NASCENT VENTURE PERFORMANCE: LINKING NOVELTY OF VENTURE IDEAS AND COMMITMENT OF FIRM FOUNDERS AS PREDICTORS

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ABSTRACT

The individual-opportunity nexus emphasizes that both the characteristics of individuals and venture ideas have roles in the entrepreneurial process (Shane & Venkataraman, 2000). Following upon this assertion the present study examined whether the venture idea novelty and investment of resources can make an important part in the venture creation process. Data analysed for a sample of nascent entrepreneurs in Australia suggests that the novelty of venture ideas restricts the performance of nascent ventures. However, the more investment of time and money do not show a significant impact to the venture performance.

INTRODUCTION

Despite a host of definitions the nature of entrepreneurship remains inconclusive. However, two recent views have become prominent. Gartner (1988) asserts that entrepreneurship is the creation of new organizations. Similarly, Shane & Venktaraman (2000) view entrepreneurship as the examination of the discovery and exploitation of venture ideas. Both views suggest that entrepreneurship is about the emergence of new firms (Davidsson & Honig, 2003). The idea is that entrepreneurship should deal with the early stages of the venture creation process. In their effort to define entrepreneurship as a unique domain, Shane & Venkataraman (2000) emphasize that entrepreneurship is not only a phenomenon of the discovery and exploitation of venture ideas, but also represents a nexus between individuals and venture ideas. The individual-opportunity nexus emphasises that there is a role for venture ideas over and above the individual characteristics in entrepreneurship.

Despite Shane & Venkataraman’s (2000) assertion, there are no in depth studies which taken into account both the characteristics of individuals and opportunities. This study aims to study this gap by showing that there is a role for venture ideas in venture creation and that individual characteristics play important concomitant part. Accordingly, this study investigates how the novelty of venture ideas and the founders’ commitment in terms of investment of money and time affect the performance of emerging start-ups. Longitudinal data of 493 nascent entrepreneurs in Australia form the basis of this study. The novelty of venture ideas seems to be a discouraging odd for firms getting operational. The investment of money and time do not show that they have a potential to getting early operational of nascent ventures. This article proceeds as follows. First we use the extant literature to show how novelty and commitment of founders affect the venture creation process. Second, we establish interrelationships among the variables and hypothesize their directions. This is followed by the method used in this research. Finally we report the results and discus the findings.
THEORY AND HYPOTHESES

Novelty

The novelty is considered to be an important characteristic of venture ideas (Damanpour & Wischnesvsky, 2006; Schumpeter, 1934). It can be defined as the degree to which a venture idea is perceived by firm founders as new to the industry (cf. Rogers, 1995). The novelty could take different forms and degrees. Novel forms that entrepreneurs introduce to the market can include new products, new processes, tapping into new markets, introduction of new organization methods etc. (Schumpeter, 1934). The different degrees of novelty can range from radical innovations to imitations (Aldrich & Martinez, 2001; Kirzner, 1973; Samuelsson & Davidsson, 2009; Schumpeter, 1934). Innovators provide some sort of new products or services which have not been supplied by other entrepreneurs in the market and initiate changes that spawn whole new industries. In contrast, imitators offer products or services similar to what others already have offered to the market and create value by extending or improving upon the status quo. Samuelson (2004), amongst the first who empirically studied how innovative venture opportunities and imitative opportunities affect the process of new venture creation. Similarly, Samuelson and Davidsson (2009) studied the process differences between innovative and imitative ventures. However, they used only a simple dichotomy as regards the degrees of novelty. In some of research on product development and innovation provide some empirical evidence to show that there are different degrees of novelty (e.g. Garcia & Calantone, 2002; Kleinschmidt & Cooper, 1991). The novelty however is fraught with different adversities which hamper the venture creation process.

Risk and uncertainty

Entrepreneurship is by definition a phenomenon that involves with the uncertainty and risk (Davidsson, 2004; Knight, 1921; McMullen & Shepherd, 2006). According to the strategy literature, the risk taking propensity is a constituent of the entrepreneurial orientation of a firm (Lumpkin & Dess, 1996). The uncertainty is believed to be harsher than the risk in terms of decision making. According to Knight (1921), under a risky condition, some information is available for making decisions. But in an uncertainty, such information is not available. According to Hayek (1945) the uncertainty is a consequence of the dispersion of knowledge. When knowledge is asymmetrically distributed over people, place and over time the uncertainty exists. In such a situation, the future is not only unknown but also unknowable (Sarasvathy, Dew, Velamuri, & Venkataraman, 2003). Therefore, the risk and uncertainty restricts the ability of prediction about the future accurately due to the lack or absence of information about market, customer, competitors, resources, suppliers etc.

It is acknowledged that the risk and uncertainty are rather perilous for innovative ventures compared to imitative ventures (Danneels & Kleinschmidt, 2001; Song & Montoya-Weiss, 1998). Madrid-Guijarro et al., (2009) claim that firms that introduce innovative products face serious difficulties in gathering of information on changes in technology, markets, and government policy initiatives. Further, research indicates that the inability of collecting relevant information has adversely affected the implementation of innovative venture ideas. For example, Galia & Legros (2004) reports that the lack of information on technologies, markets, and the lack of customer responsiveness have acted as main impediments in the implementation of innovative ventures for the manufacturing industries in France.

The principle of liability of newness

According to Stinchcombe (1965) newly founded firms are particularly prone to various discouraging odds as being their newness. New ventures generally have no established track records as established ventures in connection with their roles, routines and competencies. At the same time they are lack of internal efficiencies and sound relationships with different stakeholder. Therefore, new ventures are more likely to be vulnerable to failures when compared to adolescent and matured ventures. Further, it can be expected that ventures that introduce innovative offerings are more likely to be prone the consequences of liability of newness than ventures that offer imitative offerings. Equally,
the liability of newness cannot limit to the new or unknown firms, but it can include the new or unknown products/services produced by firms.

Research indicates that all new ventures are faced with the odds of liability of newness and report a higher death rate as a result. Carroll (1983) conducted an exhaustive study using 52 different data sets and found that organizational death rates are higher at the early years of new ventures and decline with the increase of firm age. Further, Singh, Trucker & House (1986), claims that there is a negative relationship between the organizational age and their survival suggesting that younger firms are more prone to the death than adolescent and elder firms.

Legitimacy issue

The principle of liability of newness is alternatively discussed under the issue of legitimacy of firms (Delmar & Shane, 2004; Shepherd, Douglas, & Shanley, 2000; Singh et al., 1986) and suggests that the legitimacy provides a means to overcome the liability of newness (Zimmerman & Zeitz, 2002). Legitimacy is described as the “extent to which a new firm conforms to recognize principles or accepted rules and standards” (Aldrich & Fiol, 1994, p.646). According to Zimmerman & Zeitz (2002) legitimacy is considered as a favorable judgment of acceptance, appropriateness, and desirability for the firm. Legitimacy, in a broader sense reflects the level of public knowledge about a new venture and the level of key stake holders’ acceptance of the new venture. Aldrich & Fiol (1994) mention two dimensions of legitimacy: cognitive legitimacy and socio political legitimacy. Cognitive legitimacy concerns the public knowledge and understanding about the new firm or product/service whereas the socio political legitimacy is the acceptance of the firm or product/service by key stakeholders, general public and government, whether they follow the accepted norms and laws (Aldrich & Fiol, 1994; Shepherd & Zacharakis, 2003).

Although the liability of newness and the lack of legitimacy are common for all new ventures regardless of the innovative and imitative differences, it can be argued that they are rather perilous for innovative ventures. As noted earlier Stinchcombe (1965) pointed out that new firms face challenges related to the learning of new roles, performing them in new ways, routings, and competencies. However, routines and competencies vary significantly for innovative firms from imitative firms (Aldrich & Martinez, 2001). This implies that innovative organizations have to pay rather serious attentions to learn new roles, setting on operating procedures, creating a culture of learning the skills and efforts to make relations with employees.

According to above delineations, nascent firms that demonstrate high degree of novelty can be expected to face greater difficulties in terms of gathering different information, obtaining various resources needed, and making connections with different stakeholders who provide finance, supplies, and other resources in venture creation process. Therefore, we can expect more difficult process of venture creation and negative affects the probability of achieving positive outcomes. This leads following hypotheses;

\[ H1: \text{The novelty is negatively related to the new venture performance in terms of firms getting operational} \]

Commitment of firm founders and venture performance

One of important facet of founders’ commitments for their venture is the investment of resources to the firm (Reynolds & Miller, 1992). This can include more investment of money as well as time devoted by firm founders to venture activities. The relationship between investment of time and money and the firm performance is quite straightforward. When one exert more time and efforts for accomplishing a task, it is more likely that the achievement of this task will occur (Gatewood, Shaver, & Gartner, 1995). Building on the theory of attribution of causality Gatewood et al., (1995) argue that task performance would depend on both personal force and environmental force. The effort individuals devoted on venture activities has been identified as a key element of the personal forces and construed as a cause for firm’s success or failure. Empirical evidence suggests that there is a positive relationship between efforts of individuals devoted to the firm and performance (Gatewood et
al, 2002). Weiner (1985) who investigated on academic performance of college students maintains that the success is ascribed to high ability and hard work, and the failure is attributed to low ability and the absence of trying. Accordingly, he identified that students’ academic performance is highly related with the efforts that they exert.

The investment of money or finance is undoubtedly necessary for any venture whether they are obtained either through loans, equity or other means. The investment of money and venture success is quite unequivocal. For example, Cooper et al. (1994) found that initial financial capital of firms affects their venture growth and survival. Cassar (2004) using PSED data found that higher financial capital in terms of household income has higher growth intentions among individuals. However, he claims that different types of ventures need different levels of investment. Reynolds (2007), in his PSED 1 overview report states that “intensity of effort is also a clear indicator for venture success. Both the level of personal commitment and the amount of funds assembled from the start-up team appear to be associated with successful implementation of a new firm” (p.90). Thus, following hypotheses are proposed:

\[ H2a: \text{The investment of time is positively related to new venture performance in terms of firms getting operational.} \]
\[ H2a: \text{The investment of money is positively related to new venture performance in terms of firms getting operational.} \]

Novelty and investment of resources

Choi & Shephered (2004) assert that novelty is akin to a double-edged sword. They claim that novelty on one hand represents something rare, which can help differentiate a firm from its competitors. On the other hand, it creates a number of challenges for entrepreneurs in implanting venture ideas. Both conditions demand more investment of money and time in implementing innovative projects.

Literature indicates that innovation has a range of advantages for firms. For example Daneels & Kleinschmidt (2001), assert that innovation creates greater opportunities for firms in terms of growth and expansion into new areas. In addition, significant innovations allow firms to establish competitively dominant positions through patents and first mover positions. According to Drucker (1985) innovation is main source of competitive advantage. Further, innovation is considered to be a generator of first mover advantages to the firms (Lieberman & Montgomery, 1988). All in all, the implementation of innovative venture ideas brings a rather advantaged situation to firms. This situation encourages firm founders to invest more money and their time on innovative projects in order to capture the benefits involved with it before the competitors imitate it.

While some argues that innovation is a phenomenon that filled with many benefits, others argue that it is a phenomenon that is fraught with undesirables such as the liability of newness, uncertainty and complexities associated with the innovation. This circumstance suggests that firms require more investment of money and efforts to implement innovative ideas. Firstly, innovation as a process it requires more investments to implement each steps. Secondly, the market for innovation is usually ill-defined (Ali, 2000). This implies that there is no pre- specified market for innovative products in relation to the imitative products. Therefore, founders have to make great efforts to commercialize the product by forming a target market through heavy promotional campaigns and advertising. Thirdly, as indicated in the above section innovative firms are always lacked with the legitimacy (Aldrich & Fiol, 1994), and confront with liabilities of newness. Consequently, they lack strong ties with stakeholders and stable social relations. Further, these firms at the beginning are filled with unfamiliar routines, competencies and internal inefficiencies. Therefore, innovation requires more investments of money and efforts in order to make new ventures in order to appear reliable and accountable (to increase legitimacy) and to establish relationships with external stakeholders. In light of the above, the following hypothesis is suggested:

\[ H3a: \text{The novelty is positively related to the investment of time in the venture creation process.} \]
\[ H3b: \text{The novelty is positively related to the investment of money in the venture creation process.} \]
METHOD

As this study concerns the early stages of venture creation process and the evaluation of nascent venture performance over time, it uses a real-time, representative sample of on-going start-ups (Davidsson, 2004; Reynolds, 2000). This also includes the data collection at different points in time (longitudinally) so as to broadly mirror the entrepreneurial process (Low & MacMillan, 1988).

Data and Sample

The data for this study comes from Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) project. CAUSEE project is a longitudinal study initiated by a group of scholars at Queensland University of Technology, Australia in 2007. The prime motivation to start CAUSEE is to uncover the factors that initiate, hinder and facilitate the process of emergence and development of new, independent firms in Australia (Davidsson, Steffens, Gordon, & Reynolds, 2008).

CAUSEE adopts a random sampling method for the data collection so as to ensure the representativeness of business start-ups. Following PSED approach, the identification of a random sample for CAUSEE project was carried out through a random digit dialing (RDD) telephone survey. Initially, 30,105 individuals who were above 18 years old in Australia were contacted. The first screening interviews were conducted during April 2007 and March 2008. After confirming that respondents were over 18 years old, a series of questions were directed them to verify whether they were actively involved in the venture start-up process either as a sole owner or a part owner.

Thus, following screening procedure, it was identified 1,010 nascent firms and 1,058 young firms among 30,105 individuals contacted over the all states in Australia. As a percentage this represents 3.35 nascent firms and 3.51 young firms. However, only 625 firms out of 1,010 nascent firms (61.9%) agreed to participate in the interviews which normally lasted for 40-60 minutes. After twelve months from the first interviews, follow up interviews were conducted for these entrepreneurs. Accordingly, 493 respondents were successfully contacted for re-interviews in 2008-2009. The unit of the analysis of this study is the emerging venture, with the respondent acting as its spokesperson.

Variables and Measures

Novelty

This study adopts the Dahlqvists (2007) newness scale to gauge the degree of novelty. This scale is a formative index which is composed of four indicators: product novelty, process novelty, promotion novelty and market novelty. Each indicator was formulated using three items so as to identify degrees of novelty. Each indicator is sub-classed from 0-3. This sub-scale allows identifying four degrees of novelty: imitative; substantially improved; new to the market; and new to the world respectively.

Investment of time and money

Investment of time was measured by the number of hours worked on the start-up by firm founders for the last 12 months. Investment of money is measured by the amount of money including any loans, equity and expenditures made to help the business get started by founders. As hours invested, the investment of money was the investment made between the wave 1 and wave 2. Hours invested as well as money invested are by all team members for team start-ups. Both variables are continuous.

Venture performance

The indicator of venture performance used in this study is different from traditional measures such as sales growth, employment growth, and return on investments etc. They are usually used to
measure the outcomes of established ventures (Chandler & Hanks, 1994). However, suitable performance measures for small ventures as well as nascent ventures are still under debated among scholars and there are no universally accepted outcomes measures for nascent entrepreneurship (Davidsson, 2006). Therefore, this study uses operational as the outcome variable following Carter, Gartner & Reynolds (1996). Operational is defined as having revenue at least six of the past twelve months. Respondent were requested to indicate the status of firm at the second interview indicating whether the firm is in operational, terminated or still trying. Therefore, firm getting operational is expressed as opposed to the terminated and still trying. Accordingly, the variable coded as 1 = operational and 0 = others (terminated + still trying).

Control variables

A number of control variables were incorporated in the analysis on the premise that they would affect the nascent venture performance. These variables range representing from stage of venture development (e.g. number of gestation activities completed at Wave 1), type of business (e.g. retailing), venture technology (e.g. brick and mortar), and human capital (e.g. team size and industry experience). When the first interview was conducted, some ventures would have been close to operational while others been in the beginning of the process. Therefore, the completion of gestation activities so far was assumed to have an effect on the nascent venture performance. This is formative index which includes 39 gestation activities completed up to the first interview. Retailing is a type of industry affiliation and their representation is much higher than other types of industries in the sample (Davidsson et al., 2008). Retiling was formulated as a dummy variable by coding 1 as retailing and 0 as all other type of industries. Compared to e-businesses, brick-and-mortar businesses are rather easy to reach customers and receive early sales (Amit & Zott, 2001). This is also a dummy variable and coded as 1 = brick-and-mortar, and 0 = other. Research suggests that, in most situations the larger the team size the higher the firm performance (Delmar & Shane, 2006). Therefore, the team size also was taken as a control variable. This variable was a continuous variable and measured by number of members in the team. Industry experiences of founders (Cooper, Gimeno-Gascon, & Woo, 1994) was counted by years of experience in the venture’s industry. These all variables are time invariant and measured at the first interview.

Data analysis

Collected data were analyzed using path analysis. This is similar to multiple regression. It allows testing models which have multiple relationships and variables that are continuous or dichotomous. Further, path analysis was used as analysis was wanted to put into a one model.

RESULTS

Frequency data revealed that 44.0% nascent firms have reached to the operational status during the course of the time. Table 1.1 presents means, standard deviation and correlations associated with variables. Model show a decent fit in terms of chi-square value and other fit indices. Results related to hypotheses testing are presented in Table 1.2. Standard parameters are reported in the table.

It was hypothesized that the novelty negatively related with the venture performance in terms of firms getting operational. Results shown in Table 1.2 confirm this hypothesis. Accordingly, the novelty reduces the probability of firms getting operational by 25.6% ($P<.001$). Thus Hypothesis 1a is strongly supported. It was further hypothesized that the novelty positively affects the investment of time and money. Results shown in Table 1.2 reveal that novelty has a negative relationship with them. Therefore Hypotheses 2a and 2b are not supported. Hypotheses 3a predicted that the investment of time positively affect the venture performance in terms of firms getting operational. Analysis shows that this is not the case. Thus, Hypothesis 3a is also rejected. Similarly, it was further expected that the investment of time positively affect the venture performance. Results do not confirm this hypothesis. Therefore, Hypothesis 3b is not supported.
A number of control variables were also incorporated to the model. Accordingly wave 1 gestation activities completed ($\beta = .417, p<.001$) have a strong impact the firms getting operational. Retailing industry ($\beta = .113, p<.05$) and Brick and mortar sector ($\beta = .186, p<.001$) also have a positive impact to the venture performance. However, industry experience of founders and team size do not show a significant effect.

DISCUSSION AND CONCLUSION

Following upon Shane & Venkataraman’s (2000) call for research that takes into consideration both individual characteristics and the characteristics of venture ideas, this study investigated how the venture idea novelty and commitment of firm founders affect the nascent venture performance. Using longitudinal data collected at two point of time from 493 nascent entrepreneurs in Australia the study was carried out. The study hypothesized that as novelty is fraught with high risks, uncertainty, complexity, liability of newness and legitimacy issues, it hampers the nascent venture performance. Results strongly confirmed this hypothesis. This suggests that in introducing novel venture ideas firm founders should expect less success in ventures at the early stages of the venture creation process. However, this does not mean that novelty is a factor that affects for the failure of new ventures or phenomenon that should be avoided by implementing.

As hypothesized, the novelty does not either entice or demand of more investment of money and time. Even though this could be the case for established ventures, results show that novelty does not affect for the more investment of money and time for ventures that operate in their initial stages. Similarly, it was hypothesized that the investment of time and money affect the performance of ventures. Results suggest that these have no impact to the performance. As it takes more time to receive outcomes of investment, these results could be expected. Further waves of data collection will provide conclusive evidence in this regards. On the other hand, could provide different for different outcomes variables.
Table 1.1: Means, Standard deviations and correlations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s.d</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tr>
<td>1</td>
<td>Operational</td>
<td>.44</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Novelty</td>
<td>3.98</td>
<td>2.48</td>
<td>-.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>W1-W2 hours invested</td>
<td>1092</td>
<td>1726</td>
<td>.40***</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>W2 money invested</td>
<td>127986</td>
<td>808078</td>
<td>.01</td>
<td>.02*</td>
<td>.19***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>W1 gestation activities</td>
<td>17.80</td>
<td>6.69</td>
<td>.34***</td>
<td>.11*</td>
<td>.45***</td>
<td>.21***</td>
<td></td>
<td></td>
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<td>6</td>
<td>Retailing</td>
<td>.17</td>
<td>.37</td>
<td>.05</td>
<td>-.02</td>
<td>-.08*</td>
<td>-.03</td>
<td>-.05</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Brick &amp; Mortar</td>
<td>.50</td>
<td>.50</td>
<td>.19***</td>
<td>-.16***</td>
<td>.09†</td>
<td>.03</td>
<td>.06</td>
<td>-.11*</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Team size</td>
<td>2.17</td>
<td>5.06</td>
<td>-.05</td>
<td>.01</td>
<td>.19***</td>
<td>.12**</td>
<td>.14**</td>
<td>.01</td>
<td>-.11*</td>
</tr>
<tr>
<td>9</td>
<td>Industry experience</td>
<td>15.51</td>
<td>19.5</td>
<td>.07</td>
<td>.06</td>
<td>.20**</td>
<td>.08†</td>
<td>.19***</td>
<td>-.18***</td>
<td>.08†</td>
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*p<.05, **p<.01, ***p<.001
Table 1.2: Results of path analysis

<table>
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<th>Exogenous variables</th>
<th>Operational</th>
<th>Hours invested</th>
<th>Money invested</th>
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<tr>
<td>Novelty</td>
<td>-0.256***</td>
<td>-0.015</td>
<td>-0.087</td>
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<td>W1-W2 hours invested</td>
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<td></td>
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<td>W1 gestation activities</td>
<td>0.417***</td>
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<td>Retailing</td>
<td>0.113*</td>
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<td></td>
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<tr>
<td>Brick and mortar industry</td>
<td>0.186****</td>
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<tr>
<td>Industry experience</td>
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<tr>
<td>Team size</td>
<td>-0.101</td>
<td></td>
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</tr>
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</table>

*p<.05, **p<.01, ***p<.001

REFERENCES


