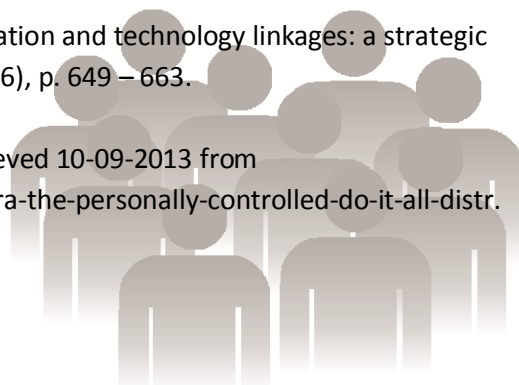
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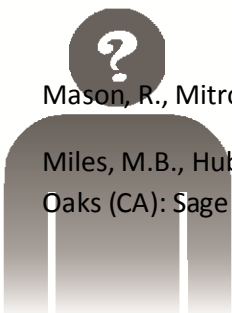
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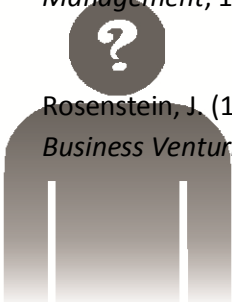
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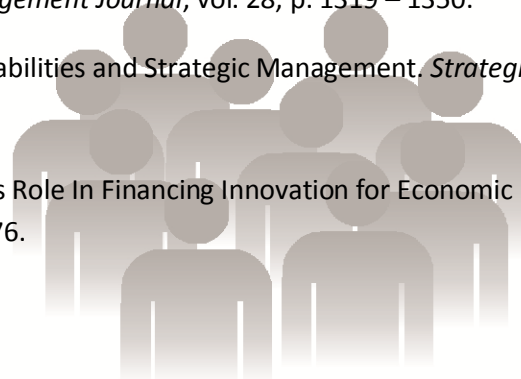
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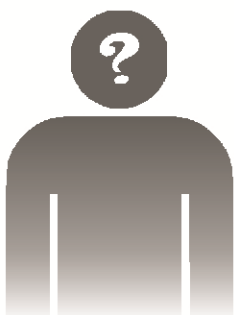
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10 Appendix A: Questionnaires

The questionnaires below propose an indication of questions presented to the respondents. Due to the unfolding character of the research, some respondents were approached multiple times in order to gather valuable and informative answers. This case is specifically valid for questions related to stakeholder management policies applied by project creators. This protocol principle is consistent with the aim of conducting open-ended, semi-structured interviews.

Interview Questions for the purpose of master thesis by Justyna Bakker – Rakowska, student of Master of Business Administration Programme at the Univeristy of Twente in Enschede (The Netherlands).

Contact information:

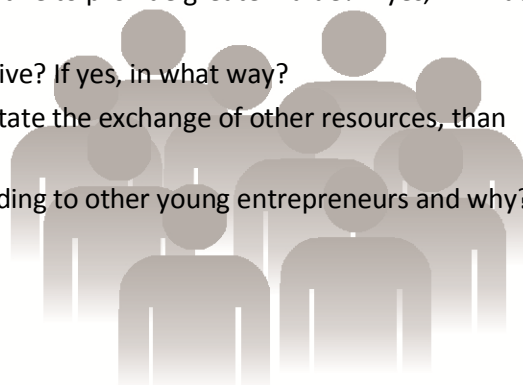
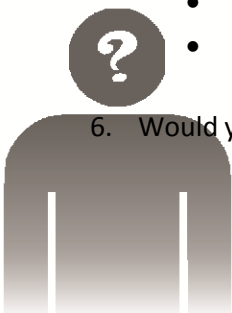
J. Bakker – Rakowska
Bontweverij 140
7511 RL Enschede
Tel. 0031623708867

General Research question:

How can crowdfunding be used to bolster successful technological product innovations?

Interview with creators

1. Why did you decide to engage in crowdfunding?
2. What were, in your opinion, the main reasons for the financial success of your campaign?
3. What did you do, during your campaign, to convince the potential funders to contribute to your project?
4. Now that the campaign is successfully finished and the product has to be launched, do you still keep in touch with the funders? Do they have questions about the progress?
 - Do the funders react with support?
 - What do you think of keeping funders updated? Do you think you put (too) much time in it?
 - How would you describe the role of funders in your campaign?
5. Except for financial resources, did crowdfunding provide you with more value? Did you receive any extra help from either the platform or the funders?
 - Do platforms or funders take the initiative to provide greater value? If yes, in what way?
 - Does the entrepreneur take the initiative? If yes, in what way?
 - Does the crowdfunding platform facilitate the exchange of other resources, than financial and how?
6. Would you recommend engaging in crowdfunding to other young entrepreneurs and why?

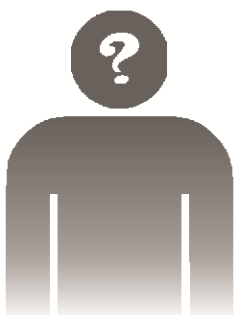


Interview with funders

1. Why do you engage in crowdfunding?
2. Did you support many projects so far? How did you express your support?
3. In what kind/type of projects are you most interested/ willing to support? Why?
4. Why do you think that the creators of the projects turned to crowdfunding for financial support?
5. Are there any drawbacks from supporting a crowdfunding campaign? If yes, what are they?
6. Every funder is offered a reward for the contribution? Do you think that the reward system proposed by project creator is attractive? Why?
7. Funders support projects financially. Other than that, did you try to support the entrepreneurs in other ways? If yes, how?
8. *If answer on Q7 is yes: Why did you support the entrepreneurs in ways different than financial?*
9. All in all, what is, in your opinion, the added value of participating in a crowdfunding campaign? (for all actors)

Interview with crowdfunding consultant

1. What are, in your view, the current, most important trends in crowdfunding?
2. What do you think that crowdfunding needs to further develop in the future?
3. What is your opinion on the role of the backers in crowdfunding process?
4. Do you think that planning the campaign and entrepreneurial experience have any influence on its success? If no, why? If yes, how?
5. Do you think that crowdfunding backers can provide useful indications for market research? If no, why? If yes, how?
6. What do you think are the main points each entrepreneur / backer should consider prior to engaging in crowdfunding?



11 Appendix B: Profiles of spokespersons / project creators

The hereby mentioned spokespersons agreed to publish their full names and include their profiles in this research document. The names and profiles of crowdfunding backers are not disclosed, because of the participants' requests for anonymity.

Ally Khantzis and Pebble Smartwatch

The spokeswoman has been working for Pebble since January 2013 and provided customer care to backers who pre-ordered the Pebble. Before, she has been working as a public relations specialist. Ally studied Communication at the University of California, Berkeley.

Eben Moglen and Diaspora

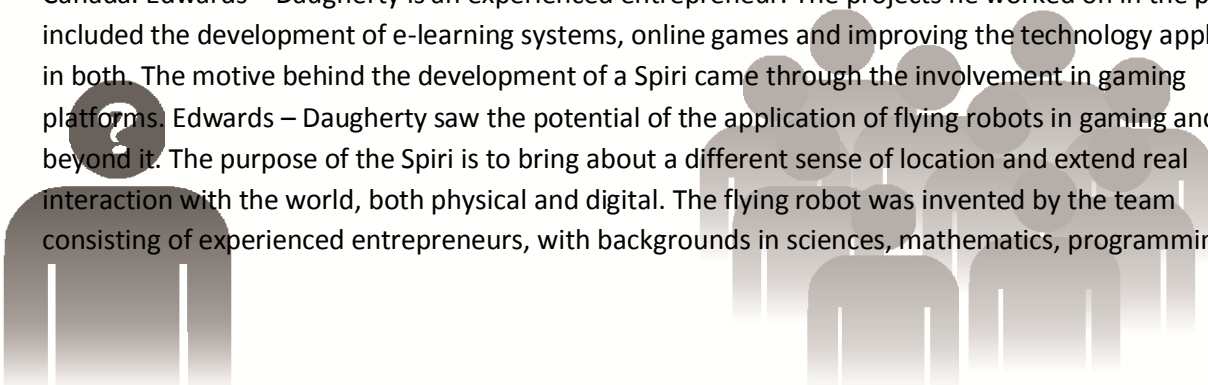
Moglen is a professor of law and legal history at Columbia University, and is the founder, Director-Counsel and Chairman of Software Freedom Law Center and has a strong affinity with protecting privacy in the digital environment. His interest in software has been present throughout his academic career, as he started out as a computer programmer. He graduated from Yale University in 1985. He has held visiting appointments at Harvard University, Tel Aviv University and the University of Virginia since 1987. Moglen was a law clerk in 1986–1987. He joined the faculty of Columbia Law School in 1987, and was admitted to the New York bar in 1988. He received a Ph.D. degree in history from Yale University in 1993. Moglen serves as a director of the Public Patent Foundation. Moglen held several lectures on privacy protection and open source software in 2010. He is a strong opponent to capitalism and believes that intellectual property creates uneven chances for societies. Moglen brought out his own version of a socialistic manifesto which expresses his idea on open source innovation and property rights.

Jim Redner and Oculus Rift

Redner is a PR-specialist from Los Angeles, who joined Oculus VR Company in 2012. He combined his career is public relations with the affinity towards gaming in his current employment. Redner's responsibilities capitalize on issuing press releases and handling media for Oculus VR. Although he did not collaborate with Oculus Rift team during the crowdfunding campaign, he has been closely involved in issuing Kickstarter updates in the aftermath, which makes him a competent spokesman.

Partick Edwards - Daugherty and Spiri

Partick Edwards – Daugherty has been the owner of a high-tech company Pleiades, operating since 1999. The business has offices in the United States, while its headquarters are located in Halifax, Canada. Edwards – Daugherty is an experienced entrepreneur. The projects he worked on in the past included the development of e-learning systems, online games and improving the technology applied in both. The motive behind the development of a Spiri came through the involvement in gaming platforms. Edwards – Daugherty saw the potential of the application of flying robots in gaming and beyond it. The purpose of the Spiri is to bring about a different sense of location and extend real interaction with the world, both physical and digital. The flying robot was invented by the team consisting of experienced entrepreneurs, with backgrounds in sciences, mathematics, programming,



mechanical and electrical engineering, business, fine art, information sciences, urban planning, sociology, and the performing arts.

George Emmanuel Vladu and Bogdan Sebastian Nedelcu and Matchbox Arm

George and Bogdan have been friends for 12 years. Both originally from Bucharest, Romania, graduated from the Technical University and decided to pursue their careers in London, the United Kingdom. They both have a strong affinity with microcontrollers and prior to establishing an own business, they have been employed as engineers. This helped them achieve the necessary experience in developing technology and understanding business practices.

Thomas Edward Larson and Micro Phone Lens

Thomas Larson is a Mechanical Engineering graduate from the University of Washington. The idea of Micro Phone Lens has become very important for the entrepreneur, hence he decided to set up a company and pursue the project further in this setting. Larson is a novice entrepreneur with no previous experience. In the leisure time he usually reads about science and history.

Peter Veldhoven and Jelmer Riemersma from Team The Bell

Peter Veldhoven graduated from Industrial Design Engineering at the University of Technology in Delft (The Netherlands) and is passionate about entrepreneurial activities. In his design philosophy, he combines the two things: facilitating a result-driven process and creating products that add value for the user. In his spare time, Peter plays the bass, loves cars and dreams of Formula 1-racing. Veldhoven is an advocate of teamwork. He believes that cooperating with different multidisciplinary design teams will ultimately lead to the best results in any innovation.

Jelmer Riemersma is the quality-gatekeeper of Dutch Design team. He has a thorough eye for each design and looks at products with critical appraisal. Riemersma also studied Industrial Design Engineering at the University of Technology in Delft. In his leisure time, Riemersma is an active DJ and plays ice-hockey. According to Riemersma, the real challenge in innovation is to effectively combine the conceptual design, creativity and company's strategy.

