Stream 3 Entrepreneurship, Start-ups and Small Business

Competitive Session

KEY PROBLEMS FACING SME OWNER-MANAGERS IN STRATEGY AND INNOVATION: EVIDENCE FROM A DIAGNOSTIC SURVEY

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ABSTRACT

This study examines the strategic planning and innovation behaviour of owner-managers from 'ordinary' SMEs. A diagnostic assessment tool was used to collect data on management practice and factor analysis of quantitative data and Leximancer analysis of qualitative data employed to examine their responses. The study suggests that formality in planning increases with size and complexity as does interest in formal innovation management. Recommendations for policy and practice are made.

Keywords: SMEs, owner-managers, strategy, planning, innovation, diagnostic assessment.

INTRODUCTION

Small to medium sized enterprises (SMEs) comprise the majority of all businesses across the world. We define an SME according to the Australian Bureau of Statistics (ABS) definition as that of an independently owned and managed firm with fewer than 200 employees (ABS, 2005), although we acknowledge that the most common definition is that of the European Union which has employees at 250 and annual turnover of less than €50 million (OECD, 2004). Throughout the 34 advanced economies that comprise the Organisation for Economic Co-operation and Development (OECD), SMEs comprise around 99% of all registered businesses, employ most of the workforce and generate between half and two-thirds of all the value added (OECD, 2010a). With unemployment across the OECD standing at an average of 13% in 2013, and underemployment around 40% of the adult workforce (Ramos, 2014), it is now critically important that the SME sector remains resilient and oriented towards growth.

Growth in SMEs is important because it helps to generate enhanced job creation and also strengthens the overall economy (OECD, 2010b). Innovation remains a critical issue in this process as it offers firms a foundation for greater product differentiation and market entry (OECD, 2010c). Despite the importance of SMEs, within government and academic circles, attention has been given to fostering entrepreneurial start-ups or high-growth and 'gazelle' firms rather than focusing on the existing small businesses. However, there is some concern over the ability of start-ups to provide the necessary economic and employment growth that governments desire (Nightingale & Coad, 2014). For example, the survival rate amongst start-ups is high, and some evidence suggests that these firms are now less likely to be the engine room for job creation they were once thought to be (Shane, 2009; Reedy & Litan, 2011).

High growth firms are those with annual average rates of growth of 20% or more over a three-year period, which had more than 10 employees at the start of the assessment period. Their "gazelle" counterparts have these same characteristics, but are also less than 5 years old. Such firms comprise between 3-6% for high growth firms and less than 1% for "gazelles" when measured by employment (OECD, 2010b). Further, their high rates of growth make them particularly risky ventures that may prove unsustainable as a foundation upon which to build economic growth and job recovery policy. Within the heartland of the world's business sector is the majority of what might be described as 'ordinary' SMEs. Most of these firms are owner-managed with modest growth intentions, but they are capable of innovation and they do employ a large proportion of the workforce. In Australia this has been estimated to be around 70.5% of the workforce (DIISR, 2011). Across the OECD SMEs can employ anywhere between 47% and 89% of the workforce (OECD, 2010a). Such firms should not be ignored when considering the need for economic and employment growth. This paper looks at the role of strategy and innovation within a cross-section of SMEs that fit into this 'ordinary' category. In particular it examines their key problems in approaching strategy and innovation. The data was drawn from a diagnostic assessment tool involving interviews with the firm's owner-managers. Three research questions guided this study: i) How do owner-managers of SMEs approach strategy and innovation? ii) What is the level of formality associated with strategy and innovation within SMEs? iii) What are the key problems facing SME owner-managers in seeking to undertake strategy and innovation?

LITERATURE REVIEW

Strategy, planning and innovation within SMEs have been subjects of study for decades (Robinson & Pearce, 1984). However, there have been some challenges in seeking to understand the nature of how strategy and innovation take place within SMEs, and also the importance of formalising these processes. The value of planning for small firms has been discussed and studied by many scholars (Ackelsberg & Arlow, 1985). Although business planning is taught in every business school in the world (Honig, 2004), there is a debate about the possible rigidities that such anticipation could generate in certain contexts (e.g. see Chwolka & Raith, 2012; Honig & Samuelsson, 2012). There is a need here to better characterise the relationships between context and the success of planning (Kraus, et al., 2008). A topic also widely studied regarding the specificities of SME management is the level of formalisation of the management processes inside the firm (Reichstein & Salter, 2006). The successful entrepreneurs:

> "...tended to have a more structured approach to organizing their businesses, which suggests a more disciplined perception of managing the firm" (Gundry & Welsch, 2001, p.453).

The value of planning and formal strategy to SMEs

How much value SMEs derive from formal business and strategic planning has been debated for many years (Cooper, 1981; Gibb & Scott, 1985; Schwenk & Shrader, 1993). Early research undertaken into the interrelationship between formality of strategic planning and performance within SMEs found initial support (Ackelsberg & Arlow, 1985; Bracker & Pearson, 1986; Stoner, 1983), but also some difficulties in demonstrating clear causal relationships (Robinson & Pearce, 1984; Fletcher & Harris, 2002). Part of the problem has been the difficulty in securing appropriate data and to control for extraneous variables, particularly the role of the owner-manager or CEO of the business (McKiernan & Morris, 1994). Also of importance has been the distinction between planning and strategy (Sandberg, Robinson & Pearce, 2001a/b), and the ability of the firm's management to implement such plans (O'Regan & Ghobadian, 2002).

The need for formal strategic planning amongst small firms has been debated for years (Posner, 1985) with some authors promoting the benefits of formal planning, particularly for start-ups (Schamp & Deschoolmeester, 1998; Smith, 1998; Castrogiovanni, 1996), but also for firms across all stages of growth (Robinson et al., 1984). The benefits of planning appear to be related not just to the activity, but the nature of the planning process and its level of sophistication (Berman, Gordon & Sussman, 1997). The nature of the owner-manager or management team within the SME is also important, in particular their risk orientation (Carland, Carland & Abhy, 1989), and level of entrepreneurial strategic vision (Sexton & van Auken, 1985; Frese, van Gelderen & Ombac, 2000), particularly those seeking to grow their firms (Richbell, Watts & Wardle, 2006). Effectuation theory (Sarasvathy, 2001) has suggested that start-up entrepreneurs may not benefit from formal planning, but this depends on the nature of the venture and the degree of uncertainty that lies within the task environment. As Brinckmann, Gritchnik & Kapsa (2010) have shown through their meta-analysis of empirical research, the value of planning is contingent on the level of uncertainty in the firm's task environment, the stage of development of the business, the owner-manager's degree of tolerance of uncertainty and the sophistication of the planning process. As they state in their conclusions:

> "Our findings determine a positive relationship between business planning and performance which is moderated by different factors. Although the gathering of information about market opportunities and the specification of how to use the information to exploit market opportunities consume resources, the benefits outweigh the costs leading to increased performance of the new and established small firms... Our analysis shows that there is a significant positive effect between business planning and new firm success...Business planning promises greater returns for the average small firm than for the new small firm. Established small firms have information from their prior operations as well as routines and processes in place, which support planning. By contrast, new small firms generally have to carry out business planning without prior information while missing structures and procedures that support planning. Various pressing strategic decisions need to be made involving a high degree of uncertainty. A high degree of uncertainty and a high degree of missing and ambiguous information characterizing the business planning in new firms could explain why the positive effect of business planning on performance is significantly reduced" (Brinckmann et al., 2010 p. 35-36).

Planning is therefore a useful activity by SMEs in particular those that are established and operate in task environments where information on market activity and business operations can be obtained so as to allow for analysis and decision making. As might be expected, the level and sophistication of planning undertaken in SMEs also tends to increase with firm size (Gibson & Cassar, 2002).

The various forms of innovation in small firms

Although small firms are playing an active role in innovation (Allocca & Kessler, 2006; OECD, 2010a; Terziovski, 2010), the OECD notes that "*the broad bulk of small firms are not capitalising on their advantages*" (OECD, 2010a, p.228). Terziovski (2010) suggests that:

> "SMEs are similar to large firms with respect to the way that innovation strategy and formal structure are the key drivers of their performance but do not appear to utilize innovation culture in a strategic and structured manner." (p. 892).

To improve this situation, the OECD suggests directions for government policies to better support their development (OECD, 2010a). This is also a possibility explored by Foreman-Peck (2013), who found that SMEs receiving state support for innovation were more likely to innovate than unsupported comparable enterprises in the UK where he conducted his study. Confronted with a lack of resources, small firms tend to develop networks enabling them to get access to more resources. For example, Huggins and Johnston (2009) found that SMEs tend to use and value more knowledge networks with actors outside the region, and that, more innovative SMEs possess a balance of inside and outside the region knowledge networks. However, this process of building the appropriate network can prove difficult for some small firms (Rothwell and Dodgson, 1991). In a longitudinal study of a small French firm, Puthod and Thévenard-Puthod (2006) analysed the sometimes difficult development and evolution of its network of partners with complementary resources and competences and showed how dynamic this process was. For De Noronha Vaz et al. (2006), this process is similar to a learning process:

> ...in which small innovative firms tend to draw on internal and external sources of expertise and are both influenced by and influence the broader socio-economic environment in which they operate. (De Noronha Vaz et al., 2006, p. 95).

For Lee et al. (2010) this innovation process is similar to an open innovation process.

The question of formalisation is a crucial one in innovation and Boag and Rinholm (198) found that the development of a new product was more successful when more formal processes were used. However, small firms often employ other ways to develop their innovations such as ‘bricolage’ (Stojic & Timcenko, 2011), or extensive informal collaborations (Rothwell & Dodgson, 1991). More generally, several authors have studied the dependence of innovation performance in SMEs to various characteristics of their contexts, including the age of the firm, the type of innovation and its cultural context (Rosenbusch et al., 2011), the size of the firm, its age and pace of growth ((Mazzarol et al., 2010), the effect of firm size (Allocca & Kessler, 2006). The influence of the technology used by the firms led also Autio & Lumme (1998) to propose a four type typology describing the innovator roles of new, technology-based firms: application innovators, market innovators, technology innovators and paradigm innovators. Finally innovation orientation in small firms is also influenced by the managerial profile (Reboud & Mazzarol, 2011) and another typology has been built by Rizzoni (1991) with reference to the various roles played by small firms in innovative processes.

Influence of proximity on strategic decision

One of the main characteristics of strategy and management in SMEs is the strong influence of what could be called 'proximity effects' (Torres & Julien, 2005). These include managerial proximity, in terms of hierarchy (flat organisation, low hierarchical distance), differentiation of tasks inside the firm, communication and coordination modes (oral, informal, flexible) (Torres, 1997), but also in terms of marketing (rather word of mouth and relationship marketing) (Grönroos, 1994), or use of an advisors' network (Ben Letaifa & Rabeau, 2013, Freel, 2003). Proximity effects also refer to more strategic behavioural traits, like the choice of countries for export or supply (geographical and cultural proximity) (Maskell, 1998, Julien & Ramangalahy, 2003). This can also include customer identification and customer relationship (lower market orientation), the recruitment and the choice of a successor (family or network) (Torres, 2003). Finally, the type of growth (internal), and the source of funding (retained profit and love money rather than debt or capital) can be included in these proximity effects (Mazzarol & Reboud, 2009). This influence of proximity results in the owner managers of small firms being reluctant to trust external advice or to seek outside resources; and the further the source of information or resource is from the owner-manager, the less he or she will trust it (Gibb, 1988, Ballereau, 2012). As a consequence, they tend to rely upon friends and family as advisors when making strategic decisions, or when testing new products or services that they want to launch into the market. However there are situations where small firms overcome proximity and develop partnerships beyond their traditional area of activity. For example, Teixeira et al. (2008) describe the case of international cooperative R&D projects where geographically distant partners proved more successful than closer ones. A similar result was found by Ben Letaifa & Rabeau (2013).

Strategic myopia – lack of information about environment and time to think about

An additional consequence of proximity effects is what is often referred to as "strategic myopia" (Lorsh, 1986), where entrepreneurs and owner managers of small firms often fail to consider the global picture of their own firm working in its environment and to take longer term into account when making strategic decisions (Wang et al., 2007). As a result, they tend to be more reactive and to not exploit at best their resources or innovations (Mazzarol, Reboud & Soutar 2009). Detchenique and Joffre (2012) suggest that such myopia could come from small being established in an industry for a long period of time and thus having difficulty to consider changes occurring in this industry. This can also come from an inappropriate level of planning and formalizing strategies, given the level of turbulence in the environment (Mazzarol & Reboud, 2009).

Lack of social capital and external advice

Such difficulty arising from proximity effect could be overcome thanks to networking and external advice. Many owner managers develop a personal network helping them to tackle such issues:

> "In any firm developing the following arguments: (1) social capital facilitates the creation of new intellectual capital; (2) organizations, as institutional settings, are conducive to the development of high levels of social capital; and (3) it is because of their more dense social capital that firms, within certain limits, have an advantage over markets in creating and sharing intellectual capital" (Nahapiet,& Ghoshal, 1998, p. 242).

As stated by Cooke and Wills (1999), social capital is advantageous to SMEs. In their study, they report that:

> "...of particular importance was the opportunity afforded to firms for linkage with external innovation networks, and the build-up of embeddedness, or the institutional basis for the enhancement of social capital (Cooke & Wills, 1999, p. 219).

Social capital is known to be essential in the process of identifying and correctly using strategic resources (Blyler & Coff, 2003). Several authors note that stakeholder relationships in SMEs could be based on a more informal and trusting basis, characterized by intuitive and personal engagement (Bocquet & Mothe, 2010, Jenkins, 2004), emphasizing the importance of informal relations (Avram & Kühne, 2008). Social capital is also found to be influenced by context and, in particular, institutional arrangements, as suggested by (Spence et al., 2003) who noted the special interest expressed by SMEs for formal engagement, networking within sectors, networking across sectors, volunteerism and giving to charity, and finally a focus on why people engage.

Small incremental innovation and HR skills

An additional area where "ordinary" small firms are supposed to differ from their bigger counterparts is whether they should innovate (Rosenbusch et al., 2011) and the scope of their innovation (Mazzarol et al. 2010). Bhaskaran, S. (2006) note in their study that:

> "...incremental innovation offers substantial competitive advantages to small and medium-size firms, that incremental innovations can be adopted and operationalized rapidly by entrepreneurs with different cultural backgrounds and skills, and that small and medium-size firms that focus on sales and marketing innovations are profitable and are able to compete successfully with large businesses" (Bhaskaran 2006, p 64).

This is also suggested by Freel (2005) who makes a link to the skills and knowledge needed by the firm and underlines the importance of intermediate 'technical' skills, rather than higher level 'technology' skills. He points also the fact that this is a dynamic, rather than static, phenomenon, putting the emphasis on the training organised by the firm that might compensate the difficulty that small firms often report of finding skilled employees. More generally, small firms often lack many resources, as Vermeulen (2005) suggested, mentioning the problems experienced by the small firms they studied in terms of resources, project-based working, incentives, and information technology.

Issues of intuitive, implicit not formalised processes

One of the consequences of this perception of lack of resources is that IP management and IP protection, often perceived as expensive processes, are underestimated by small firms. For Kitching and Blackburn (2003), first the development of so-called ‘high-trust’ relationships with customers and suppliers were the preferred practice of non-formal intellectual property protection. Second, legal protection is no incentive for innovation. On the contrary, because SMEs have only limited resources they prefer to use these for innovation rather than investing in the complicated process of acquiring formal rights. This is also the result of a study conducted by Reboud, Santi and Mazzarol, (2008), which suggested that IP strategy was at best implemented by a small number of owner managers who had a greater knowledge in IP, often from a previous experience in a bigger firm. Most of small firms did not formalise the protection of their intellectual property, and were convinced that such protection was too expensive for them. Mazzarol and Reboud (2009) proposed that IP formalised protection was a good indicator for the formalisation of an innovation strategy and that firms referring “high trust” relationship as described by Kitching and Blackburn (2003) were also more likely to have a more informal process of innovation.

Pecking order and lack of financial resources

Watson and Wilson (2002), who followed Myers (1984), state that:

> “Asymmetric information models predict a ‘pecking order’ which reflects a combination of owner-manager preferences and external capital supply constraints whenever insiders know more about the true value of the firm's prospects than outsiders. The pecking order results in retained earnings being the most preferred source of finance, then debt and finally the issue of new shares to outsiders” (Watson & Wilson 2002, p 217).

In their study of 629 UK SMEs over the five-year period from 1990 to 1995 they have found evidence consistent with a pecking order in which retained equity is preferred over debt. This is also suggested by Mazzarol and Reboud (2009), who found that if retained profit was always preferred, French and Australian firms differed, French firms preferring debt over capital funding, where their Australian counterparts preferred capital over debt. This literature review suggests that small 'ordinary' firms broadly favour proximity in terms of their relationships, in terms of the timeframe of their strategic decisions, favour also more incremental modest innovation that they rarely protect formally. They also seem to favour informal internal processes and retained profit a source of funding. However these are rather general characteristics and there are many variations among “ordinary” small firms for each of them. We have thus tried to identify in our study if there were different profiles of small ordinary firms.

Benchmarking best practice in SMEs

The benchmarking of SMEs has been identified as a useful mechanism for assisting such firms to increase their overall performance (McAdam & Kelly, 2002). For firms seeking to grow or to employ innovation strategies for new product development, best practice benchmarking is an important source of information (Cooper & Kleinschmidt, 1995). Comparisons with other firms of similar size and industry sector can assist them to develop better practices. However, a study of SME manufacturing firms found that while many will seek to adopt best practice, their ability to do so may depend on their capacity to possess the required resources and expertise. Further, the adoption of best practice may not always lead to direct improvements in performance and some firms may adopt such measures despite the fact that they may be experiencing problems more fundamental to their long term success (St Pierre & Raymond, 2004). For a benchmarking tool to be of value to SMEs it is best to be simple and comprehensive in nature, without imposing too much on the owner-manager in terms of time or resource allocation to implement (Suttapong & Tian, 2012).

METHODOLOGY

A total of 241 SME owner-managers were interviewed for this study. They were drawn from Australia and Singapore as part of an MBA program in which students studying small business management interviewed two owner-managers using a diagnostic assessment tool that operated within an EXCEL spreadsheet. Interviews were undertaken over the time period 2005 to 2010 with each interview taking place fact-to-face over a period of approximately two hours. The diagnostic assessment tool used in the study contained a total of 124 items that mapped into 12 distinct areas of management competence. These were drawn from formal international benchmarks such as ISO9001 (quality management), BMS4581 (business management systems), ISO4360 (risk management), ISO15504 (information technology), plus items developed specifically for the tool. The questionnaire collects information from the owner-manager of how they perceive they are running their business and also data on their use of outsiders for assistance, plus data on the firm's financial performance. The aim of this diagnostic assessment was to assist these owner-managers to develop their firm's management systems (Fassoula & Rogerson, 2003). At the end of each section of the diagnostic review owner-managers were asked to identify any key problems they were facing in each area. This data was collected via open ended sections within the spreadsheet.

In terms of the sample the owner-managers were drawn from a range of industry sectors with around 45% engaged in retailing, including a high proportion of retail pharmacies. Cafes and restaurants comprised a further 15% and the remaining 40% consisted of a mix of services firms and manufacturers. The firms ranged in age, with 41% having less than 5 years since establishment, 24%

between 6 and 10 years, 18% between 11 and 20 years, and 17% with over 20 years. In relation to size 29% were micro-firms with fewer than 5 employees, 60% were small firms with between 5 and 20 employees, while the remaining 11% were medium-sized firms with 21 to 200 employees. Most firms had annual turnover of between $500,000 and $5 million. For the purposes of this paper we have limited our focus to the 16 items within the diagnostic tool that relate to strategy and innovation. These focus on the owner-manager's ability to build a competitive market position through value adding, innovation and the differentiation of their products and services. Also examined are the owner-manager's uses of formal intellectual property rights protections, business planning, sales forecasting and customer and market tracking. The diagnostic tool used a 3-point scale comprising a 1 = "yes", 0.5 = "partially" or 0 = "no" response to each item. This enable the generation of a graph (see figure 1) that illustrated to the owner-manager whether they were effectively planning with high levels of 'no' to items showing as red.

Insert Figure 1 about here

The analysis of this data was undertaken in two phases. The first was an analysis of the quantitative data from the diagnostic survey tool; the second was an analysis of the open ended question item transcripts using Leximancer text mining software (Leximancer, 2011). For the first phase a principal component (factor) analysis was undertaken with the data from the 16 items in the strategy and innovation area. This was undertaken in order to help reduce the overall number of variables within the analysis, and to identify any underlying structure in the strategy and innovation items. The Kaiser-Meyer-Olkin measure of sampling adequacy for the items examined was .847 and the Bartlett's test of sphericity was significant at the .000 level. This suggested the items were suitable for factor analysis (Kaiser, 1974). A varimax rotation with Kaiser Normalisation was used within the SPSS statistical package to provide a clear structure to the final model. The final model converged after 9 iterations generating 5 factor components with eigenvalues greater than 1. As shown in Table 1, the first factor component "forecasting" was comprised of four items with factor loadings ranging from .588 to .771. This comprised 29.4% of the variance in the model and the items scale reliability was good with a Cronbach's alpha score of .735 (Cronbach, 1951; 2004).

Insert Table 1 about here

The second factor component "marketing" was comprised of three items with factor loadings ranging from .459 to .773. This comprised 8.49% of the variance in the model and the alpha score was .636, suggesting good scale reliability. The third factor component "planning" was comprised of four items with factor loadings from .480 to .739 representing 7.85% of variance. This also had a good alpha score of .662. The fourth factor component "IP rights" comprised two items with factor loadings of .822 and .823 representing 7.37% of variance. This also had a good alpha score of .633. Finally, the last factor component "ideas" was comprised of three items with factor loadings from .419 to .789.

This represented 6.51% of the variance and its alpha score was .457, which is fairly low, but analysis found that removal of any item would not improve the scale reliability so this factor was retained. The 16 items from the original survey were combined into five new derived variables through a process of summing the means of the items contained within each factor component. This generated a smaller set of items for use in subsequent analysis. This involved an examination of the characteristics of the firms in relation to how they scored on these five dimensions and against other items in the diagnostic survey. ANOVA and t-tests were used to identify any statistically significant differences between the firms in relation to how they scored on these factors. The second phase of the analysis used the Leximancer software to examine and map the comments made by the 214 owner-managers in relation to their key problems relating to strategy and innovation. The Leximancer software examines text in a grounded fashion, identifying the main concepts in a corpus and how they relate to each other. It provides both conceptual (thematic) analysis and relational (semantic) analysis, identifying concepts in the corpus and how they interrelate. In identifying concepts and showing how they interrelate, Leximancer uses word frequency and co-occurrence counts as it basic data (Smith & Humphreys 2006). Leximancer not only identifies how frequently words occur, but it also tags them as containing a concept if sufficient accumulated evidence is found to suggest that they represent a distinct concept. Terms found in the text are weighted so that the presence of each word in a sentence contributes to the body of evidence to support the existence of a concept.

RESULTS

From the phase 1 analysis significant differences were found between the firms in relation to the five factors in the principal component model. ANOVA tests were undertaken with a post-hoc Scheffe's test of differences between the means. This found significant differences at the .05 level for all five factors in relation to size of firm. For example, medium sized firms were significantly more likely than micro or small firms to report higher scores in relation to "forecasting". Medium sized firms were also significantly more likely to report higher "marketing" scores than the micro firms. In relation to "planning" the small and medium sized firms were more likely to report higher scores than the micro firms. Significant differences were also found between the micro and medium sized firms in relation to "IP rights" with the latter more likely to report higher scores. Finally, the medium sized firms were significantly more likely to report higher scores for "ideas" than their micro and small counterparts.

Differences were also found in relation to the owner-manager's use of outsiders for assistance. For example, owner-managers who reported actively seeking out help from outsiders in relation to business problems were significantly more likely to record higher mean scores across all five factors (measured with t-tests at $p < .005$ level). This was also found to be the case for owner-managers who sought to get this assistance from professionals (e.g. accountants, consultants). For owner-managers who sought help only from other business owners this was only found to be significant for "ideas" and "forecasting". Assistance sought from business associations (e.g. CCI) was found significant for "forecasting", "planning" and "ideas", while assistance from government agencies was found significant for "forecasting", "planning", "marketing" and "ideas". Where the owner-managers sought help from family and friends there were not significant differences found. The Leximancer analysis was undertaken in two stages, the first with the low strategy and innovation group, the second with the high strategy and innovation group. Figure 2 and 3 show the concept maps generated by the software. These maps are generated automatically by algorithms in the Leximancer software. A "concept" is a collection of words that are associated within the text with each other. Leximancer identifies the frequency of these words and whether they represent distinct concepts. The bubbles are "themes" that contain concepts, with themes overlapping and clustering around concepts that are associated with each other in the same sequences of text.

Insert Figure 2 about here

As can be seen from Figure 2 the low strategy and innovation firms owner-managers identified a range of concepts grouped into eight themes. At the core was the theme "business", plus the need to systematically undertaken planning and strategy. As the associated text box shows, many owners in the low group indicated that they lacked time and a clear sense of direction. Related to the business theme was whether they were "able" to engage in planning as a result of a lack of information or knowledge on the industry, plus not having staff that could support them in this work. Another related theme was "time", which related to not having time to undertake planning and strategy in a systematic or formal way. The "time" concept was in turn related to the concept "staff" that was associated with not having staff to help, or implement any future strategies. In turn this was associated with the themes "strategies" and "ideas". The first of these related to the difficulties the owner-manager's had with formulating strategy, and the second with the challenges of finding new ideas. Additional themes were "products" and "place". The first of these was related to the "able" theme via the concept "industry" and reflected the owner-managers' concerns over finding new products to help maintain competitiveness, plus the need to keep marketing and sales teams in touch with key trends in the market. Finally, the "place" theme related to the owners' sense of trying to instil an innovation mindset into the workplace.

Insert Figure 3 about here

For the high strategy and innovation group seven themes emerged as shown in Figure 3. These were all quite closely related. The first of these was "business", which related to the owner-manager's ability to monitor the market trends and develop strategies in response. Associated with this theme were the themes "plan" and "products". The first of these related to the owner-manager's capacity to plan in uncertain market environments. The second related to the owner-manager's recognition that they had to keep finding new products and services through innovation even if this carried a high cost. A further related theme was that of "problem", which was associated with a range of concepts dealing with competitors, customers and the need for “change”. This was as separate but related theme associated with both internal change management as the owner-managers sought to get their employees to adapt to new ideas, and also external change and the owner-managers’ capacities in monitoring external environment. Also associated with the theme “problem” was the theme “quality”. This reflected the owner-manager’s recognition of the need to maintain high quality in products and services in order to remain competitive within their industries. Finally, there was the theme “ideas”, which lay separate from, but related to the other themes via the concept “strategies”. This theme focused on the challenge of generating ideas from employees.

DISCUSSION AND CONCLUSION

In relation to our three research questions the findings from this study suggest that owner-managers of SMEs appear to view strategic planning and innovation as falling into five dimensions (as found in the factor analysis). These relate to processes of “forecasting”, “marketing”, “planning”, “IP rights” and “ideas”. The strongest of these dimensions were “marketing” and “ideas”, followed by “planning”. The “forecasting” and “IP rights” dimensions were much weaker. Much of their planning was informal in nature. The first of the five dimensions identified relates to the owner-manager’s ability to use formal tools and analysis techniques to forecast future market or sales trends and to use these for setting future sales and marketing strategies. The second involves formal IP rights protection via such measures as patents, and this is uncommon within most SMEs. However, it is worth noting that as the size of the firm increases so too does the capacity for “forecasting” and “IP rights”, although a relationship between firm size and overall performance in strategy and innovation clearly emerged from these surveys. This should not be a surprise as it would be expected that as a firm’s size and complexity increases, so would its need for more sophisticated and formal systems for strategy and innovation. Our Leximancer analysis addresses the third question and shows a dichotomy between the low and high strategy and innovation firms. Owner-managers from the low group were more likely to express concerns over a lack of time to engage in formal business planning and the formulation of strategy. These firms were also more likely to identify problems with marketing. By contrast the high strategy and innovation group were more likely to raise concerns over innovation (something the low group hardly mentioned), as well as customers, products and services. This reflects a stronger strategic focus with an eye on the market, customer satisfaction and the generation of new products and services via innovation. The findings suggest that in response to our three research questions, that strategic planning and innovation is likely to become more formal with the growth of the firm, and may commence with marketing and move onto formal IP rights issues, if at all. Most owners, particularly from micro-enterprises will struggle to adopt formal planning systems and need outsider support to enable them to undertake such planning. Owner-managers should seek outside support in developing formal planning and innovation systems and government support should target support towards this as it is likely to assist survival and growth rates amongst SMEs.

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Figure 1: Strategy and Innovation scores for entire sample

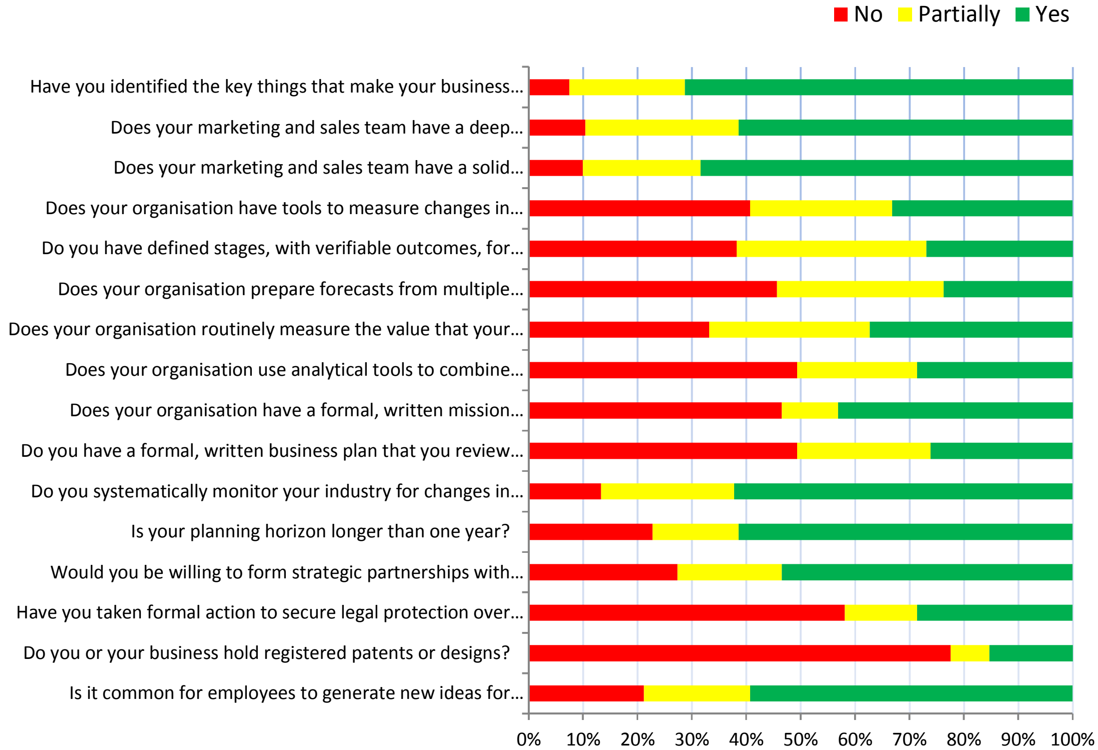

Table 1: Rotated Component Matrix - Strategy and Innovation[a]

	Factors				
	Forecasting	Marketing	Planning	IP rights	Ideas
Does your organisation prepare forecasts from multiple perspectives (such as market research, assessment, analysis of sales potential and historical analysis)?	.771				
Does your organisation uses analytic tools to combine historical forecasting performance with sales-sourced forecasts to improve predictability?	.744				
We have defined sales stages, with verifiable outcomes, for each of our key market segments (customer buying cycle type).	.591				
Does your organisation have tools to measure changes in your market segment?	.588				
Does your marketing and sales team have a solid understanding of your entire portfolio of products and services?		.773			
Does your marketing and sales team have a deep understanding of your industry, customers, and competitors to improve performance results in your organisation?		.690			
Does your organisation routinely measure the value that your customers receive from your products and services?		.459			
Is your planning horizon longer than one year?			.739		
Have you identified the key things that make your business different from its competition?			.716		
Does your business have a formal, written mission statement that communicates clearly the purpose of your business?			.503		

Do you have a formal, written business plan that you review regularly?			.480		
Do you or your business hold registered patents or designs?				.823	
Have you taken formal action to secure legal protection over your firm's intellectual property (e.g. patents, trade names)?				.822	
Would you be willing to form strategic partnerships with other firms to undertake a new product or process innovation?					.789
Is it common for employees to generate new ideas for enhancing your firm's products, services and processes?					.542
Do you systematically monitor your industry for changes in government regulation, technology or the actions of customers, suppliers and competitors?					.419
Eigenvalues	4.704	1.358	1.256	1.179	1.041
% variance	29.4	8.49	7.85	7.37	6.51
Cronbach's alpha	.735	.636	.662	.633	.457

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

Figure 2: Leximancer Concept Map for Low Strategy and Innovation Group

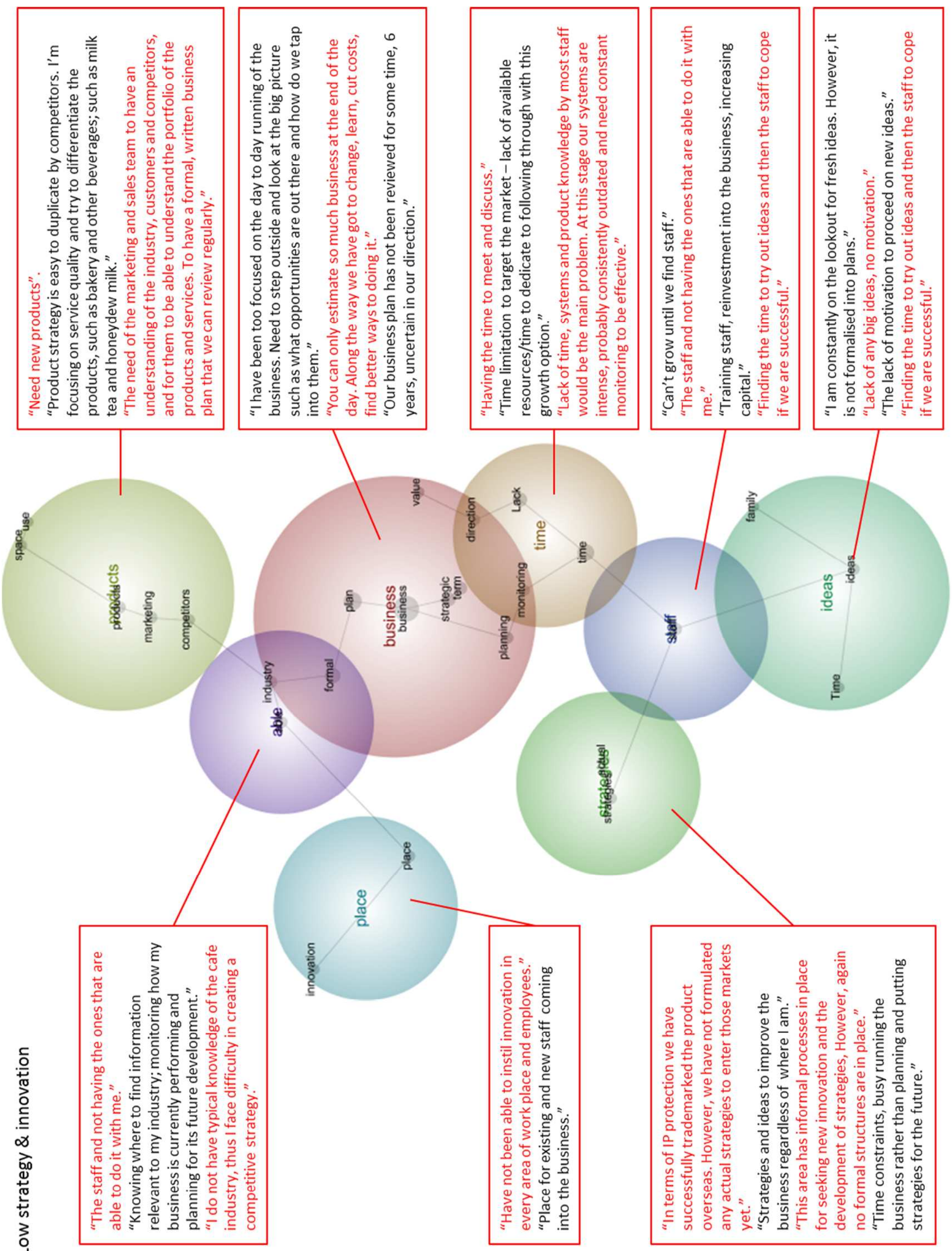

Figure 3: Leximancer Concept Map for High Strategy and Innovation Group