The Successful Use of Social Capital in Start-ups

How to use social capital in making start-ups thrive?

(Image: Tramp, 2010)

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Preface

Dear reader,

First of all, I hope you will appreciate this thesis. The writing process was a ‘Long and winding road’ as The Beatles once sang. Nonetheless, it is one I look back on contently. During the time I worked on making this thesis into what it is now, I have had many people standing by my side who proved invaluable to me on both personal and professional level. Without these people, writing this thesis would have been an impossible task. Therefore, I would like to take this opportunity to thank them for standing by my side all this time. The person I want to thank in particular is my supervisor Nanne Migchels. His feedback and support helped me greatly. Also, I would like to thank my girlfriend for coping with me during all the times I was (mentally) absent and for her endless encouragement. The other friends and family I want to thank will remain unnamed; however, you all know how much I appreciated your feedback, support and friendship. I want to thank the company Ugoo and all my colleagues there for their time and help during the writing process and in finding suitable respondents. Without you, I would never have obtained the useful connections and conducted these inspiring interviews, and the writing of this thesis would have been more difficult than it already proved to be. Lastly I want to thank my interviewees for their time and effort, all of you were kind as to invite me and provide me with the opportunity to discuss your start-up process. I have learned a great deal from your experiences and personal stories. I hope you enjoy reading.
Abstract

This thesis discusses the way in which an entrepreneur’s social capital influences the performance of their start-ups. Much research has been conducted with regard to quantitative relations between variables related to this topic, but there is a lack of qualitative research focusing on the insights of entrepreneurs. Therefore, the research approach consists of conducting qualitative interviews with entrepreneurs. In order to create structure in these interviews but to leave space for related subjects as well, a semi structured interview guide was constructed. This interview guide was based on variables like network size, network diversity, structural holes, strong ties and weak ties and their relations with social capital, which were commonly used in existing literature. After interviewing ten entrepreneurs, the results were analysed through open coding after which codes were refined and categorized. The results were sorted by category. They shed light on the perceived relationships between variables, and provided a deeper perspective into why these relationships are useful to entrepreneurs and in what different ways different relationships were seen as valuable. The results also clarified how and why entrepreneurs used their social capital.
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Chapter 1: Introduction

“If I have seen further it is only by standing on the shoulders of Giants” (Newton, 1676)

This famous quote from Sir Isaac Newton symbolizes how much one can discover by making use of previous discoveries by others. If someone is a ‘giant’ in something while you are not able to see far enough to reach your goals, why not ask this giant for help? The message of this quote is transferable to many situations in everyday life. Imagine yourself a beginning entrepreneur forming a start-up: you are going to start your first business on your own, and you have never done anything like it before. Logically, you do not have the capabilities, the experience, connections et cetera to do this entirely on your own. In order to overcome this obstacle, you make use of your connections with giants in the particular area in which you find your own resources inadequate. Through these connections with giants you make use of the ‘Social Capital’ you possess, which can be defined as: the resources that are embedded in the personal network of an entrepreneur (Stam, Arzlanian, & Elfring, 2014), or in actionable terms: “[…] the ability of entrepreneurs to extract and utilize resources from relationships to achieve desired outcomes” (Smith, Smith, & Shaw, 2017). Entrepreneurs are generally seen as the founder, owner, and manager of a company (e.a. start-up) (Zhao, Seibert, & Lumpkin, 2010).

When an entrepreneur founds a business, this business can be labelled as a start-up: “[an] early stage in the life cycle of an enterprise where the entrepreneur moves from the idea stage to securing financing, laying down the basis structure of the business, and initiating operations or trading” (WebFinance, Inc. (z.j.)). In order to confine the term start-up to certain company characteristics, RVO (n.d.) restricts the age of a start-up to three years, where after it will no longer be seen as a starting company and thus does not fall within the category of start-ups. There is a large body of scientific literature that digs into the use of social capital by entrepreneurs forming a start-up. Social capital of entrepreneurs has proved to be positively related to firm performance (Stam et al., 2014). Moreover, there is a consensus that the social capital of an entrepreneur effectively contributes to the success of a start-up (Maurer, & Ebers, 2006; Baron, & Markman, 2003; Smith et al., 2017).
There are, however, questions about how social capital, assessed at the individual level of an entrepreneur influences firm performance (Stam et al., 2014). Research has argued that the social capital of an entrepreneur is positively related to the performance of his or her firm (Bosma, Van Praag, Thurik, & De Wit, 2002). However, it is not clear what characteristics of social capital influence this relation and thus what causes this argued interaction between social capital and firm performance. This thesis will therefore aim at examining how the social capital of an entrepreneur translates into firm performance. By examining this translation, the firm performance implications of social capital can be disentangled from its returns at the individual level (Stam et al., 2014). In doing so, the knowledge on social capital in general can be extended. To examine this translation process, the following main question was formulated:

“How does an entrepreneur’s social capital influence the performance of the entrepreneur’s firm?”

Researching this process would greatly improve the understanding of social capital and its role in start-ups, because it would help to fill an existing gap in social capital literature; which is the way in which social capital influences firm performance, as indicated by Stam et al. (2014). Moreover, entrepreneurs could use the created knowledge to their benefit by intentionally using their networks in a way that increases the potential for deriving positive firm performance. Elfrink and Hulsink (2007) state in this regard that:

“[…] the main challenge is to complete the picture and include more explicitly both the antecedents of tie formation and the consequences in terms of the performance implications of particular patterns of network development.”

In order to answer the main research question, existing theories on the subject and the different definitions of and viewpoints on regarding social capital will be reviewed to gain a better understanding of the concept of social capital. Based on this knowledge, a research methodology that enables to accomplish the goal of this thesis and to answer the main question is constructed. With this research methodology constructed, data will be collected using the data collection instruments. The collected data will be analysed according to the methodology. Through this analysis the main question is answered. This thesis will conclude with the main findings and an assessment of the possible weaknesses of the methodology, results and analysis, and suggest opportunities for further research that could help in further developing the field of research of social capital.
Chapter 2: Literature review

2.1 Introduction
Social capital as a concept has been used in many different areas of research (Adler & Kwon, 2002). Because social ties, and thus social capital, can be seen in different contexts, social capital is a very broad concept which encompasses many different underlying viewpoints and concepts. In other words, social capital can be seen as an umbrella concept.

The concept of social capital is roughly understood as: the ability of entrepreneurs to extract and utilize resources from relationships in entrepreneur’s personal networks in order to facilitate action (Adler, & Kwon, 2002; Smith et al., 2017; Stam et al., 2014). Social capital can also be described as “[…] a valuable asset that stems from access to resources made available through social relationships” (Krause, Handfield, & Tyler, 2007). This quote emphasizes the central position of social relationships in social capital, but it lacks in defining what ‘actors’ social capital can be applied to. Adler and Kwon (2002) explain that social capital can be assessed at the individual, group, organizational and inter-organizational level, since it is a broadly applicable umbrella concept. In this thesis, the level of analysis for social capital will be the individual level, since the social capital of one of the founding entrepreneurs of a company will be assessed. However, the influence of that individual social capital will not be measured at the individual level but at the organisational level, thereby transcending the different levels of analysis and looking at the influence of events happening at the individual level on results at the organizational level.

2.2 The dimensions of social capital and their defining properties
Stam et al. (2014) have conducted a meta-analysis of the construct of social capital. They wanted to synthesize the findings from 59 studies on the performance effects of entrepreneurs’ social capital, in order to assess the generalizability of results. Despite the fact that many studies used different labels in identifying social capital, they were able to present a summary on which measures were most used in studies on social capital. Based on this meta-analysis, Stam et al (2014) ascribed the following defining properties to social capital: network size, network diversity, structural holes, strong ties and weak ties. Social capital has been conceptualized in many articles by assigning the different defining properties of the concept to a number of dimensions, usually making a distinction between the structural dimension, the relational dimension and the cognitive or contingent dimension (Nahapiet, & Ghoshal, 1998; Maurer, & Ebers, 2006; Scholten 2006). See Appendix 1 for a table which summarizes those three dimensions, their fields of influence and their potential benefits.
2.3 The structural dimension and its defining properties

The first dimension of social capital, the structural dimension, concerns the formal structure of a social network and the overall pattern of connections between the actors in a social network (Kwon & Adler, 2014; Nahapiet, & Ghoshal, 1998). It comprises the structure of social relations in social capital, and can be assessed by e.g. the number of relations, the diversity of relations and the centrality of an actor in its network. Besides that, Scholten (2006) argues that the structural dimension comprises the extent to which connections overlap with each other. This overlapping is called redundancy: the more connections interact with each other and are aware of each other, the more redundant a network is, since every tie can be replaced with a different tie (Reagans & Zuckerman, 2008). The more redundancy exists in a network, the more closure a network has, which means that the information known to one person is easily diffused to others in the network that are able to interpret the information in a similar way (Scholten, 2006). On the other hand, Scholten (2006) states: “The disadvantage of redundancy is that with each tie connecting to the same kind of people, the marginal value of each succeeding tie drops” (p. 40), so each added tie provides less new information. This makes it difficult to derive new knowledge and resources from the social capital. On the other side of the continuum, there is non-redundancy: ties do not (significantly) overlap. In a network with non-redundancy, the range of the network is large. Through many connections in different contexts, such a network provides more information on opportunities in other markets (Reagans & Zuckerman, 2008). Networks where connections do not overlap in such a way will have structural holes: a lack of connection between ties or networks of ties, which can result in benefits in terms of information and opportunities when a connection would be established (Scholten, 2006). Reagans & Zuckerman (2008) state that there is a trade-off between redundant and non-redundant networks, where “[…] the former providing more certain but more limited returns relative to the latter” (Reagans & Zuckerman, 2008, p. 939). Structural holes are one of the defining properties of social capital. These holes present opportunities to expand a social network in ways that create access to more information and resources. There is no consensus in research on whether the redundant, non-diverse network with much closure or the non-redundant, diverse network with structural holes is a better influence on start-ups (Scholten, 2006). This field of tension between redundant non-diverse networks and non-redundant diverse networks is what defines the structural dimension of social capital. This can be expressed in both the size of a network (e.g. the number of ties) and the diversity of a network (e.g. the extent to which ties are non-redundant) (Stam et al, 2014).
2.4 The relational dimension and its defining properties

The second dimension of social capital, the relational dimension, is described as “[…] the role of direct ties between actors and the relational, as opposed to structural, outcomes of interactions” (Inkpen, & Tsang, 2005, p. 153). This role can be expressed by the resources which are created and leveraged through relationships, such as norms and sanctions, obligations and expectations, identity and identification (Nahapiet, & Goshal, 1998). This dimension focuses on relational aspects which can either stimulate or obstruct the use of social capital.

Different viewpoints on how to make optimal use of social capital from a relational viewpoint have been formulated. One of the most recurring distinctions between viewpoints is the theorized difference between ‘bonding’ and ‘bridging’. This distinction stems from a difference in the strength of ties, which are the building blocks of a social network. Granovetter (1983) states that there are a number of aspects that determine what the strength of a tie is. These aspects are: the amount of time invested, the emotional intensity, the intimacy, and the reciprocal services which characterize the tie. Therefore, a strong tie represents a relation in which much time is invested, where the relation has a high emotional intensity and intimacy, and several reciprocal services that characterize the relation. On the other hand the weak ties are ties in which little time is invested, and which do not have a high level of emotional intensity or intimacy. The relation is usually not characterized by reciprocal services. These type of ties cost little effort to maintain.

From a society perspective, “The bridging/bonding distinction [allows] us to simultaneously capture both the dynamics of openness within civil society, and closure within small exclusive groups […]” (Patulny, & Lind Haase Svendsen, 2007, p. 33) On personal level, the bonding viewpoint entails that advantages come with small, cohesive personal networks with strong ties as these networks enable an entrepreneur to mobilize resources more effectively (Stam et al., 2014). However, these networks hinder access to new information and ideas because of the small social circle: When someone is so caught up in a closely-knit network, that he can miss out on for instance opportunities and resources that ties outside his network could provide (Elfring, & Hulsink, 2003). The bridging viewpoint entails that a large, diverse and weakly connected personal network with weak ties has advantages in discovering new opportunities, new perspectives, unique resources and new information. On the other hand weak ties might be less helpful in sharing resources and helping an entrepreneur in exploiting these new opportunities (Stam et al. 2014). These two views do not
necessarily contradict each other: the bonding viewpoint emphasizes advantages that come with small, cohesive personal networks with strong ties while the bridging viewpoint emphasizes the advantages of a large, diverse and weakly connected personal network. Both types of networks can be useful for firms, but they work best in different ways and at different stages. Therefore, the ideal network for an entrepreneur would contain both strong and weak ties (Elfring, & Hulsink, 2003).

2.5 The cognitive dimension and its defining properties

The third and last dimension of social capital is the cognitive or contingent dimension. This dimension concerns mainly the presence of shared representations, interpretations, and systems of meaning with social connections (Nahapiet, & Ghoshal, 1998) and incorporates the contextual factors that play a role in a relationship (Scholten, 2006). This dimension shows in, for instance, shared language, codes, and narratives. According to Maurer and Ebers (2006), this dimension is a part of social capital because:

“[… ] actors have to invest in learning and understanding in order to be able effectively to communicate and interact with persons not sharing their language and meaning systems. […] this investment creates an asset that bears potential value, because a shared language and shared meanings enable actors effectively to access information and resources of social relations which they could not access without the investment” (Maurer & Ebers, 2006, p. 7).

Shared language and meaning systems create a better conversation since understanding each other’s language and meanings is easier. A better understanding between actors stimulates the use of social capital, since access to each other’s information and resources is facilitated by this mutual understanding (Scholten, 2006). In short, in studying social capital it is important to keep the cognitive aspects of a network tie in mind, since this can influence the interactions between actors.

The five defining properties of social capital that have been mentioned and explained in the former paragraphs are summarized in Table 1.
Table 1. Definitions of the defining properties of social capital.

<table>
<thead>
<tr>
<th>Property</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network size</td>
<td>The size of the network of the respective actor</td>
<td>Stam et al. (2014)</td>
</tr>
<tr>
<td>Network diversity</td>
<td>The extent of network heterogeneity in the attributes of entrepreneurs’ personal network connections</td>
<td>Stam et al. (2014)</td>
</tr>
<tr>
<td>Structural hole</td>
<td>The lack of connection between separate ties or clusters of ties in a social network</td>
<td>Scholten (2006)</td>
</tr>
<tr>
<td>Strong tie</td>
<td>A relation in which much time is invested, and where the relation has a high emotional intensity, as well as much intimacy and several reciprocal services that characterize the relation</td>
<td>Granovetter (1983)</td>
</tr>
<tr>
<td>Weak tie</td>
<td>A relation in which little time is invested, and which do not have a high level of emotional intensity or intimacy. The relation is not characterized by reciprocal services.</td>
<td>Granovetter (1983)</td>
</tr>
</tbody>
</table>

2.6 Performance measurement in start-ups

Measuring performance in start-ups is a challenging task, because start-ups usually have little revenues while they have to invest a lot, this makes that they are mostly burning capital (Maurer, & Ebers, 2006). According to Maurer, & Ebers (2006), measuring start-up performance by looking at firm survival or firm failure is not a solution either, since the reasons why start-ups survive or fail vary in each case and are mostly not directly linkable to the financial performance of a start-up. Moreover, the dissolution of small firms does not necessarily indicate weak business performance (Unget et al., 2011, in Stam et al., 2014, p. 9). In order to gain a better understanding of performance measures in relation to social capital, and to be able to operationalise towards proper questions regarding firm performance in the methodology, the measures used in other research will be assessed.

Firm performance in relation to social capital has been measured in many different ways. From a meta-analysis of the relation to these two variables, it became clear that there
are two different types of measures used for firm performance, namely financial measures and non-financial measures (Stam et al., 2014). Financial measures regard the extent to which economic goals of the firm are attained, whereas non-financial measures look into the operational effectiveness of a firm (Stam et al., 2014). Stam et al. (2014) also distinguished two different types of financial measures, namely measures looking at profitability and measures looking at growth. Measures of profitability include return on assets, return on sales and self-reported assessments of profitability. Measures of growth include objective or perceived growth in sales, profit, employment and market share. Regarding non-financial measures, these include indicators of operational effectiveness. Among these indicators are technical excellence, competitive capabilities, productivity and export performance.

Looking specifically at start-ups, some other performance indicators or measures can be identified. Lester, Parnell, & Carraher (2003) propose a five stage lifecycle model for organizations, where the first stage, identified as ‘Existence’, elaborates on what is needed for start-ups to grow beyond the start-up phase. They identify this as viability, or attracting enough customers to support existence. It is at first foremost important to become viable, and after that earning revenue and profit becomes important. Therefore viability is an important measure in firm performance in this research.

2.7 Firm performance effects of social capital

Social capital has a positive effect on the firm performance as the social capital of an entrepreneur effectively contributes to the success of a start-up (Maurer, & Ebers, 2006; Baron, & Markman, 2003; Smith et al., 2017). Moreover, Semrau and Werner (2014) state that network relations enable an entrepreneur to access resources at relatively attractive terms. Different kinds of social capital provide access to different kinds of resources. Semrau and Werner (2014) analysed what kind of entrepreneurial network characteristics helped in attaining specific kind of resources. Weak ties had an overall positive influence on firm performance. Strong ties also had a positive influence on firm performance. Another study claimed that a network dominated by strong ties had a positive impact while one dominated by weak ties had a negative impact (Batjargal, 2003). Stam et al. (2014) conclude from their meta-analysis that weak ties are more important than strong ties for new firms, while the opposite seemed to be true for old firms. The frequency of interaction with network connections also has ambiguous influence on firm performance. Some studies claimed a strong, positive relation, while other studies claimed no relation at all or even a negative relation (Semrau, & Werner, 2014). Heuven and Groen (2012) claim that structural holes can
have a positive influence on firm performance when crossed, enabling a firm to access more information and resources. However, this could be the opposite for start-ups, since they did not yet build a reputation that would enable them to cross structural holes (Heuven & Groen, 2012).

2.8 Usage of social capital

Entrepreneurs are different individuals and therefore make different decisions and generate different outcomes in using their social capital. Shane and Venkataraman (2000) said in this regard that an essential research subject in the field of entrepreneurship should be: “[…] why entrepreneurial opportunities exist and why some people, and not others, discover and exploit those opportunities”. This question emphasizes the importance of discovering and exploiting opportunities as an entrepreneur, and discovering why and how individual differences are influencing this process. Research dedicated to this subject has shown that entrepreneurs’ social competences have a significant influence on a firm’s financial success (Baron & Markman, 2000); also Ramanujan, Vidya, and Rao (2018) discovered a positive influence of an individual’s networking capacities on productivity and performance of that individual. How an entrepreneur uses his own social capital is therefore an essential factor in discovering the influence of social capital on a firm.
2.9 A conceptual model of social capital and firm performance

This thesis aims to determine in what way the social capital of an entrepreneur translates into firm performance. To clarify the variables, the following conceptual model was constructed:

*Figure 1. Conceptual model of the relation between Social Capital and Firm Performance.*

The underlying properties and indicators were used as starting points for analysing the data. To assess the individual social capital of an entrepreneur, the earlier explained defining concepts were used, including: network size, network diversity, structural holes, strong and weak ties. The definitions of these properties can be found in Table 1. To assess the firm performance, the perspective of Stam et al. (2014) was adopted, which included: financial measures looking at profitability and growth, and non-financial measures in the form of indicators of operational effectiveness.
Chapter 3: Methodology

3.1 Research strategy

This research sought to provide an understanding of what is behind the relations that exist between individual social capital and firm performance; thus how and why do these two variables interact. A qualitative research approach was used to conduct the research, for a number of reasons. Firstly, qualitative research fits with the purpose of this research, because is used to conduct a detailed investigation of phenomena underlying a research question within their own context (Hartley, 2004). Secondly, by sorting the results on more and more abstract levels while simultaneously checking the more abstract entities against the data, it is possible to create a comprehensive set of themes, which in turn allows for complex reasoning through inductive and deductive logic to make sense of the research subject (Creswell, 2007). Lastly, researching the how and why of a subject is a classic example of a qualitative research conducted through for instance historical research, experiments and case studies (Yin, 1994); because these kind of questions “[…] deal with operational links needing to be traced over time, rather than mere frequencies or incidence” (Yin, 1994, p. 6).

3.2 Qualitative research interviews

The data was collected by using qualitative research interviews. It is important to conduct a detailed investigation of the phenomena underlying the research question within their own context. This can be done by using qualitative research interviews (Hartley, 2004), which usually have a low degree of imposed structure, relatively much open questions and a focus on situations and actions as perceived by the interviewee (King, 2004). Using qualitative research methods results in data based on the perspectives of the respondents, and how they developed their specific perspectives (King, 2004).

3.3 Operationalisation

The semi structured interview format consists of a short introduction, including discussion of interview ethics such as anonymous participation and explaining the way data is used in the results. After the introduction, the interview format contains the conceptual model of this thesis and a topic list with the defining properties of social capital: network size, strong and weak ties, structural holes and network diversity. The questions posed with regard to each topic were formulated with the intent to discover how these different defining properties are perceived by the respondent, how he or she made use of them, and what the effects of these properties on firm performance were.
The interview format has been drafted in Dutch, since Dutch is the mother—tongue of the respondents and conducting the interview in Dutch will therefore stimulate the conversation. See Appendix 2 for the interview format.

3.4 Sample
The respondents in this research were entrepreneurs of start-ups located in the Netherlands. This research elaborates on the perspective of an entrepreneur on the relation between their social capital and the performance of their firm, by focusing on how situations and actions are perceived by them. Each of the entrepreneurs in this sample is one of the founders of a start-up. Eight out of the ten respondents came forth from the network of Ugoo, a company that supported the author of this thesis. Two respondents were contacted and interviewed through the personal network of the author. The time period during which the data was collected stretches from June 2017 to August 2017, see Table 2.

Table 2. Respondent characteristics

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Business start-up date</th>
<th>Interview date</th>
<th>Companions at start-up</th>
<th>Contacted through</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June 2015</td>
<td>Tuesday 13 June 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>2</td>
<td>June 2015</td>
<td>Thursday 15 June 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>3</td>
<td>March 2015</td>
<td>Monday 19 June 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>4</td>
<td>April 2016</td>
<td>Monday 3 July 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>5</td>
<td>June 2014</td>
<td>Monday 3 July 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>6</td>
<td>December 2014</td>
<td>Wednesday 5 July 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>7</td>
<td>March 2015</td>
<td>Thursday 6 July 2017</td>
<td>2</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>8</td>
<td>January 2016</td>
<td>Thursday 27 July 2017</td>
<td>3</td>
<td>Author's network</td>
</tr>
<tr>
<td>9</td>
<td>April 2015</td>
<td>Thursday 27 July 2017</td>
<td>3</td>
<td>Ugoo network</td>
</tr>
<tr>
<td>10</td>
<td>December 2014</td>
<td>Wednesday 2 August 2017</td>
<td>2</td>
<td>Author's network</td>
</tr>
</tbody>
</table>

3.5 Enrolment respondents
To gain familiarity with the culture of participating organisations (Schenton 2004), the researcher did an internship at the company Ugoo. This company supports most of the participating organisations in collecting grants for their innovative activities. In doing so, he visited three of the customers of this organisation (amongst which were ultimately no organisations participating in the research) in order to get familiar with the culture of start-ups. Regarding the respondents, they were all sent an invitation to participate in the research. This resulted in 5 respondents who were not willing to participate out of the 15 who were sent an invitation. Interviewing only the entrepreneurs who accepted the invitation makes that the
respondents interviewed for this research were genuinely willing to participate, which is an important factor in the validity of qualitative research because it increases the honesty of respondents (Shenton, 2004).

To make respondents feel at ease, the interviews were conducted at their own offices. There is one exception where the interview was conducted by phone (which was the case with respondent 3). At the start of the interview, respondents were ensured that their personal information as well as the information that the interviews would contain, would be processed in confidentiality. All respondents gave their permission for recording the conversation. Before the interview began, they received a short explanation of the study and its purpose. They were informed that they would receive a summary of the research results at completion of the research, also with the option to receive the entire thesis if they wanted to.

3.6 Data analysis
In analysing the data, an open coding approach was used. This means that the data was analysed by ascribing codes to portions of text, where the ascribed codes were chosen in such a way that they reflected the contents of that portion of text. The codes that were ascribed to the data during this stage of the analysis can be found in Appendix 3.

After this open coding approach, selective coding was used: redundant or overlapping codes were combined into higher-order codes and these codes were categorized. In doing so, categories were created which were labelled with explanatory codes. In the next part of the analysis, the formed categories were, if possible, linked to the variables of the conceptual model based on their relation to one another. The paragraphs in the written analysis of this research are based on these linkages.

3.7 Saturation
The first interviews provided many different insights in the research subject. Each respondent had a different background, which contributed to collecting a variety of different, and sometimes conflicting, opinions. The more interviews were carried out, the less new insights and ideas came forward. More and more of the information the respondents gave was similar to what other entrepreneurs had mentioned in earlier interviews. After conducting ten interviews, the author concluded that further interviews were unlikely to generate radically new insights and therefore data saturation was obtained. This means that no further interviews were necessary.

3.8 Researcher reflexivity
An important factor in the reliability and validity of qualitative research is the involvement of the researcher. The involvement of the researcher in this research is relatively high, which has multiple reasons. First of all, the researcher is also the writer of this thesis, through which the researcher executed every step from selecting respondents to writing the analysis of the gathered data. Golafshani (2003) argues that, in qualitative research, the researcher is the research instrument. Therefore the involvement of the researcher in the research is inevitable. Kleinsassen (2000) states that “[…] a researcher collects data that pass through the researcher’s theoretical, practical, experienced and inexperienced lenses”. Johnson (as cited in Golafshani, 2003) claims that, from a constructivist viewpoint, researchers need to cope with the fact that reality is a socially constructed phenomenon, which changes constantly and is depending on the view of the observer. The data collection method used in this research is one which produces results largely based on the conversational qualities of the researcher. Since the data collection method was based on the conceptual model, and the interview format was semi-structured, the findings are partly dependent on the execution of the interviews by the researcher. Using the same interview format, it would be likely that more or less the same results would be obtained, but the results would still be influenced by the interviewer. With this knowledge, using multiple investigators, methods and data sources serves as an instrument to record whether the construction of reality presented by the researcher is appropriate (Golafshani, 2003). In order to improve the research in general, other researchers have been involved in the process. The supervisor of the main researcher provided feedback on the writing process, the content in general and main features of the research (e.g. the conceptual model, the research question and the interview guide). Another researcher was involved through coding the data a second time, in order to correct for potential bias in the coding process caused by the involvement of the researcher, helping to provide the main researcher with more reliable codes.
Chapter 4: Results

4.1 The defining properties of social capital

4.1.1 Network diversity

The entrepreneurs have different views on what they think creates value in their network. They shed light on what their ideal network would look like, and how that compares to their own networks. On many of the defining properties of social capital, they had different, although not necessarily contradictory, opinions. One of the main themes in assessing the social capital of entrepreneurs is the necessary diversity of the social capital: Respondents indicated that a more diverse network would be an advantage for them ‘Network diversity is difficult, [...] especially at the beginning we could have used some more connections’ (Respondent 10). Respondent 6 stated that his network is, to a large extent, limited in its diversity since the most connections reside in the same domain as his company itself. Other entrepreneurs indicated that their network in their company’s domain was stronger compared to other domains as well. Notable in this regard is that comments on insufficient network diversity were mostly made in the context of specific domains, such as the legal domain (Respondents 2, 6, 9, & 10). They need connections in other domains in order to advance their company (e.g. legal counsel in constructing labour contracts, formulating privacy standards if they are working with sensitive information and creating the necessary judicial documents for starting a company). Domains that were often mentioned in this regard are: administration, business management, grant intermediaries, sales & marketing, and politics.

Some entrepreneurs indicate that a generic element in their network composition is an advantage. In these cases, a large group of similar connections in their working field is very important to them (respondents 3, 6, & 7). Respondent 6 even sees these connections as far more relevant for the success of their company than the diversity of connections outside their working field. An example is the connections with comparable people who find or previously found themselves in the same position of starting a company, thus connections with the same (homogenic) properties as the entrepreneurs themselves. Especially respondents 7 and 9 commented on advantages of these connections, mostly forthcoming from their participation in an accelerator programme. Since these comparable people encounter the same issues as these respondents in starting a company, like a lack of connections, a need of certain expertise or documents, they can help each other out in many ways. This varies from sharing legal documents: ‘[…] so I only had to send them to our lawyer in order to adjust them to our
company’ (Respondent 2); to acquiring good suppliers, customers and personnel (Respondent 9). Also, talking with other entrepreneurs about problems the entrepreneurs encounter has helped a lot in solving these problems (Respondents 1, 4, 8, & 9). This can be seen as a benefit of a non-diverse network. However, all the entrepreneurs saw diverse connections in other domains as necessary for obtaining relevant knowledge and skills that they can not find in their own working field.

4.1.2 Network size

The entrepreneurs’ opinions on the ideal network size varied between different entrepreneurs. Respondent 4 stated, for instance, that a bigger network is only useful only if the extra connections are relevant for the start-up. Respondents 5, 6 and 8 emphasized that relevant connections were mainly the connections within their respective working field, for they wielded the largest growth potential in terms of extra customers, building their reputation, attracting experienced employees and knowledge sharing. Respondent 8 also emphasized that relevant connections to him would be connections outside their working field which would enable them to collaborate and thereby to offer their customers more.

4.1.3 Strong ties

One of the main results regarding the strength of network ties is that strong ties, which are mostly family and/or friends, are seen as less useful than other ties. For instance, Respondent 5 said that: ‘Family and friends are mostly active in other industries than the one we work in, and therefore have less value to us’. The extent to which these ties are considered valuable in the process of starting a company depends very much on the experience and knowledge they can deliver. In cases where family and close friends were working in fields that were unrelated to the business of the start-up, the amount of value that an entrepreneur extracted from them was minimal e.g. asking for global advice or discussing general business ideas. In these cases, sharing start-up related information with close friends and family was not very valuable. There was, however, one case were family members actually proved to be very valuable during the start-up process: the case of Respondent 9. This was because: ‘All or our fathers are either entrepreneurs themselves or are self-employed’, and thus possessed valuable information and insights for them in starting their own business. Their fathers also helped in connecting them with their first customers. Thus, the experience and knowledge that these strong ties could provide made them valuable.
4.1.4 Weak ties

Regarding direct connections outside the circle of friends and family, there is a general consensus on that their use depends largely on the experience and knowledge they can deliver. When direct connections were working in relevant fields, or possessed relevant experience and knowledge, they were very useful. Examples of when direct connections are useful are for entrepreneurs are when they possess: Knowledge on patenting, experience with the start-up process, PR-knowledge, or PR-connections. Other topics for which direct connections were frequently named as valuable sources was in hiring personnel, attracting customers, contracting suppliers and in enabling entrepreneurs to pitch their ideas at events with potential customers and investors. Acquiring personnel is frequently done by using direct connections, as Respondent 3 states: ‘I prefer to hire new colleagues through my existing connections, because assessing whether someone is ‘good’ is easier that way’. What some entrepreneurs see as essential factors for becoming a successful start-up, they acquired via their own network. This counts for experience, knowledge and people, but also for material factors such as finding a decent office space (Respondent 6), creating awareness, and creating reputation (Respondents 2 & 7).

4.1.5 Structural holes

In many cases, entrepreneurs were missing certain experience, knowledge, and connections at the beginning of the start-up process. In that case, they tried to acquire those connections through their existing connections. Many of the entrepreneurs indicated that creating new ties through existing ties has been very important for them (Respondents 1, 2, 4, 7, & 10).

In order to get in touch with connections that might prove valuable, they used different methods. Respondent 4 said, for instance: ‘I just talked about what I needed with my friends and connections of which I knew they had relevant connections’. He almost always found someone who could help him through these connections and/or their connections. Respondent 2 had a different strategy: he has a large network that stems from his times as a student and his engagement in previous projects, as does his companion. However, these connections were usually not in his direct environment anymore, due to different career paths. In order to find out who could be useful, he ‘[…] looked them up on LinkedIn and made a list of which people were most likely to be able to help […]’. Respondent 5 used more or less the same tactic of looking up old friends and colleagues, but he did not use LinkedIn. He just mailed or called these people without first checking what their current occupation is.
These new ties were formed for various reasons, amongst which were the acquisition of very specific experience and knowledge (Respondents 1, 3, 4, 8, & 9), enhancing business ideas (Respondents 2, 5, & 7), creating publicity, reputation and awareness for their start-up (Respondents 2, 3, 4, & 5), attracting (potential) investors (Respondents 2, 4, & 5) and creating ties with potential customers (Respondents 4 & 5). Also, new ties were created to improve their position and influence in the market, by for instance discussing new ideas with comparable businesses (Respondents 4 & 7) or by gaining a seat on the board of directors on the inter-industry organisation (Respondent 3). The entrepreneurs all agree on that expanding their network and creating new ties is important for the company, especially when there is a lack of experience and knowledge in certain fields or when a company is starting small and wants to create a momentum.

Another influential aspect in obtaining new connections is participation in a business accelerator-program. Two of the interviewed entrepreneurs entered such a program during the start-up phase in order to improve their company in general. Those two entrepreneurs were Respondent 7, who entered the Rockstart program with his company; and Respondent 9, who entered the Utrecht Inc. program with his company. They both indicated that the accelerator network, including both the network of the accelerator itself and the connections with other participants, was very useful in finding people with specific areas of expertise, such as accountancy and start-up experience and knowledge. Furthermore, Respondent 7 explained that their participation in the Rockstart program had a large influence on their development as a company because it enabled them to expand much faster than would have been possible otherwise (e.g. by giving and receiving feedback on their business). Rockstart also gave them access to many relevant connections that helped them to find many potential customers and investors. Summarized, they were able to grow and professionalise their company at a much higher rate than it would have without their participation in the accelerator programme.

Respondent 9 explained that the business accelerator programme provides them advantages in three ways. First, their office is situated in a building with fifteen other start-ups, which makes contact with comparable people very easy. Also, this incubator provides them with many templates for legal documents and such, as well as experienced people who they can ask for advice. Lastly, the network of the incubation program itself provided an opportunity to make contact with past entrants and potential customers or suppliers. However, in backward perspective they acquired fewer connections through that network than they thought they would.
4.1.6 Complementary property: Geographical location

During the study a complementary characterizing property on social capital was discovered. Complementary means that it was not derived from the initially constructed conceptual model. The geographical location of the company was mentioned to have an influence on the network and connections of some entrepreneurs. This was the case with respondent 3, who is situated at the High Tech Campus in Eindhoven, where many starting companies are located and where interaction between them is stimulated. For him, that network was valuable in obtaining relevant knowledge and making connections with potential customers. Another entrepreneur who indicated that geographical location was an important factor in his network was respondent 6. His company is also situated at the High Tech Campus in Eindhoven, and he indicated that having a central position is an advantage for reaching potential customers and suppliers. Also, the events organised at the High Tech Campus facilitate expanding their network and obtaining useful connections. The last entrepreneur who indicated that his location was a factor in their network was respondent 9. His company’s headquarter is situated at the Utrecht University, in a building with fifteen other start-ups, which enables them to contact other entrepreneurs for mutual help and advice by just stepping out of their office.

4.2 The usage of Social Capital by the entrepreneur

4.2.1 Decisions regarding network usage

Entrepreneurs used their network to gather information and knowledge they did not possess themselves, and which was hard to gain from the public domain. Information gathered that way concerns mostly the use of labour contracts, the use of certain materials for production and the use of HR policies. Another way to use the network was in order to use the expertise of their network, by for instance explaining them their product, ideas, or problems and asking for feedback or advice on which decisions to make. The third way of using the network was to attract financial support. This was done by both respondent 2 and respondent 5. Respondent 2 used his network by deliberately selecting from his connections the people that had ties with investors, and indirectly found a suitable investor through socializing with these existing connections. Smit used his network differently. He attracted money through family that was willing to support him. In addition, he won a contest for ‘The best start-up’, which brought him in contact with an investor firm that decided to invest in his start-up. One of the most
important ways for entrepreneurs to use their network is to attract customers and employees, the details of which will be explained under the headers ‘recruitment and new customers’.

One of the aspects that entrepreneurs often mentioned as very important in the role of network in the company was whether connections were relevant. Respondent 2 describes this with an example: ‘A friend of ours brought us, with our [product], in contact with a potential investor who owned a [business related to our product]. Because our product was very relevant to him, the contact was very good and gave us one of our first investors’. The relevance and similarities with connections is thus an important factor in the value of that connection, which contributes to the potential of someone becoming a useful business partner or investor. Regarding the relevance of connections, respondent 4 claims that the most valuable connections are ones of which he knows what their area of expertise is. According to respondent 2, the most important factor in using your network is the relevance of a connection in regard of the goal you want to reach. Having an idea of what someone does for a living is very useful in that context and LinkedIn has proven very useful to him in gathering this information. Respondent 3 also aims to obtain relevant connections. He tries to contact relevant people through his involvement in the inter-industry organisation of his working field. Respondent 6 states that the relevance of connections, in his opinion, depends largely on the network of that connection. The value of his connections is greatly influenced by the value of their network. Respondent 10 thinks that the size of his network is less important than the relevance of connections. Having one relevant contact can make a huge difference while having many connections may not result in anything according to him.

4.2.2 Social media usage

Some of the entrepreneurs commented on their use of online networks and social media. Social media is mainly seen as a tool for good PR (Respondents 5 & 7). It is also an important way to create awareness (Respondent 5), to obtain relevant connections (Respondent 2) and to explore the potential for operating on an international level (Respondent 7). Respondent 5 sees LinkedIn as the most important online platform for maintaining business relations and placing PR-statements. Respondent 2 also sees LinkedIn as the number one business platform online, which greatly facilitates obtaining relevant connections. Respondent 7 prefers Twitter, since many international corporations and highly placed people within those corporations use Twitter which, for instance, gave him a potential lead on an investor from Silicon Valley.
4.2.3 Reputation and trust

An important outcome of making use of connections is building a reputation. Some of the entrepreneurs indicated that the reputation, built by using their network, was an important factor in the success of their start-up. For example, respondent 2 used his connections to get articles placed about his start-up by the “Nederlandse omroep stichting” (NOS). Since the NOS is known as a reliable source, potential customers who read the article are more easily convinced to use their product. Respondent 3, in turn, sees a positive influence of their reputation coming from successfully completed projects and collaborations. Respondent 6 states something similar: ‘[…] because customers were happy after we helped them, we got many more customers’. According to him, creating positive brand awareness is what allows them to grow. Respondent 9 states the same: ‘PR and good references are essential; where [good references] really come from our network: the more customers are served successfully, the faster a next customer says yes to our product’.

A large part of the business of respondent 2 is based on the trust of their customers. Therefore, media-attention and visibility are two very important factors for their start-up. To get these, respondent 2 and his business companion made extensive use of their network, with great success. In his view, knowing the right people or knowing how to contact them through his network was essential for the success of their start-up. Respondent 3 also made use of his network in creating awareness for his start-up. He did so by using a connection to contact the leadership of an important event and thus gaining a place there with his products. He also used his connections to obtain a position on the board of the inter-industry organisation.

4.3 The influence of social capital on firm performance

4.3.1 The influence of social capital on the company in general

Respondent 1 states that the influence of his network on his company is mainly reflected in the choices they made about the concept of their business. These choices are, for instance, deciding what target audience they want to reach, at what kind of places they want to make their product available and whether customers pay based on the service the product delivers or based on what customers sell through the service of the product. Network also influences them in terms of awareness and reputation. respondent 1 does not think that network helped them grow, but that it mostly helped them by providing useful feedback on how and what they were doing.
Respondent 2 sees a large influence of his network in many aspects of his company. He states that ‘Through network and the use of direct as well as indirect connections, we were able to save a lot of money for more important things. Brooding on a decision and searching whether it could be solved through existing connections has been very lucrative for us’. They made extensive use of their network in PR and creating awareness. Via direct connections, they were able to place articles about their business in Dutch magazines such as Quote and Elsevier. These articles, in turn, prompted magazine ‘Het Parool’ and the ‘NOS-journaal’ to contact them and create articles about them as well. These different media outlets provided them with free advertisement, and according to respondent 2 ‘This has provided us with free awareness and attention that would otherwise have cost us at least 100,000’. Another area in which the network was thoroughly used was the financial area. At a certain moment during the start-up phase, it was very important for them to attract investments in order to keep their product functioning on a larger scale, because they were growing fast. Through contacting relevant people in their network, they were able to attract a good investor who had affection with their business. They used their existing connections for problems they encountered, especially when their experience was insufficient to solve that particular problem. In doing so, they improved the concept of their idea by discussing it with a connection who worked with start-ups, and they improved their business model through a friend who had experience creating business models. The same goes for legal issues at constructing employment agreements and covering themselves in the case of flaws in their product: they contacted a friend who was a lawyer, and he helped them for a strongly reduced fee. A friend who is a recruiter was contacted, and he helped them with contracting employees and assessing who (not) to hire.

Respondent 3 indicated that his company ‘[…] gained many advantages from the use of our networks’. He and his business partner used their networks for attracting their first customers, all of which came out of their networks. On the longer term they used their network for hiring employees, because that allows them to assess the quality of employees better.

Respondent 4 contradicts the others: he states that ‘[he has] the feeling that the cuddliness of our idea is more important for the company than the connections we have’. Respondent 7 says something similar. He claims that their product and the service it provides generate more new customers than their network. This changed over time: at the very
beginning, network was the only way to attract potential customers, but as the product gained recognition and awareness, that changed completely.

Respondent 5 thinks that he and his business companion used their network differently than other start-up entrepreneurs, which is due to their already long career in freelancing. In those 20 years, they built a network of business associates which they mainly used during their start-up period. In that way, they made much use of their direct connections but did not have the need to create many new connections, since the experience and knowledge needed for starting a business was already available in their direct network.

For respondent 6, the most important people in his network can be placed in three categories: customers, suppliers and people whose network is useful for them in creating new connections. In his view, his network ‘helped in taking care of business easier, but most of all quicker’. The network he maintained at the start of his business hasn’t increased in value, but the extra connections he made during that period were very useful for his business in a general sense. His network strongly helped the company to grow, by attracting customers and making useful connections.

Respondent 8 has many software programmers in his network, which is an advantage since most of their work is in software programming. He has ties with many students, since he stopped studying himself a short while ago. Because students have relatively much free time, he can always ask people to jump in when the workload becomes too much. They have not deliberately made use of their network, other than to find new assignments. They want to improve their network, since respondent 8 has the feeling that it could be of more use to them than it is now.

4.3.2 The influence of social capital on growth

Different entrepreneurs indicate that their network has been essential to the growth of the company. Respondent 2 states in this regard that ‘The growth of the company has depended strongly on the network’, while respondent 4 complements that by stating ‘The growth of the company depended on connecting with the right people in order to gain brand awareness, financial advice, investments and the public’s interest’. Respondent 6 specifies the importance of his network for the growth of the company further: in his opinion ‘[The] network has helped us to grow by attracting customers and making useful connections, although I see no clear role for the network in the operational development of our company. Network has little influence on costs, but it does give us better projects and results’. Respondent 10 contradicts
the others, because he sees no clear indication that network and growth go hand in hand. According to him, the usefulness of his network depends on meeting the right person at the right time, which is usually a coincidence rather than a direct outcome of his network.

4.3.3 The influence of social capital on profitability

Many of the entrepreneurs made comments regarding the influence of their network on the financial aspects of the company. Respondent 2 made extensive use of his network in attracting investors. He thinks that attracting a suitable investor would have taken longer without their network, and that the financial outcome could have been worse than it was now. Besides attracting investors, his network helped financially through friends and connections that helped them with different aspects of the business free of charge, or for a reduced fee. Respondent 3 emphasizes the same; he saved a lot of expenses by approaching his network for legal advice and constructing the necessary documents regarding legal issues and privacy statements. Respondent 4 has gained financial advantage through his network by receiving a gift from one of his connections, and by connecting with an advisor on subsidies, which reduced costs greatly.

4.3.4 The influence of social capital on operational effectiveness

Respondent 1 thinks that ‘[… ] a lot of operational knowledge [was obtained] from our network and friends who are entrepreneurs as well’. They approached fellow entrepreneurs to gain insights on how to handle the billing process and how to do good marketing. Respondent 2 also sees an influence of his network reflected in the operational side of his business. In constructing labour contracts and hiring personnel, they used a connection who worked at a recruitment bureau for advice on how to assess someone’s qualities and how to handle difficult situations with hired personnel. However, respondent 2 does have a feeling that there is a difference in network influence: ‘I have the feeling that regarding profitability, we received about 80% from using our network, while regarding the operational area that percentage lies about 50%’. Respondent 3 also used his network to gain knowledge of administrative and legal issues, in order to solve operational problems. Respondent 6 used his network for operational purposes in a practical way: he used his connections to obtain a suitable office for his start-up. But in the operational side of the start-up in general, he does not see a specific role of his network: how to keep the company operational was discovered along the way, and therefore not really influenced by his network. Respondent 7 thinks that how to handle the operational side of the start-up has been greatly influenced by their
participation in the Rockstart programme, and that the programme enabled them to professionalize very fast in that area. Respondent 8 has improved the operational side of his start-up by going to meetings with other starting entrepreneurs and learning from their mistakes and advice. A friend who is also an entrepreneur was also useful in the same way. Respondent 9 also states that talking with fellow entrepreneurs was their main source of improvement regarding the operational side of the company.

4.3.5 The influence of social capital on recruitment and attracting customers

With regard to recruitment of new employees, many of the entrepreneurs that commented on it found that network is an important factor (Respondents 3, 5, 7, & 8). The main reason for hiring employees through the existing network is because it enables the entrepreneurs to assess whether someone has a fit with the company (Respondent 8) and ‘[…] whether he or she is good’ (Respondent 3). As a result of that, most or sometimes all of the employees in the start-ups were hired through the existing network of the entrepreneurs (Respondents 3, 7, & 8). However, respondent 1 and respondent 7 also state that hiring through their existing network means hiring from a specific pool of people which has limited experience and knowledge compared to hiring outside the existing network.

During the start-up process, finding the first customers is very important for being successful. Respondent 1 has not yet started selling his product, but is working on getting as much awareness with potential customers as possible. He tries to do so by testing his product at events which he can enter using his connections, where many people can see the value of his product. Respondent 4 uses more or less the same strategy: he uses his network to find potential customers and to meet them, aiming at having as much awareness and potential customers as possible before the definitive launch of their product. Respondent 2 focussed on media attention in order to reach potential customers, which he acquired through his and his companion’s many connections in that world. He feels that this has helped them greatly in gaining the confidence of customers and in attracting many customers at a time, more than would have been possible without the media attention. Respondent 3 thinks his network provided him with a comparable advantage: since his industry is relatively small, knowing the right people gave him and his company a lot of credibility, which in turn helped them get their first customers. This way, their first three customers were contracted through their direct network. Another factor respondent 3 names in attracting customers is that successfully completing assignments gave easy access to new assignments. Respondent 6 agrees with
respondent 3 by stating ‘Because customers are happy afterwards, we got many customers, so the network of our network was very important’. He thinks that, as time goes on, more and more customers find them due to formerly completed projects and references from existing customers. Respondent 7 sees a large influence of his network in attracting customers, specifically the network stemming from their participation in the Rockstart accelerator program. This was mainly important during the early days, where most, if not all, of their customers were attracted through either their personal network or the Rockstart network. However, as time progressed, he thinks their network became less and less important in acquisition: ‘[Attracting new customers] is more and more depending on the quality of our product’. Respondent 8 and respondent 9 both emphasize that all their first customers were contacted through their direct network. In this regard, respondent 8 thinks that it is very important for them to use and to expand their network more in contacting new customers. For respondent 9, the reason for attracting their first customers through their direct connections was mostly because all three companions come from a family with more entrepreneurs, so there were many potential customers to be found there. Currently, they attract most of their customers through the network of the Utrecht University, which they are collaborating with.

4.3.6 The influence of social capital on obtaining knowledge

A very important factor in starting a company is having or obtaining relevant knowledge. This starts at choosing a business companion: respondent 3 explains that the different backgrounds of him and his business partner were main reasons for them to start a company. Respondent 3 had business knowledge, while his companion had technical knowledge which, together, enabled them to start their technical business. On the subject of relevant knowledge respondent 5 claims that he and his business companion had significant advantage over other starting entrepreneurs since they had a lot of knowledge and experience in business. This enabled them to start their business faster, and also helped to generate financial inflow earlier than others. In general the entrepreneurs were looking for knowledge on how to start a business and how to do so in the market they wanted to operate in, and connections who had such knowledge were seen as very valuable (Respondents 6, 8, & 9).
Chapter 5: Conclusion

Looking back on the defining properties of social capital, network size matters mainly when the extra ties that come with a larger network also provide a significant marginal value to be extracted for the good of the firm. A more diverse network with regard to ties outside the existing knowledge radius of entrepreneurs would be advantageous, but on the other hand a closely knit network with like-minded people is also seen as important making a combination of both the ideal network composition. Family and friends were on occasion of value, with as prerequisite that they could provide entrepreneurs with something that they needed. Creating a valuable network is essential to firm performance, and therefore it is essential for entrepreneurs to create new connections, to maintain existing connections and to have a pro-active attitude in using their social capital.

There are many different ways in which entrepreneurs see an influence of their social capital on the performance of their firms. Social capital provides useful connections to valuable parties like investors, customers, suppliers and media companies. Social capital also grants access to essential knowledge and experience for starting entrepreneurs, which provides them with tools to improve their business ideas, contact the right people and manage their progress. These different factors generally increase the financial position of the company by generating income and saving costs, and thus improve chances of survival, which in turn makes it easier to become profitable and invest in growth. On the subject of operational effectiveness, measurement is difficult because ascribing operational decisions to individually obtained knowledge or experience proved difficult, thus making the perceived value of social capital is this perspective positive but small. It is however important to note that the extent to which each factor contributes varies highly between start-ups. Social capital has a positive influence on the firm performance of start-ups, but the contribution of specific factors differs and is largely depending on the context in which a start-up exists. These results call for further research to break through the overlapping influences that are implicated by many of the outcomes.
Chapter 6: Discussion

6.1 The most important findings in relation to existing knowledge

With regard to the entrepreneurs’ perspective on their own social capital, the main conclusion is that they all see social capital as essential and beneficial to firm performance. Different expected and unexpected perspectives were discovered. Firstly, this study showed that a diverse network was preferred by the entrepreneurs, meaning a network that includes connections in several specific domains that could be advantageous, where the legal domain was the most mentioned. Also, some entrepreneurs recognized advantages in a non-diverse network where they had many useful connections in a relevant domain, which was closely related to the domain of the start-up itself. The main finding is that there is no clear preference: It seems that a combination between a widespread diverse network and a closely knit non-diverse network is what most entrepreneurs would prefer. A larger network was preferred only if the extra connections were also relevant connections, deeming a ‘large network’ in itself not necessarily an advantage. Expanding your network and creating new ties is important, but especially when there is a lack of experience and knowledge that can not be obtained through existing connections in certain fields or when a company is starting small and wants to create a momentum for growth. Thus the main finding is that it is important that ties have some kind of value to the entrepreneur, making the size of their network on itself less important than the ties in the network. Ties were most valuable for the entrepreneurs when they can deliver a missing piece of knowledge or experience, or when they have connections in a relevant domain. Because of this, family and friends were deemed less useful than weaker connections due to a difference in the amount of useful knowledge they could deliver. There was one exception where family and friends possessed a lot of useful information and experience, through which they were of much value to the entrepreneurs. Since family and friends generally came from a less diverse background than weaker connections, their knowledge was also less diverse and was therefore of less value.

There are multiple results which are useful for entrepreneurs to keep in mind when starting a company themselves. Connections mainly provided value by providing advice on business (idea) issues, legal issues and marketing. Operational effectiveness was supported by social capital through sharing these kind of issues with others and asking for advice, which results in knowledge which improved the way entrepreneurs could deal with operational problems and stimulate effectivity in the business. Many entrepreneurs saved costs by
receiving advice for a reduced fee or even for free. Finding customers in an early stage of the company was mostly done by using relevant connections who might take an interest, and all entrepreneurs agreed that social capital is essential in finding first customers as a start-up. However, as awareness spreads and the customer base grows, the role of social capital in finding customers declines. Connections were also used to attract suppliers, in terms of supplying material. Besides, connections in media can provide a lot of free marketing and help greatly in creating a customer base. Regarding investments, entrepreneurs sometimes received money through family or friends. But when the entrepreneurs intended to grow on a larger scale, the investors were always attracted through use of their network, and specifically by creating new ties with potential investors or with people that could connect them to investors. Thus the social capital of entrepreneurs is essential in creating knowledge, viability and in saving costs; thereby providing more opportunity for growth and profitability.

6.2 Limitations

Reflecting on the research process, there are some limitations. First of all, there was data obtained from ten respondents, all living in the Netherlands. This is of consequence for the potential generalization of the results, since a larger amount of entrepreneurs would have provided more data, which would undoubtedly have given some insights that were overlooked during this research and yield a greater potential for generalization. Also, the entrepreneurial environment differs between countries meaning that the results of a similar investigation among entrepreneurs in another country might deliver different results.

The decision to conduct semi-structured interviews has consequences for the data that was obtained. In a structured interview, differing opinions of entrepreneurs would be more distinct, giving a clearer image of differences of similarities. On the other hand, an open interview could have provided data spread over more different subjects which could uncover subjects that have been overlooked in this research.

6.3 Strengths

The results provide many insights in which segment of a network can prove valuable in certain situations. There are different examples of, for instance, how to find investors, how to gain knowledge and how to create a customer base which largely overlap with each other and therefore can provide starting entrepreneurs with a clear direction in comparable situations.
The different entrepreneurs create a clear image of what went well and what could have gone better in the usage and influence of social capital on their company. There are examples where social capital has proven essential for a certain aspect of the company, while there are also examples where social capital was hardly used which yielded different, in the perspective of the entrepreneurs mostly worse, results. Thus, the entrepreneur’s experience with the influence of social capital on different aspects of their start-up makes an excellent vantage point for other entrepreneurs to evaluate and improve their own efforts in using social capital.

6.4 Recommendations for further research

Many different directions for further research can be derived from the results. What stood out was that different entrepreneurs indicated that the geographical location of their company proved to be an advantage. It would be interesting to investigate what difference a location makes, and what factors have an influence on the value of a location. There were also two entrepreneurs who had participated in a start-up accelerator and who stressed the importance of their participation for their start-up. Investigating the difference between start-ups who participate in accelerator programmes and standalone start-ups could provide useful results for entrepreneurs. This research could focus on social capital, but also on other factors that determine the success of a start-up, since the results on this subject were focussed on the start-up performance in general.

Since the entrepreneurs had different opinions on what was the value of their social capital and why it is valuable to them, it would be interesting to investigate the relation between the insights of an entrepreneur on the value of his or her social capital with the quantitative value of social capital for that entrepreneur. Through research, it would be possible to determine if there really are individual differences, and if so, why these differences exist.

It is questionable whether conducting the same research in another country would provide the same results. Therefore, it would be fruitful to conduct similar research in other countries than the Netherlands in order to establish whether they yield similar results. Also, conducting similar research on a larger scale would contribute to the potential generalizability.

Another result that stood out was that some entrepreneurs indicated that a non-diverse network proved advantageous to them. The existing literature focusses mainly on the diversity
of a network (Stam et al., 2014). Therefore, research towards the advantages of non-diversity in a network and the consequences it has for the potential advantages of diversity would be the key to discovering what kind of connections the ideal network would consist of for an entrepreneur.

Lastly, there was a case where strong ties were very useful because of their knowledge and experience. Because strong ties are generally seen as less useful than weak ties, this provides an interesting insight. Since weak ties are, in most opinions, more useful than strong ties, this might lead to a biased look toward strong ties and result in unused potential. Research toward the potential value of strong ties could provide insights in whether focussing mainly on using weak ties results in a negative trade-off for the potential value that could be extracted from strong ties. Another foundation for further research in the potential of strong ties is provided by Krackhardt, Nohria, and Eccles (2003, p. 218), who emphasize that “[…] strong ties are more likely to be useful to [the] individual when that individual is in an insecure position”. Since entrepreneurs are, especially during the start-up phase, in an insecure position, strong ties might prove more useful to them than they currently are based on the results.
Literature


Appendices

Appendix 1. Dimensions of social capital and corresponding benefits.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Ends of the continuum</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td>Redundancy (closure argument)</td>
<td>Trust and enhanced communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reputation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuity of the linkage</td>
</tr>
<tr>
<td></td>
<td>Non-redundancy (structural</td>
<td>Information and resources</td>
</tr>
<tr>
<td></td>
<td>hole argument)</td>
<td>Time advantage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referrals</td>
</tr>
<tr>
<td>Relational</td>
<td>Strong tie</td>
<td>Reliable connections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transfer of complex knowledge</td>
</tr>
<tr>
<td></td>
<td>Weak tie</td>
<td>Opportunities and unique resources</td>
</tr>
<tr>
<td>Cognitive / Contingent</td>
<td>Content of tie</td>
<td>Effectiveness of network structure or strength of tie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>depends on content of discussion and context</td>
</tr>
</tbody>
</table>

Appendix 2. Interview guide.

**Introductie**

- Voorstellen
- Kort uitleggen wat het interview inhoudt
- Toestemming opnemen en afstemmen vertrouwelijkheid en anonimisatie
- Kort uitleggen wat het onderzoek inhoudt
- Uitleggen dat ik het toestuur
- Gelegenheid geven om vragen te stellen

**LinkedIn netwerkvisualisatie**

- Uitleggen wat de bedoeling met de visualisatie is
- Toestemming vragen om dit met de ondernemer te doen
- Uitvoeren en peilen eerste indruk: komt dit overeen met verwachtingen?
- Welke dingen vallen de ondernemer het meest op?

**Vragen stellen vanuit conceptueel model en topiclijst**

- Uitleggen wat het conceptueel model inhoudt

  **Conceptueel model**

  ![Conceptueel model diagram](image)

  - Vragen stellen betreffende de topics in de topiclijst
## Topiclijst

<table>
<thead>
<tr>
<th>Topics</th>
<th>Voorbeeldvragen</th>
</tr>
</thead>
</table>
| **Inleiding van Social capital op firm performance** | ● In welke situaties heeft u gebruik gemaakt van uw sociale netwerk?  
   ○ Wat was het gevolg/resultaat hiervan?  
   ○ Wat is de achtergrond van deze situaties?  
● Wat is in uw ogen de bijdrage geweest van uw sociale netwerk aan uw bedrijf?  
● Welke kenmerken van uw connecties hebben een rol gespeeld voor uw bedrijf?  
● Betreffende de connecties waar u gebruik van heeft gemaakt, waren dit vooral sterke connecties of zwakke connecties?  
   ○ Waren dit connecties binnen uw kennisgebied of daarbuiten? |
| **beslissingen omtrent gebruik van het sociale netwerk** | ● Op welke manieren heeft u bewust gebruik gemaakt van uw sociale netwerk?  
● Heeft u bewuste keuzes gemaakt in welke personen/partijen u wel om hulp heeft gevraagd/ingeschakeld en welke niet?  
   ○ Waarop waren dergelijke keuzes gebaseerd?  
   ○ Waren uw afwegingen daarin achteraf gezien de juiste afwegingen?  
● Waren er connecties met specifieke vakgebieden of personen die u heeft gemist in uw netwerk?  
   ○ Heeft u deze connecties alsnog gelegd? En zo ja, op welke manieren heeft u dat gedaan? |
Appendix 3. Initial list of codes.

This is a list of the codes that were used before selective coding was applied, where the codes were combined and organised into categories.

- Bedrijfsgroei
- Belang netwerk
- Compagnon(s)
- Directe contacten
- Financiële zaken
- Gelijkgestemden
- Geografische locatie
- Indirecte contacten
- Investeringen
- Klantenwerving
- Netwerkdiversiteit
- Netwerkgebruik
- Netwerkgrootte
- Netwerkuitbreiding
- Operationeel
- Personeelswerving
- Relevante kennis
- Relevantie contacten
- Reputatie
- Social media
- Sterke contacten
- Zichtbaarheid