

Networks and Performance of Small and Medium Enterprises (SMEs) in Different Stages of the Life Cycle: A Case Study of a Small Business in the Netherlands

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ABSTRACT The paper investigates the relationship between small business performance and the use of networks in the start-up and growth stage of the life cycle. A qualitative approach was adopted in exploring the effect of networks on small business performance. A case study of one firm in the Netherlands and an in-depth interview was conducted to complement a thorough literature review on entrepreneurial networks, small business performance and business life cycle. The study found a relationship between performance and entrepreneurial networks in both the start-up stage and the growth stage of the firm. Networks are important to small businesses for information and opportunity seeking, accessing resources and gaining legitimacy. Small business performance improves as a firm moves from start-up to growth stage of the life cycle. Understanding the factors that impact small business performance is important for business advisors, policymakers and other relevant stakeholders to better serve the small business sector.

INTRODUCTION

As more countries realize the importance of entrepreneurship, the use and effect of networks on small firms are changing. This paper reveals that the relationship between networks and small business performance varies in different development stages of entrepreneurial firms. The study investigated the use of networks in different developmental stages of businesses. The relationship between small business development stages and small business performance was also investigated. The study also reveals the relationship between small business performance and the business life cycle. There are also previous studies that have looked at the relationship between small business development stages and networks (Birley et al. 1991; Hite 2001; Lechner 2003) as well as the relationship between small business development stages and small business performance (Uzzi 1997; Simsek 2003; Anon 2003). Various studies have also dealt with the relationship between small business performance and the life cycle of small firms (Masurel and Montfort 2006). This study aims to address gaps in literature on small business development by addressing the following question:

Is there a relationship between the use of networks and small business performance in different phases of the firm's life cycle?

Objectives

- The primary objective of the study was to:
- investigate the relationship between networks and small business performance in different phases of the firm's life cycle.
- Secondary objectives of the study were to:
- to identify networks that dominate at each stage of the life cycle
 - to investigate the role of strong and weak ties in the performance of a business

Literature Review

Networks

Networks are a rather abstract and broad construct, a very broad range of definitions and determinants are found throughout the literature. Aldrich and Zimmer (1985) came up with a narrow definition of networks where they defined networks as consisting of those persons with whom the entrepreneur has a direct relationship and those with whom the entrepreneur has indirect relationships through his direct relationships. Aldrich et al. (1986) argues that density is an important factor in examining networks. Density is explained as how well people in a network know each other. A broader definition is provided by Granovetter (1973) that refer to the strength

and quality of relations in a network by the amount of time, emotional intensity, intimacy and reciprocal services involved in these relations. Subsequently they argue towards strong ties and weak ties. This paper focuses on the weak and strong ties section of Granovetter's (1973) definition since the researcher expected these representative determinants of a network. Strong ties are the type characterized by frequent interaction, more intimacy and intensity and weak ties are characterized by the opposite traits. This research paper considered the narrow definition to be limiting in the field of social media and therefore the broader definition of Granovetter (1973), with a particular focus on strong and weak ties was used.

Small Business Performance

Gaskill and van Auken (1993) noted that the understanding of factors that impact small business performance is important and enable business advisors, policymakers and other relevant stakeholders to better serve the SME sector. Performance remains the ultimate indicator for success and this is evidenced in both empirical and theoretical models (Man et al. 2002). Westhead and Wright (1998) clearly state that small business performance can be measured in terms of sales growth, employment growth, changes in profitability, and changes in profitability in relation to competitors. Increases in earnings, sales revenues, and employment are also indicators of performance (Blatt 1993; Orser et al. 1998; LeBrasseur 2003).

Non-financial measures can also be used to measure performance (Lumpkin and Dess 1996). The lack of formal reporting requirements for the majority of small businesses makes it difficult to obtain sufficient reliable information to measure their performance in an economic sense (Everett and Watson 1998). This is often complicated because of the interference between business profits and entrepreneurial income by the entrepreneurs (Massurel and van Montfort 2006). According to Bird (1992) and Le Brasseur et al. (2003), owner-managers periodically reflect upon the firm's performance in light of their personal vision for business to assess performance. This study makes use of both financial and non financial performance measures. Sales, profitability, growth, productivity and owners' satisfaction are used as measures of performance in this study.

Small Business Life Cycle

A myriad of theories exist about the different stages a growing small business usually goes through (Adizes 1979; Churchill and Lewis 1983; Miller and Friesen 1984). Proposed models vary greatly in setup and range from a mere three stages to models describing no less than ten stages in the small business life cycle. However, we can conclude from extant literature that some general form of a life cycle can definitely be identified in the great majority of firms, and most firms follow roughly the same trajectory (Hirsch and Peters 1998). These stages serve solely as a general indication of the maturity of a small firm, and are by no means absolute (Lester and Parnell 2002). The practical importance of having such a model is to identify different priorities and challenges that change with the life cycle of a firm (Churchill and Lewis 1983). Although the literature describes many stages within an SME's life cycle, the researcher focused on the two first stages, namely start-up and growth.

The start-up phase of a firm usually marks the start of a company: growth is often slow and the main focus lies on keeping the firm alive. The growth phase marks the beginning of an increasing profit and more rapid growth, characterized by the establishment of structure (Quinn and Cameron 1983) and competencies (Miller and Friesen 1984).

The Conceptual Relationship between Life Cycle and Networks

Birley et al. (1991) argue that at early stages of the development of an enterprise networks consist mostly out of informal contacts, friends and family. When the firm develops further firms rely more on professionals, lawyers, accountants and so on. Hite et al. (2001) argue that firms evolve from identity-based networks in the early stages of the firm towards calculative-based networks, which are based on expected economic benefits, in later stages. In identity-based networks some kind of personal or social identification between actors plays a role besides the economic motives and can be seen as strong ties. On the other hand, calculative networks, based on expected economic benefits, consist of more diverse work based ties and weak ties. Firms moving from start to early growth are increasingly able to manage these types of networks and their motivation is the resources availability and

reduced environmental uncertainty that these networks provide. From this information, the first hypothesis is proposed:

Hypothesis 1: Small firms networks evolve from identity based networks (strong ties) in early stage to calculative networks (weak ties) in the growth phase

The Conceptual Relationship between Networks and Small Business Performance

While the existing research on the relationship between small business performance and the importance of networks is surprisingly limited (Simsek et al. 2003), the literature that does exist on this matter suggests a general facilitating effect of a well developed social network on business performance (Anon 2003). However, while this general effect is clearly present, not all ties a small firm possesses are of equal importance or have this positive effect (Peng and Luo 2000). Studies on the effects of having strong ties (Uzzi 1997), or weak ties (Granovetter 1973) come up with different benefits for each and suggest that having strong ties or weak ties can each be ideal in different situations.

One of the benefits of having a well developed social network is described by Birley (1985) as having access to new information. Also, empirical research has shown that in addition to the benefit of new information, several other benefits can be identified. Stuart et al. (1999), for example, have shown that a firm might benefit from the legitimacy gained from a large social network. Furthermore, research indicates that access to financial capital (Batjargal 2003) and emotional support (Bruderl and Preisendorfer 1998) also play important roles in the facilitating effect of networks on small business performance. Based on above information, the following hypothesis is proposed:

Hypothesis 2: The performance of an SME is positively related to the number of strong ties in the start-up phase and to the number of weak ties in the growth phase

The Conceptual Relationship between Networks and Small Business Performance

Masurel and Montfort (2006) discuss what happens to the small firms when the firms grow.

They discuss that the firm changes in terms of diversification of sales, differentiation of employment and labor productivity. As discussed in the section on small business performance we chose to incorporate non-financial attributes of performance in our analysis. Therefore we consider labor productivity and differentiation of sales to be representative determinants of small business performance. In different stages of the firm's life cycle different levels of performance are expected. In the start phase, slow or no growth in sales revenue, slow or no growth in client base, slow and no growth in profits and low productivity can be expected. In the growth phase, growth in sales revenue, growth in client base, profits and productivity can be witnessed in this stage of a firm.

Small businesses in different stages of the life cycle are not generally expected to follow the exact same pattern as described by Man et al. (2002), who argue that a firm in the introduction or maturity phase of the life cycle grows more slowly or shows no growth at all, whereas a firm in the take-off phase can show fast growth. This is also shown in Table 1 where key performance characteristics related to the first two stages of the firm's life cycle are indicated. Based on these findings the researcher proposes the following hypothesis:

Hypothesis 3: There will be a positive relationship between moving from start to growth stage and business performance measured in terms of sales, profitability, growth, productivity and owners' satisfaction

Masurel and van Montfort (2006) discussed changes that take place in small firms when firms grow. They discuss that the firm changes in terms of diversification of sales, differentiation of employment and labor productivity. Performance is the ultimate measure of success or failure. We consider productivity and increase in sales, profits, growth and owners satisfaction to be indicators of small business performance. Based on this the researcher proposes the following proposition.

METHODOLOGY

This study followed a qualitative approach to explore the relationship between networks and

small business performance in different developmental stages of entrepreneurial firms. One in depth case interview with an entrepreneur was conducted in addition to the literature review of networks, small business performance and small business life cycle. To address these research questions, a case study was performed on the company 'Nameshapers' in Amsterdam, the Netherlands. An in-depth interview was held with one of the founders of this small firm. The entire interview was recorded in consent with the interviewee for later review. Although the interview overall went according to the researcher's expectations, the researchers encountered some minor difficulties during the interview. As the interviewee did not recognize any of the phases of a typical small business life cycle as described in the literature, he could not identify the current position of his business in such a life cycle, therefore the researcher had to adapt the questions to this situation. However, despite this minor problem, valuable information that will help to answer the research question in the current study was obtained.

RESULTS

The results for the study are presented in the paragraphs that follow.

The first hypothesis proposed was: "*Small firms networks evolve from identity based networks (strong ties) in early stage to calculative networks (weak ties) in the growth phase*"

Based on the information obtained during the interview this hypothesis was partially confirmed. Identity based networks were recognized in the early stages since the interviewee relied on actors with whom the interviewee has a social or personal identification, such as friends and family. This phase was characterized by giving away/seeding through free workshops just to establish a stronger name. In the growth stage calculative networks were recognized since there were large corporate clients reaching out to them. It can be expected that the relationship with these types of clients are based more on expected economic returns compared to identity based network. However, the interviewee mentioned that the emphasis is on the personal touch and the personal effort and that these corporate clients are like friends. Therefore, this hypothesis is partially confirmed. This is in line with the suggestions of Scarborough et al. (2013) that there is a need for

SME owner-managers to create and maintain wide networks of weak ties, at the same time developing stronger ties that will enable easy recognition and realization of opportunities. Santarelli and Tran (2013) on the other hand pointed out that both weak ties and strong ties form part of the social capital of an SME, but the benefits from weak ties outweigh those from strong ties.

The second hypothesis proposed was: "*The performance of an SME is positively related to the number of strong ties in the start-up phase and to the number of weak ties in the growth phase*"

With the information obtained during the interview, this hypothesis was confirmed. The interviewee clearly stated that during the start-up phase, the relied mostly on feedback from the owners' family and close friends (strong ties). This feedback helped the business improve the quality of the services which were being offered, and thus increased the performance of the overall business. Later on, the interviewee stated that weak ties became more important, as the company relies mainly on word of mouth advertisement. The interviewee saw a clear relationship between the number of weak ties and the number of assignments the company gets, thus increasing the performance in terms of profit. Ebbers (2013) accepts that a positive relationship exists between the use of social networks by new ventures and the performance of these firms. Ebbers (2013) went on to highlight that many studies on social networks especially those following a sociological discourse, have focused more on tie strength although the importance of social networks is widely acknowledged in entrepreneurship research.

Finally, the last hypothesis was: "*As a firm moves from start up to growth stage, the performance measured in terms of sales, profitability, growth, productivity and owners' satisfaction will also increase*"

The entrepreneur interviewed admitted that business performance improves as the firm moves from the start-up phase to the growth phase. In the case of interviewed entrepreneurs, they expected to breakeven after 6 months of operating the business. Although they mentioned that after 6 months they were already profitable and they were already growing, it can still be accepted that performance of a firm increases as the business moves from the start-up phase to

the growth stage. As their business moved from start-up phase to growth stage, their sales, profits and productivity also increased. Owners' satisfaction and client base also increased. These findings are in line with what was noted by Masurel and van Montfort (2006). Hohenthal et al. (2013) also agreed that business relationships can play a critical role in the early stages of SME expansion. Literature reveals that as a firm moves from the start up phase to the growth phase, performance generally improves. Sales volumes, profits, growth, satisfaction of owners and productivity will all increase.

The differences in performance levels may also be explained by improvements in networking. Elfring and Hulsink (2002) acknowledged the role of networks in explaining entrepreneurial performance or success in different stages of the life cycle. Aldrich and Zimer (1986), Johannison (1987) and Birley (1989) also identified the roles played by entrepreneurial networks from start-up to the growth stage of the life cycle as that of helping discover opportunities through information, securing resources and obtaining credibility. The more the networks contribute to the discovering of opportunities, securing of resources and gaining of legitimacy will mean an increase in productivity, sales, profitability and also in the satisfaction of owners; and this improves as the firm moves from the start-up to the growth phase of its life cycle.

DISCUSSION

Upon discussing performance, the interviewee explained that Nameshapers doesn't assess performance and that there is no loss of information. Since there are only two owners who manage the companies the financial health of the company is clear. Within this performance dimensions we discussed measurement and feedback of the training. He argued that his workshops are aimed at making a change in behavior so that it makes no sense to assess directly after a workshop and that they don't have the resources for these types of assessment tools. The interviewee did not agree with our definition of life cycles. He argued that small business owners usually don't have time to stop and think and to reflect strategically. He explained that pinpointing the company on a simplified one-dimensional graph can become a sort of self-fulfilling prophecy and can misguide the company.

The interviewee agreed with the researcher's definition of networks that focuses on strong and weak ties since he recognized weak ties to be important. It was found that networking is all about sharing instead of getting or pulling in people. It adds a lot of value to reach out to outskirts of the network and to connect people in your network that don't know each other. A personal touch and the personal effort to the network are very important as well. Therefore, the interviewee agreed with the weak ties characteristics.

The interviewee's view on the relationship between networks and SME performance was that networking is equally important for small and larger firms. Due to predicted shifts in the economy, where we are becoming more self employed and the emphasis will be more on the person and quality of the work he delivers, large firms can't hide behind their logo's any longer. Therefore, networks are equally important for large firms and SME's.

Generally there is an agreement that social networks are critical for SME performance. Stam et al. (2013) pointed out clearly the importance of networks that were also confirmed by this study. The importance of social networks include that they enable entrepreneurs to identify opportunities, obtain resources below the market price, and to secure legitimacy from external stakeholders. Rost (2011) pointed out that both weak and strong ties are important for SME success and strong ties (especially professional networks) are important for the knowledge creation process. Social networks remain an important component of social capital (Kwon and Arenius 2010; Nybakk et al. 2012).

CONCLUSION

Although the interviewee did not recognize the different phases described in the literature, the researcher obtained enough information to confirm or reject the hypotheses. It is evident from the interview that there seems to be a positive relationship between the quality of a social network in both the start-up and the growth phase, and the performance of an SME. Therefore, SMEs are recommended to exploit their strong ties in order to increase performance, and firms past their initial stage are advised to focus on developing weak ties to reach this goal. However, this conclusion is based on a single case,

and therefore might not be generalized to the majority of the SMEs. Further research into this relationship will be necessary in order to definitively confirm or reject hypothesis.

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