

HELP OR HINDRANCE: THE ROLE OF INTRAPRENEURIAL STRATEGY-MAKING IN SMALL FIRM PERFORMANCE

Martie-Louise Verreynne
Auckland University of Technology



CONTACT: Martie-Louise Verreynne, Auckland University of Technology, Private Bag 92006, 1020 Auckland, New Zealand. Tel: 64 9 9219999 x 5026, Fax: 64 9 9219629, Email: martie-louise.verreynne @aut.ac.nz

ABSTRACT

Intrapreneurship as a concept has received a fair amount of attention over the past 20 years (Antoncic & Hisrich, 2003; Pinchot, 1985; Robinson, 2001). Less consideration has been paid to how firms use intrapreneurial strategy-making processes to improve performance. This paper investigates the existence of intrapreneurial strategy-making processes in small firms and argues whether this type of process has a positive role to play in the performance of these firms. It also describes the results of an empirical study conducted with firms employing less than 100 employees. Analysis of the data (n=477) indicates that intrapreneurial strategy-making exists in small firms, but that it may not have a significant relationship with firm performance, and when used in combination with a differentiation strategy it has a negative effect on firm performance.

INTRODUCTION

The concept of intrapreneurship has been coined by Pinchot (1985) and supported by a number of other authors, both academic (e.g. Antoncic & Hisrich, 2003) and popular (e.g. Robinson, 2001). Intrapreneurship is often defined as entrepreneurship within an existing firm (Antoncic & Hisrich, 2003), but a more useful definition for this paper is that of Stevenson and Jarillo (1990) who define it as the process that individuals inside a firm use to identify and pursue opportunities. Intrapreneurship is closely related to a number of concepts, such as corporate entrepreneurship (Zahra, 1991), innovation (Drucker, 1985), generative strategy-making (Hart, 1991) and intrapreneurial strategy-making (Lumpkin & Dess, 1995). This paper focuses on the latter concept, and investigates both its existence in and importance to small firms.

While intrapreneurial or innovative strategy-making was identified by Lumpkin and Dess (1995), they reconceptualised it two years later (Dess, Lumpkin & Covin, 1997) and redefined it as entrepreneurial strategy-making. More than just semantics, these two concepts are actually vastly different when applied in firms, the first being an emergent strategy-making process and the second deliberate (Mintzberg & Waters, 1985). Intrapreneurial strategy-making is therefore a generative process (Hart, 1992) through which risky, innovative ideas are created in a dynamic manner and implemented emergently by employees (Bourgeois & Brodwin, 1984). Both entrepreneurial and intrapreneurial strategy-making have been under-investigated in the literature, and when addressed, it is often exploratory (Mintzberg, 1973) or addressed as part of studies with a different focus (Hart, 1991, 1992; Lumpkin & Dess, 1995). Furthermore, it has not

been studied in the firms where Mintzberg (1973) first suggested that entrepreneurial processes would fit best, namely small firms. This type of research may be very important to small firms who have been accused of neglecting strategic planning (Robinson & Pearce, 1983), probably because received wisdom has it that they do not engage in the traditional rational (planned) strategy-making processes prescribed in strategic management text books. Such research may also be able to provide answers to performance differences in SMEs that employ different approaches to strategy-making.

Evidence regarding the performance implications of intrapreneurial strategy-making is mixed. In studies conducted mainly in large firms or large SMEs (small and medium enterprises) in the Northern hemisphere, authors find variously that it improves (Covin & Slevin, 1989) or impedes (Dess et al., 1997; Hart, 1991) performance. These authors further suggest that the relationship between intrapreneurial strategy-making and firm performance may be influenced by a variety of other factors, such as the entrepreneurial orientation (nature) of the firm, the organisational structure, the hostility of the environment and the type of strategies that the firm chooses. Therefore the purpose of this paper is to investigate the existence and importance of intrapreneurial strategy-making in small firms, and to establish how the nature of the firm's internal and external environment, as well as its choice of competitive strategy, may further influence performance in small firms that use an intrapreneurial mode of strategy-making.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Strategy-making

Dess and Lumpkin (2001) describe strategy-making as "a process that involves the range of activities that firms engage in to formulate and enact their strategic mission and goals" (p. 4). Firms use a variety of approaches during the process of strategy-making. Some firms prefer rational, formal approaches, while others prefer the informality of participation between employees during their strategy-making process (Hart, 1991; Mintzberg, 1973). Firms often use different processes in for example, different business units or at different stages of their life cycle (Gibson & Cassar, 2002; Mintzberg, 1978). The unified, prescriptive approach to describing strategy-making processes which was so popular 40 years ago (Ansoff, 1965), therefore seems redundant nowadays (Mintzberg & Lampel, 1999).

Several approaches to strategy-making have been described in the literature. These include the rational, adaptive, entrepreneurial, participative, symbolic, simplistic, transactive, command and political modes (Dess et al., 1997; Hart, 1991; Mintzberg, 1973). These approaches have mostly been developed with large firms in mind, and few researchers have investigated the nature of strategy-making processes in small firms. Where it has been done, the research is prescriptive and tends to focus on formality versus informality (Bracker, Keats & Pearson, 1988; Robinson & Pearce, 1983) rather than the more specific nature of the process, as found in the literature described above. One approach has been touted as being significant to small firms, namely the entrepreneurial mode of strategy-making (e.g. Mintzberg, 1973). Described as an approach to strategy-making in which a strong leader oversees a firm in which practices such as innovation, risk-taking and pro-activeness at the lowest levels of the firm are prevalent (Dess et al., 1997), the entrepreneurial mode of strategy-making seems to fit particularly well with small firms

which are driven by an entrepreneur or strong owner, and often renewing the business in order to stay competitive (Mintzberg, 1973). However, some researchers question whether the owner/managers of small firms are too caught up in operational issues to provide both strong direction and innovative initiatives to the firm (e.g. Beaver, 2002; Frese, van Gelderen & Ombach, 2000; Miller & Toulouse, 1986; Verreynne, 2005). These authors argue that an intrapreneurial mode of strategy-making may be more relevant to small firms.

Intrapreneurial strategy-making

The intrapreneurial mode of strategy-making implies independent behaviour by innovative employees who are encouraged and sponsored by top-management to experiment and take risks with, for example, product ideas. Intrapreneurial strategy-making is defined as a mode of strategy-making in which innovative employees come up with new ideas for products, services or processes which are entrepreneurial in nature, and which, therefore, emerge from within the firm. Intrapreneurial strategy-making is a relatively new and unexplored concept in the strategy-making literature, termed variously organic (Ansoff, 1987), *crescive* (Bourgeois & Brodwin, 1984), and generative (Hart, 1992) strategy-making.

Although few conceptual studies attempt to explore this concept, the existence of an intrapreneurial strategy-making mode or aspects thereof has been identified through empirical studies. For example, Miller and Friesen (1977, 1978) identify product-market innovation as a measure of innovativeness based on the number and novelty of new products, services and markets of the firm; pro-activeness of decisions as a comparison of the relationship between the firm and its environment, whether the firm attempts to shape the environment, or merely react to it; and risk-taking as an explanation of the degree of risk that managers are willing to take with the resources of the firm.

Hart (1991, 1992) and Hart and Banbury (1994) discuss the “generative” mode of strategy-making, which implies that employees act autonomously; and that strategy-making is facilitated by intrapreneurial employees who allow ideas to flow upwards in the firm. Furthermore experimentation and risk-taking are encouraged and managers seek and nurture high potential strategies. Bourgeois and Brodwin (1984) identify the “*crescive*” mode. The CEO of a firm that employs the *crescive* (literally meaning “growth”) mode defines the purpose of the firm (as before), and then challenges employees to come up with innovative ideas on how to attain the set goals. This mode has advantages, such as the CEO does not have to monitor all the opportunities and threats and there are more developmental opportunities for employees. But the approach does have disadvantages such as complicated reward systems and strategies that are based on perception, rather than fact. Its potential relevance to small firms is, however, the issue under investigation in this paper.

Strategy-making in small firms

Researchers investigating the strategy-making processes of small firms typically approach their research from one of two points of view. The first approach investigates the absence or presence of strategy-making processes in small firms, often using the presence of formal strategic plans as a proxy for the use of “strategic planning”, as this stream of research is called (Ogunmokun, Shaw & FitzRoy, 1999). These researchers then conclude that few small firms use

formal strategic processes (Bracker & Pearson, 1986). This lack of strategic planning in small businesses is subsequently typically attributed to a variety of factors, including a lack of time and know-how and pressing operational issues (Robinson & Pearce, 1983). As with most strategic management authors, the ultimate purpose of these researchers is to establish whether the use of strategic planning can improve small firm performance. Once again, in this regard, the evidence is contradictory with some authors finding that small firms that plan, perform better (Frost, 2003; Storey, 1994) while others find the opposite (Robinson & Pearce, 1983) or that no correlation exist at all (Orpern, 1985).

Two major fundamental problems exist with this approach to research, namely that it assumes that strategic plans were created through a process conducted by the firm itself, and not only for the purposes of obtaining finance. But more importantly, that it takes the view that strategy-making processes are formal, or by default they are informal or non-existent. A few authors have, however, taken a broader view of strategy-making in small firms, and have attempted to identify the typical approaches that these firms follow. For example, Beaver and Jennings (2000) explain that formulation and implementation in small firms are intertwined, Chen and Hambrick (1995) explain that smaller businesses initiated competitive challenges more actively, and are speedier and more secretive in executing their challenges than larger firms, as do Spillan and Ziemnowicz (2003). All these studies suggest an approach followed in small firms which is similar to Hart's (1991) generative strategy-making, thus intrapreneurial strategy-making. Furthermore, Dess et al. (1997) argue strongly that entrepreneurial strategy-making will include a strong command aspect, where a strong, single-minded owner-manager dictates the direction of the firm. However, closer scrutiny of their factor analysis shows that their findings are consistent with the findings of this paper that intrapreneurial strategy-making only consists of innovation, experimentation, risk-taking and dynamism. Similarly Verreynne (2005) finds that small firms employ amongst others intrapreneurial strategy-making processes. Following the method used by Dess et al. (1997), it can therefore be proposed that:

H1 Intrapreneurial strategy-making is an important mode of strategy-making that small firms exhibit.

Intrapreneurial strategy-making and firm performance

There has been much debate about the performance outcomes of entrepreneurial processes in small firms, including what is now termed the intrapreneurial mode of strategy-making. Beaver and Jennings (2000) posit in this regard that the "relationship between enterprise performance, management actions (or inaction) and the value and contribution of strategy is extremely tenuous and very difficult, if not impossible, to demonstrate conclusively" (p. 400). Much of what has been written about intrapreneurial strategy-making and its performance implication in both the popular press and academic journals assume that intrapreneurial processes will lead to growth and profitability for the firm (Covin & Slevin, 1991; Miller & Toulouse, 1986; Peters & Waterman, 1982). The capacity of these processes to provide firms with the ability to continuously deliver on ever increasing consumer demands, may lie at the heart of this assertion. But other research such as that carried out by Dess et al. (1997) and Hart (1991) found empirically that it may have no association with performance, or even impede performance. However, these authors suggest that this may be a short term effect and that on the long term the results may be more positive. Therefore it is hypothesised that:

H2 Intrapreneurial strategy-making is positively related to firm performance.

Environmental uncertainty

Firms react or cope with environmental uncertainty in various ways. These include risk-taking, innovative behaviour, pro-active strategies and pioneering (Khandwalla, 1987, Miller, 1983), which are aspects of intrapreneurial strategy-making. Different dimensions have been used to characterise the uncertainty that the environment holds for firms. For example, Dess et al. (1997) propose aspects such as unpredictability, dynamism and heterogeneity. Dess and Beard (1984) use three aspects, namely complexity, dynamism and munificence to describe the nature of the environment. Khandwalla (1976/77) uses dynamism, hostility, heterogeneity, restrictiveness and technological sophistication. Covin and Slevin (1989) classify external environments on a continuum of hostile to dynamic and benign environments. In general these dimensions refer to the nature and scope of change in a firm's environment that arises from factors such as government regulations, competition and technological progress (Zahra, 1993). This paper specifically investigates environmental hostility and defines hostile environments as dynamic, complex and changing in unpredictable ways (Hart & Banbury, 1994).

An overview of the research articles that compare strategy-making process, external environment and firm performance generally reveals that the external environment is considered as a moderating factor on the strategy-making – firm performance relationship. Simply put, this means that certain modes of strategy-making will have a greater impact on performance in, for instance, a hostile than a benign environment. Similar contradictions exist when the relationship between intrapreneurial strategy-making, the environment and performance is investigated. For example, Dess et al. (1997) find that intrapreneurial strategy-making will have a positive association with performance when it is combined with both the appropriate strategy and environmental conditions. More specifically Frese et al. (2000) find that intrapreneurial strategy-making (opportunistic) is more likely in a dynamic environment and less likely in a hostile environment. However, Khandwalla (1976/77) finds in his study of 103 public Canadian companies that firms in hostile environments employ the entrepreneurial mode of strategy-making, while firms in dynamic environments employ entrepreneurial and rational strategy-making. Furthermore, Hart (1992) proposes that the generative mode is unlikely to be associated with high performance unless it is in complex environments where prospecting is important. This is consistent with the findings of Miller (1988). Although the results from the previous studies are somewhat contradictory, it seems that the intrapreneurial mode of strategy-making is more likely to occur in a hostile than any other environment and that environment has some influence on the relationship between intrapreneurial strategy-making and performance. It can therefore be hypothesised that:

H3a The relationship between intrapreneurial strategy-making and firm performance is moderated by environmental hostility or dynamism

Organisational structure

Organisational structures can be placed on a continuum, ranging from formal to informal. Burns and Stalker (1961) call it mechanistic and organic structures. Organicity of organisational structure is often investigated for its contribution to entrepreneurial behaviours and processes

in firms (e.g. Bouwen & Steyaert, 1990; Miller, Dröge & Toulouse, 1988). An organic structure is characterised by flexible administrative relations, informality, one or few top managers and delegation (Mintzberg, 1979). Small firms often have organic structures that “develop around the interests and abilities of the entrepreneur and are likely to be organic and loosely structured” (Beaver & Jennings, 2000, p. 399). This is supported by Mintzberg who suggests that organic structures are found in young, small and often vulnerable firms.

Organisational structures are believed to facilitate innovation. Many authors suggest that organic organisational structures allow for rapid organisational response to changing external forces in unpredictable environments, something that is crucial for firms that want to be innovative (Burns & Stalker, 1961; Covin & Slevin, 1989; Lawrence & Lorsch, 1976). Furthermore, authors such as Covin and Slevin (1988), Dess et al. (1997), Miller and Friesen (1978) and Mintzberg (1973) all indicate that entrepreneurial processes are more successful in firms with organic organisational structures. More specifically, Covin and Slevin (1988) find in a study of 80 firms that an organic organisational structure moderates the entrepreneurial style and firm performance relationship. Another study that investigated organisational structure, planning behaviour and firm performance in small firms is Chaston (1997). He finds support for his hypothesis that an organic structure and entrepreneurial management style together will improve firm performance. This strengthens the argument that an organic structure and intrapreneurial strategy-making have a combined positive effect on firm performance. This study draws on the works of Chaston (1997), Covin and Slevin (1988) and Dess et al. (1997) as well as the previous arguments to hypothesise that:

H3b The relationship between intrapreneurial strategy-making and firm performance is moderated by the organicity of organisational structure

Business strategies

Although it is recognised that strategies exist on all firm levels, most research generally focus on business or competitive strategies (Parnell, 2002; Porter, 1980; Segev, 1987). Business strategies show how single firms or individual business units of larger firms compete in a specific industry or market (Bowman & Helfat, 2001). Porter (1980) suggests that firms can maximise performance by employing one of three broad strategies. The first, differentiation, aims to create uniquely attractive products or services by using strong marketing capabilities, creative designs, quality, image, and market channel co-operation. The second, cost-leadership, aims to produce products and services at a lower cost than competitors through reductions in manufacturing, research and development and other costs. The products or services that result from this strategy is standard, high-volume and competitively priced. The last, focus, is a niche strategy that focuses the firm's attention on a specific type of customer, product or service, or geographical area.

According to Porter (1980) differentiation and cost-leadership strategies can be placed on opposite sides of a continuum and therefore they will seldom be utilised simultaneously. The middle of the continuum is aptly called “stuck in the middle”. Furthermore, both of these strategies can have different degrees of focus. He also posits that small firms do not have economies of scale, and will therefore follow either differentiation, or focus differentiation strategies.

Both the links between entrepreneurial processes and differentiation (e.g. Dess et al., 1997) and differentiation and firm performance (e.g. Sapienza & Herron, 1990) have been supported in the literature. Specifically, it can be argued that the use of a differentiation strategy would strengthen the effect of entrepreneurial processes such as intrapreneurial strategy-making on firm performance. Although the support for such a moderating relationship between intrapreneurial strategy-making, differentiation strategies, and performance is not conclusive, this paper is still interested in investigating the following hypothesis for small firms:

H3c The relationship between intrapreneurial strategy-making and firm performance is moderated by the use of differentiation strategies

RESEARCH METHOD

Sample and data-collection

This paper explores the three hypotheses formulated earlier through a survey conducted in small firms. A total of 2000 questionnaires were mailed to small firms with less than 100 full time equivalent employees in New Zealand, chosen randomly from the Kompas database. This number was deemed appropriate because, even though no internationally recognised definition of small firms using employee numbers exist, Ghobadian and O'Regan (2000) argue that firms with 250 employees can not only be considered small and medium enterprises, but that they can also be treated as a homogeneous grouping. From this an inference is made that a number of 100 employees is an appropriate limit to call a firm small. Of the 2000 sent out, 477 useable questionnaires were returned, imported into SPSS and analysed with the use of a number of data-analysis techniques, designed to test these types of hypotheses. In particular, factor analysis, correlations and moderated regression analysis were used in this regard.

Measurement instrument

Six different scales were used to collect the data required to test the hypotheses. *Strategy-making mode* was measured with the Hart (1991) scale as modified by Dess et al. (1997). Their scale consists of 25 items and is scored on a five point Likert scale, ranging from 1 "Strongly disagree" to 5 "Strongly agree".

The scale developed by Khandwalla (1976/77) was used to measure *environmental uncertainty*. The respondent's ratings on each sub-set of items were averaged to arrive at a single index for each of the three aspects above. The higher the index, the more hostile, dynamic, or heterogeneous the firm's environment was. All three factors loaded as expected, with the exception of two items, namely "competition in product quality" and "technological sophistication". Both these items were deleted to improve the alpha coefficients of the factors. *Organicity* was measured following the approach of Covin and Slevin (1989). To measure structure, a seven-item scale by Khandwalla (1976/77) that measures the organicity of a firm's structure was used for this study. Respondents were asked to indicate on a seven-point Likert scale to what extent each item measured the collective management style of the firm. The items of the scale were aggregated to measure the extent of each firm's organicity of structure. The higher the index, the more organic the firm's structure.

Porter's (1980) *business (generic) strategies* were tested with the seven-item scale developed by Miller (1988). Miller (1988) based this scale on the works of Hambrick (1983) and Dess and

Davis (1984). The scale is a seven-point Likert scale, ranging from 1 “Not important at all” to 7 “Extremely important”.

The dependent variable, *performance*, was measured by using the financial performance scale developed by Covin and Slevin (1989) and Gupta and Govindarajan (1984). Covin and Slevin had SMEs in mind when they developed this scale. Respondents had to indicate the “importance” of ten financial measures, namely sales level, sales growth rate, cash flow, return on shareholder equity, gross profit margin, net profit margin from operations, profit to sales ratio, return on investment, ability to fund business growth from profits, and overall firm performance, to the firm. Thereafter they were asked to indicate their satisfaction with the firm’s performance for the same ten performance measures. The “satisfaction” scores were multiplied by the “importance” scores and aggregated in order to compute a weighted average performance index for each firm. Weighing satisfaction with importance scores is the same method followed by Covin and Slevin (1988, 1989). The higher the aggregate score on this relative index, the better the perceived level of firm performance.

Data analysis

The data were first investigated to ensure that they satisfy the underlying assumptions for parametric testing. After this was found to be satisfied, the measurement instrument was tested for reliability and validity. The results from the reliability testing are contained in Table 2. Further data analysis was conducted as follows. Hypothesis 1 was tested using rotated factor analysis. Hypothesis 2 was tested by using Pearson’s correlations. Hypotheses 3 a, b and c were tested using moderated regression analysis.

Factors and indices were calculated to create the constructs necessary to test the hypotheses. Intrapreneurial strategy-making was calculated by adding the three items that loaded onto that factor in the factor analysis and dividing it by three. The firm performance index was calculated as described in the previous section. The EO and organicity indices were calculated by adding all items in each scale. The factors “hostility” and “differentiation” were created through factor analysis as described above. Table 2 presents the correlations between the factors and indices used in this paper.

RESULTS

The findings in this section are presented according to the hypotheses formulated earlier. Firstly, Hypothesis 1 was tested with rotated factor analysis as shown in Table 1. Careful consideration of the resulting four factors revealed that these factors still describe similar constructs to those defined by Dess et al. (1997), namely participative, entrepreneurial (intrapreneurial in this study), simplistic and adaptive strategy-making. All of the variables have significant factor loadings (≥ 0.30) (Hair, Anderson, Tatham & Black, 1998). The interpretation and labeling of the dimensions presented by the different questions were reasonably straightforward when compared to the modes of strategy-making processes identified in previous studies. Specifically, “Intrapreneurial SM” includes aspects such as risk-taking, a dynamic process, and experimentation – indicating the entrepreneurial nature of the process. Furthermore, aspects such as the making of decisions at the appropriate level, consensus decisions and people having input into decisions that affect them indicates that this is a bottom-up process. Although the terminology (intrapreneurial SM) differs from that used by Dess et al. (entrepreneurial SM), the factor loadings are very similar.

This study argues that Dess et al. labeled this particular factor incorrectly, since the command aspect that should form part of the entrepreneurial mode (Dess et al., 1997; Mintzberg, 1973) actually loaded negatively in the Dess et al. study. Instead the emergent or bottom-up aspect forms part of this mode, leading it to be labeled intrapreneurial strategy-making. Support for Hypothesis 1 is therefore strong.

Table 1: Results of the rotated factor analysis of this study

Variable	Factor 1 Participative SMP	Factor 2 Intrapreneurial SMP	Factor 3 Adaptive SMP	Factor 4 Simplistic SMP
There is a clear blueprint for this organisation's strategy that was set some time ago and has changed very little	0.354			0.327
Strategy for this organisation is primarily provided by the owner/manager/chief executive officer and a few of his/her fellow top managers/executives				0.519
Our organisation continually adapts by making appropriate changes in its strategy based upon feedback from the market place			0.607	
Business planning in our organisation is ongoing and involves everyone in the process to some degree			0.593	
We spend as much time as possible with customers and other key stakeholders, listening to what they have to say about the organisation			0.681	
Our business and product planning process involves various stakeholders such as customers, suppliers, and providers of funds			0.762	
Business and product planning in this organisation is largely an internal process that seeks to contain the amount of information leaking to the outside				0.625
There is a clear and consistent set of values in this organisation that governs the way we do business	0.705			
This organisation has a characteristic 'management style' and a common set of management practices	0.561			0.404
Decisions in this organisation are usually made at the level where the most accurate information is available, even if it is not top management		0.503		
Most people in this organisation have input into the decisions that affect them		0.593		
Most people in this organisation are willing to take risks		0.785		
Most people in this organisation are treated equally, regardless of rank or status	0.533	0.448		
People in this organisation are very dynamic and entrepreneurial		0.686		
Conflict in this organisation is often suppressed rather than dealt with openly	0.516			
Specific work roles and expectations are clearly defined in this organisation	0.404			
Co-operation and collaboration across functional roles are actively encouraged	0.687			
People with unpopular views are given a fair hearing in this organisation	0.587			
Working in this organisation is like being part of a team	0.639			
Failure is something to be avoided in this organisation at all cost				-0.554
People are encouraged to experiment in this organisation so as to identify new, more innovative approaches or products		0.486		
Long-term potential is valued over short-term performance in this organisation	0.559			
The way we do things in this organisation is well suited to the business we are in	0.598			
Decisions concerning business strategy are made on a consensus basis, involving people from different departments or areas in the organisation		0.580		
The chief executive officer of our organisation insists on placing his/her mark on virtually every major initiative				0.563

Second, Hypothesis 2 was tested using Pearson's correlations. Table 2 provides the correlations for all the constructs in this study. From this table it is clear that intrapreneurial strategy-making is not related to firm performance. Hypothesis 2 is therefore not supported.

Table 2: Correlations matrix

	Number of items	Mean	Standard deviation	Cronbach alpha	Performance index	Intrapreneurial strategy-making	Organicity index	Hostility
Performance index	20	139.92	38.62	.89	1			
Intrapreneurial SM	7	3.50	.86	.79	.067	1		
Organicity index	7	31.10	7.02	.78	.039	.332(**)	1	
Hostility	5	3.61	1.05	.73	.071	.191(**)	.130(**)	1
Differentiation	6	4.33	1.27	.76	.178(**)	.184(**)	.202(**)	.439(**)

** Significant at the .001 level

Hypotheses 3 a, b and c were tested using moderated regression analysis (see Covin & Slevin, 1989 for this technique). The results for Hypotheses 3 a and b, as indicated in Table 3, were not significant, indicating that neither of these hypotheses was supported, even though strong correlations between the constructs of these propositions and intrapreneurial strategy-making were found.

Hypothesis 3c looked at the moderational effect of differentiation. Moderated regression analysis (see Table 3) supports this hypothesis. However, the interaction term is negative (-.198) which means that intrapreneurial strategy-making will have a greater effect on firm performance in the absence of a differentiation strategy, which is the opposite from what was argued in the hypothesis. Therefore, support for Hypothesis 3c is mixed.

DISCUSSION

This paper provides evidence that the intrapreneurial mode of strategy-making is an approach used by small firms. Intrapreneurial strategy-making in this context is emergent and is characterised by experimentation and learning by firm members at any level. It is therefore in fact similar to Hart's (1991) "generative" mode of strategy-making. Furthermore it leads to innovative ideas and risk is accepted as normal in this mode of strategy-making, which is also described as dynamic and entrepreneurial.

The low correlation between intrapreneurial strategy-making and firm performance is consistent with previous research (e.g. Dess et al., 1997) which shows a weak relationship with firm performance in the short run, even when context factors are taken into consideration. Hart (1992) also suggests that intrapreneurial-type strategy-making is more likely to be associated with poor performance when he argues that firms with intrapreneurial employees operating in a generative mode are less likely to be high performers.

Pearson's correlations indicate that firms in hostile environments prefer the intrapreneurial mode of strategy-making. This result indicates that intrapreneurial strategy-making may provide firms in hostile environments with the ability to deal with issues that are prevalent in these environments, such as a high rate of product/service obsolescence and a requirement to change

marketing and operations practices frequently. It is interesting that firms in a hostile environment engage in an emergent strategy-making process such as intrapreneurial strategy-making, which clearly indicates that these firms are actively engaging staff in strategy-making and simultaneously acting in entrepreneurial ways to deal with the hostility in the environment. However, it was proposed that environmental hostility will moderate the relationship between intrapreneurial strategy-making and firm performance. No evidence to support this hypothesis was found which means that even though this mode of strategy-making is used in hostile environments, it does not improve firm performance under these circumstances.

Smallbone, Leigh and North (1995) argue that small firms will grow successfully if they develop their organisational structure in such a way that the owner-manager can delegate operational tasks and focus on higher level strategic functions. The results of the correlations show a strong relationship between organicity and intrapreneurial strategy-making. This indicates the need for an environment where staff can interact easily and ideas can flow freely, such as that created by an organic organisational structure. But once again, moderated regression analysis indicated that this arrangement will not have a positive impact on firm performance. This raises the question whether informality in both process and structure may lead to lost opportunities for firms in terms of ensuring that innovations are commercialised.

Specifically, the strategic management literature suggests that it is actions (in the form of strategies), and not the processes that they result from that have the most direct effect on firm performance. An exploration of the correlations of a differentiation strategy with modes of strategy-making indicates that differentiation is strongly related to intrapreneurial strategy-making. Correlations also indicate a strong relationship between differentiation and firm performance. But moderated regression analysis indicates that when found in combination with each other in a firm; it will have a negative effect on firm performance. This result is counter intuitive and in disagreement with authors such as Covin (1991) who finds that types of differentiation strategies, such as high price and high product/service quality, are more evident among entrepreneurial firms. However, it has some similarities with Dess et al. (1997) who found that intrapreneurial strategy-making is most strongly associated with performance when it is combined with a cost-leadership strategy. The explanation by Dess et al. who argue that two constructs that are so closely related cannot have a compound effect on firm performance since multiple bases of competitive advantage are not tapped in such a case, seems the most plausible for this finding.

CONCLUSION

This research contributes to the theory of strategy-making in small firms by conceptualising intrapreneurial strategy-making, and explaining the circumstances in which it can be expected to occur in small firms. It finds that the intrapreneurial mode of strategy-making is an important mode of strategy-making used by small firms. In the intrapreneurial mode strategy-making is driven by inventive employees, instead of a commanding entrepreneur. It is therefore a generative process which creates risky, innovative ideas in a dynamic manner. Hence, intrapreneurial strategy-making for the small firms in this paper is defined as a dynamic process through which employees generate entrepreneurial strategies in an emergent, risk accepting manner.

But although used by small firms, it does not contribute to firm performance, most likely because of small firms' inability to harvest the innovative strategies that emerge as a result of this process. The absence of a strong leader may partly explain its weak relationship with firm performance, confirming the important role that SME owner/managers play in the success of their firms. Intrapreneurial strategy-making does further contribute negatively to firm performance when used in combination with differentiation strategies. This is possibly because intrapreneurial strategy-making has to be supported by a larger, more resource rich firm that can bring innovations to the market. It transpires that the context and sometimes the content of a firm dictate which mode of strategy-making is more appropriate to a particular firm. Intrapreneurial strategy-making is found in organic firms and in hostile environments. But neither of these factors strengthens the effect of intrapreneurial strategy-making on firm performance.

This study offers a number of implications for business practice. The results indicate an inability among small firm owner-managers to capitalise on the intrapreneurial processes of their firms. Support from government agencies, training and mentoring should focus on helping small firms to overcome this problem. Furthermore, small firm owner/managers should also be mindful that the use of intrapreneurial processes is not an end, but rather a means to an end. Therefore they should invest time and money into the commercialisation of entrepreneurial ideas, for example by employing a professional manager or by seeking assistance from agencies that specialises in helping small firms.

A number of limitations have to be kept in mind when reading the results of this study. Specifically, since data were collected from small firms in New Zealand, the generalisability of the results to other settings is questionable. Furthermore, the cross-sectional design may be another limitation (Bowen & Wiersema, 1999; Schwartz & Teach, 2000) especially as far as the short term effect of intrapreneurial strategy-making on firm performance may skew the results. A longitudinal study may provide some advantages. It is suggested that further research is conducted in the form of a quantitative longitudinal study to further the understanding of the influence of strategy-making processes on firm performance by considering a larger group of firms over time. It is possible that the effect of these processes on firm performance may have a time lag. The same may be true for the strategies that the firm chooses, which may explain the inability of these strategies to have a significant effect on firm performance. This means that a longitudinal study may strengthen the results of this study.

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