A TYPOLOGY OF CORPORATE VENTURE UNITS: EXPLORATION, EXPLOITATION AND LOCUS OF OPPORTUNITY

Julian Birkinshaw
London Business School
Regents Park, NW1 4SA
London
+44 (0)207 262 5050
jbirkinshaw@london.edu

Susan Hill
London Business School
Regents Park, NW1 4SA
London
+44 (0)207 262 5050
shill@london.edu

July 2005

An earlier version of the paper was presented at the Academy of Management conference, New Orleans, in August 2004.
A TYPOLOGY OF CORPORATE VENTURE UNITS: EXPLORATION, EXPLOITATION AND LOCUS OF OPPORTUNITY

Abstract

We develop a typology of corporate venture units, based on their strategic role in the corporation, and specifically on (a) their relative emphasis on exploration vs. exploitation and (b) the internal vs. external locus of opportunity they pursue. We argue that the internal structures and management systems used by the venture unit will be a function of their strategic role, and that their performance will be higher when these internal elements are all aligned. We also argue that exploitation-oriented units will survive for longer than exploration-oriented units. Using data collected on 95 corporate venture units over the period 2001-2003, we test and find support for our hypotheses.
INTRODUCTION

Corporate venturing continues to be an important activity among large firms, despite recent global economic uncertainty and the decline in private equity investments that followed the collapse of the “dot-com” sector. Corporate venturing has been a topic of scholarly and practitioner interest since the 1960s (Fast, 1981; von Hippel, 1977; Rind, 1981), although both actual corporate venturing practice and scholarly research efforts have been characterized by waves of heightened then waning interest (Chesbrough, 2000; Birkinshaw, van Basten Batenburg, & Murray, 2002).

A common approach to conceptualizing corporate venturing has been to develop typologies or taxonomies in order to make sense of what appears to be a multitude of different objectives and activities undertaken by corporate venture (CV) units (Burgelman, 1984a; Campbell, Birkinshaw, Morrison, & van Basten Batenburg, 2003; Chesbrough, 2002; Miles & Covin, 1999; Sharma & Chrisman, 1999). This approach has recently been revitalized as interest has grown within large companies as to the wisdom and utility of adopting the structures and practices of the limited partnership venture capital (VC) firm (Brody & Ehrlich, 1998; Chesbrough, 2001, 2002).

However, despite the considerable progress that has been made in understanding corporate venturing, two concerns remain regarding our understanding of CV unit types. First, only limited attention has been paid to grounding CV typologies in underlying theory on strategy and organization; second, large-sample research on CV units has been almost entirely restricted to externally-focused “corporate venture capital” (CVC) units. The few studies that examine a
full spectrum of venture activities from CVC to “internal corporate venturing” (ICV) all rely heavily on either small-sample research or anecdotal evidence.

The purpose of this paper, then, is to develop and test a typology of corporate venture units that is theoretically grounded in strategic management and organization literature and is empirically validated. The paper makes use of an original data set of 95 venture units, incorporating interview and survey data collected over a three-year period. The paper is organized as follows. In the first section, we briefly review the literature on corporate venturing, focusing on typologies of CV units. This leads into our proposal of a revised CV unit typology based on the two dimensions of locus of opportunity and strategic logic (exploration vs. exploitation). We then derive a number of hypotheses regarding the identification of CV unit types, and their performance. Thereafter, we describe the methodology employed in the study, focusing on the use of a configurational approach to the statistical analysis. The final section describes the findings, and presents a discussion of the major issues arising from the study.

BACKGROUND AND THEORETICAL DEVELOPMENT

Prior Research on Corporate Venture Units

While the term corporate venturing is used in a wide variety of ways in the literature, our focus in this paper is the corporate venture unit, defined here as a distinct organization unit controlled by the parent firm that has responsibility for investing in business opportunities that are new to the corporation (cf. Block & MacMillan, 1993; Burgelman, 1983). Such units may engage in a variety of forms of investment, from making small investments in independent start-ups, to incubating internal business ideas, to spinning out businesses.
A common approach in the corporate venturing literature has been to develop typologies and taxonomies to try to make sense of the different objectives and activities undertaken by corporate venture units. For example, Burgelman (1983) distinguished between the strategic importance and the operational relatedness of the venture activity, while Chesbrough (2002) focused on operational relatedness and the relative focus on financial and strategic objectives. These typologies have been useful in identifying a range of motivations and practices within venture units. They appear for the most part, however, to suffer from two limitations. First, they are rarely validated through systematic empirical evidence: instead they either involve small-sample qualitative data, or they are restricted to dispersed forms of corporate entrepreneurship (for example, Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra, Jennings, & Kuratko, 1999), or to studies of units employing only externally-oriented Corporate Venture Capital models (for example, Dushnitsky & Lenox, 2002; Gompers & Lerner, 1988; Maula, 2001; Maula & Murray, 2001; Sykes, 1990). Second, most prior studies fail to make a connection to underlying theory – that is, they are generally taxonomies (empirically derived) rather than typologies (theoretically derived) (Meyer, Tsui, & Hinings, 1993). Moreover, many appear to blur issues of strategy (i.e. the objective in creating the venture unit) and structure (i.e. the way the unit is managed and organised) in a manner that is not conducive to separating underlying differences between CV types from any potential behavioural and/or performance consequences. As a result of these limitations, we currently know relatively little of a systematic nature about different forms of CV units, and our ability to interpret any differences between CV units from a rigorous theoretical vantage point is constrained.

In the current paper we attempt to remedy these two limitations of prior research on CV units. We build on existing lines of thinking in strategic management to develop a novel
theoretical framework based around the locus of the venturing opportunity and the strategic objectives of the CV unit. We also demonstrate that this new framing can be integrated with prior research. By restricting the definition of the typology to strategic objectives and opportunity sources, we can then examine structural and managerial differences as consequences (or corollaries) of the chosen objectives and opportunity sources.

**Strategic Classification of Corporate Venture Units**

In this section we use two well-established constructs in the strategic management literature that, taken together, provide insight into fundamental distinctions amongst corporate venture units in a manner that enables sharper discrimination between their strategic and structural properties. The first of these constructs – namely, the locus of the opportunity – has a well-established tradition in corporate venturing literature (e.g. Miles & Covin, 2002; Sharma & Chrisman, 1999; Sykes, 1986) as well as in strategic management literature. The second construct – namely, the distinction between the strategic logics of exploration and exploitation (March, 1991) – although integral to the field of strategic management, has not, to the best of our knowledge, been applied in the field of corporate venturing\(^1\).

The locus of opportunity dimension refers to whether or not new venture ideas lie inside or outside the formal boundaries of the firm. While traditional notions regard firms as “islands of innovation” in a sea of economic enterprise, a shift in the field of strategic management has occurred in which such notions have increasingly given way to a more integrated, connected worldview. From such a perspective, strategic alliances and joint ventures between partners are

---

\(^1\) Some recent CVC literature has, however, examined programmatic and portfolio precursors to exploratory and exploitative learning (e.g. Keil, Zahra, & Maula, 2004; Schildt, Maula, & Keil, forthcoming).
commonplace (Badaracco, 1991; Powell et al., 1999), and innovation is frequently conducted according to an “open innovation” model whereby firms may “commercialize external (as well as internal) ideas by deploying outside, as well as in-house, pathways to the market” (Chesbrough, 2003: 36-37). This implies that some venture investments are likely to be made on the basis of ideas or opportunities found inside the firm, while others will be made on the basis of ideas or opportunities currently lying outside the firm’s boundaries. The mix of internal venture ideas and external venture ideas employed by a corporate venture unit will, we assert, significantly impact the challenges and constraints faced by the unit and, accordingly, influence the form its governance structures and systems take.

The strategic logic dimension identifies the relative importance of two different strategic agendas a corporate venture unit may pursue: exploration or exploitation (March, 1991). Exploration (March, 1991:85) involves “experimentation with new alternatives” with returns that are “uncertain, distant and often negative”, and is associated with the organization’s need for adaptability. Exploitation is the “refinement and extension of existing competencies, technologies and paradigms” with returns that are “positive, proximate, and predictable”, and is associated with the organization’s need for alignment (March, 1991:85). The distinction between exploration-oriented and exploitation-oriented activities is widely used in the fields of strategic management and innovation (e.g. Daneels, 2002; Katila & Ahuja, 2002; He & Wong, 2004; Koza & Lewin, 1998; Rothaermel & Deeds, 2004). We propose that it is also potentially useful in the field of corporate venturing. Traditionally, most people have focused on the explorative role of CV units (e.g. Burgelman, 1983; Dushnitsky & Lenox, 2002; Galbraith, 1973, 1982). However, we would argue that CV units actually engage in both exploration and exploitation. For example, a venture unit may build on the firm’s existing assets to develop new
technologies, or it may focus on leveraging existing technologies in order to yield financial returns. In such cases, there is a clear exploitation component to the venturing activity, even if exploration is still the primary goal.

By integrating these two separate lines of thought, it is possible to identify four generic approaches to corporate venturing, as shown in figure 1. We discuss these types in turn, and we show how each one can be linked back to the types of venture units identified in prior research.

---

**Internal explorer.** The purpose of internal explorer units is to invest in opportunities that arise inside the parent firm, and to actively nurture and grow them so that over time they become sources of growth for the firm. This is probably the most well-known form of corporate venturing, and it is comparable to Burgelman’s (1983) New Venture Division or the Internal Venturing models of Sykes (1986) and Miles and Covin (2002). The emphasis in such units is on exploration in the early years of development of a new opportunity (though this emphasis shifts to exploitation later). In many respects, the activity is similar to traditional R&D, but the innovation venturing unit is managed as a separate entity, and it typically employs to some degree the investment methods of the venture capital industry.

---

2 It is worth noting that this framework can also be used more broadly to identify the generic forms of business development a firm can pursue. The top-left quadrant includes all forms of exploration where the locus of opportunity is internal to the firm, such as traditional R&D and knowledge sharing networks. The top-right represents exploration-oriented activities where the opportunity is outside the boundaries of the firm, including acquisitions, alliances and joint ventures. The bottom-left quadrant is concerned with exploitation of assets and opportunities internal to the firm, such as licensing of patents and technologies. The bottom-right quadrant is concerned with exploitation-oriented activities where the locus of opportunity is outside the firm’s boundaries, such as bargaining with customers and/or suppliers to increase margins (Porter, 1980), and working with partner companies to develop complementary products.
An example is Royal Dutch/Shell’s GameChanger programme (Hamel, 1999; Verloop, 2004). GameChanger was established in 1996 with the initial objective of spending 10% of the upstream technical budget on innovative, “venturing” ideas. A stage-gate process was developed through which employees from anywhere within the Shell group could submit ideas for consideration, and could then, if successful, receive staged funding to develop and commercialize the venture. The process was subsequently adopted in a number of other areas within Shell. By mid-2002, GameChanger had screened 400 ideas, commercialized 32 new technologies, and established 3 new businesses.

**Internal exploiter.** The purpose of such units is to “generate cash from harvesting spare resources” (Campbell et al., 2003). They take existing assets within the firm, such as patents, technologies, raw ideas, and managerial talent, and they attempt to monetize these within a short time frame by spinning them out. Thus, while there is inevitably an element of exploration involved in such units, the dominant logic is one of exploiting existing assets and turning them into cash. While the logic of harvesting assets through spin-offs has been recognised in the literature for many years (e.g. Burgelman, 1984), the creation of dedicated harvesting units only appears to have emerged during the most recent wave of corporate venturing activity (Chesbrough, 2001). Campbell et al (2003) call these “venture harvesting” units.

An example of an internal exploiter unit is British Telecom’s Brightstar unit, which was set up in 1999 to “uncover the hidden value” in BT’s R&D database of 14 000 patents and 2 500 inventions. Within its first year of operating, 4 businesses had been launched and a further 11 funded; and by 2001 it had created revenues of £30 million (Campbell et al., 2003).

**External explorer.** The purpose of external explorer units is to create value based on opportunities that lie beyond the current boundaries of the firm. In this model, the CV unit
typically seeks to invest (alone or with other partners) in small firms and entrepreneurs. Critical to the selection of investments by ecosystem venturing units is their estimated growth potential in a domain anticipated to be of future strategic importance to the firm – thus the common arguments from executives in such units that they need to create strategic options, and generate a “window on new technology”. These units also seek to put into practice the emerging dictum that new value is created in the interstices between firms, rather than within traditional boundaries (e.g. Chesbrough, 2003; Powell et al., 1999).

An example of an external explorer unit is Siemens Venture Capital GmbH (SVC). It invests strategically in external companies and initiatives that have a direct link with Siemens, either as potential partner or supplier. It typically takes minority equity stakes, in return for which SVC get a board seat. Often these investments lead to strategic relationships for Siemens, and occasionally Siemens ends up buying out the start-up company in question (Birkinshaw et al., 2002a).

**External exploiter.** The purpose of external exploiter units is to make investments in external companies with a view to generating a financial return (what Chesbrough, 2002, calls *passive* investments). As with internal exploiter units, there is an element of exploration at work, but we would argue the logic behind the establishment of such units is primarily exploitive. Effort typically focuses on deal-making (buying and selling equity) rather than on nurturing and building the start-up business in question. And the reason firms create such units in the first place is typically because they believe they can leverage existing assets (e.g. knowledge of the industry, their brand name, their relationships) to capture investment opportunities that independent venture capitalists could not.
An external exploiter unit may, for example leverage its parent’s market power to make selective investments that strengthen its influence over other parties in the business system or to gain privileged access to specific deal flow (cf. Porter, 1980). It may also actively encourage the emergence of a variety of complementary products and services, to sustain or strengthen the business system that it derives value from. Examples of such units include GE Equity and Nokia Venture Partners.

**HYPOTHESIS DEVELOPMENT: VENTURE UNIT CONFIGURATIONS**

Having put forward a theoretically-grounded approach for categorizing corporate venture units, the next step is to formalize and extend our logic through a set of testable research propositions. To do this we adopt a configurational approach, which involves specifying the structural attributes we would expect to be associated with each type of venture unit, and then testing whether the level of “fit” between the type of unit and its chosen structure is associated with higher performance.

The configurational approach to organizational analysis has its roots in the work of Miller (1987) and Mintzberg (1979, 1983) and became well established during the 1990s (Doty, Glick, & Huber, 1993; Meyer et al., 1993; Gresov & Drazin, 1997). It builds on some of the same principles as contingency theory – that there is no one best way to organize, that different structural arrangements are valid for different strategic conditions, and that “increased effectiveness is attributed to the internal consistency, or fit, among the patterns of relevant contextual, structural and strategic factors” (Doty et al., 1993: 1196; Galbraith, 1973). However, configuration theory goes further, and indeed challenges some of the limiting assumptions of
contingency theory. Three differences are worth highlighting. First, configuration theory is concerned with multiple elements of strategy and structure, rather than the limited set of abstracted concepts that are typically the focus of contingency theory. Second, configuration theory assumes that the relationships between elements of a configuration are reciprocal rather than unidirectional – attributes of the venture unit’s structure can influence its strategic objectives, as well as the vice versa. Third, the notion of equifinality – that there is more than one way to succeed in each type of setting - is a central component of configuration theory. As observed by Meyer et al. (1993: 1178), “Equifinality might imply that pursuing technological innovation or a niche strategy could enable a particular organization to thrive in a volatile environment. The configurational twist would be to add that neither strategic approach is liable to work unless it is embedded in an appropriate pattern of coherent organizational processes and structures”.

**Application of configuration theory to corporate venturing**

The configurational approach implies the following framework for corporate venture units. The venture unit has a set of *strategic objectives*, defined in terms of the locus of opportunity it is pursuing, and its relative focus on exploration vs. exploitation. It has a *structural profile*, which consists of a number of aspects of its internal organization as specified below. And it achieves a certain level of *performance*, which we examine both in cross-section (i.e. at the time the strategic and structural data was collected) and over time. The broad proposition under investigation is simply that the level of fit between a unit’s strategic objectives and the elements of its structural profile will be associated with higher performance (Figure 2).
While well established in other areas of organization research, this logic has seldom been applied to corporate venturing (Jennings & Hindle, 2004). A few recent studies suggest, however, that this approach may aid understanding of corporate venturing performance. For example, Weber and Weber (forthcoming), in a study of 20 German CVC organizations, found that those focused primarily on either strategic or financial goals – rather than on a mixture of strategic and financial goals – reported higher levels of goal attainment. They attribute this finding to multiple goals creating the potential for conflict and inefficiencies in CV units. This logic may be extended to suggesting that fit with a strategic profile within our proposed typology may enable goal alignment and, accordingly, enhanced performance in CV units.

What are the relevant elements of the CV unit’s structural profile? No definitive list exists, so we reviewed the corporate venturing literature to identify what appeared to be the most relevant elements. These were as follows:

1. The governance structure of the venture unit. This consists of (a) its operating autonomy vis-à-vis the parent company; and (b) the extent to which the unit takes part in syndicated investments (Brody & Ehrlich, 1998; Burgelman & Doz, 2001; Chesbrough, 2000, 2002; Fast, 1981; Galbraith, 1982; Kanter, 1985; Rind, 1981; Sahlman, 1990; Sykes, 1986, 1990).

2. The activities of the venture unit, by which we mean the level of involvement in the various developmental and managerial tasks that could potentially be performed by venture unit managers. Research has identified three important activities: (a) selecting which ventures to invest in, (b) exiting ventures as necessary or appropriate, and (c)
building and nurturing the ventures within the portfolio (Brody & Ehrlich, 1998; Chesbrough, 2000; Fast, 1979; Sahlman, 1990; Schulz, 2002; Zider, 1998).

(3) The network of relationships held by venture unit managers. This includes two key sets of stakeholders: (a) links to venture capital firms, for access to deal flow and ideas (Brody & Ehrlich, 1998; Sahlman, 1990; Sapienza, 1992; Sykes, 1990), and (b) links to corporate executives in the parent firm, to increase the learning from the venture operations, and the potential for leveraging corporate resources into the venture unit.

(4) The management systems of the venture unit. This includes: (a) the types of measures used to evaluate the performance of the venture unit, and (b) the incentives provided for venture unit managers (Block & MacMillan, 1993; Fast, 1979, 1981; Rice, O’Connor, Leifer, McDermott, & Standish-Kuon, 2000).

These structural elements are expected to vary across the four types of corporate venture units in predictable ways. However, it would be inappropriate to develop formal hypotheses for each element in turn, because the logic of configuration theory is that the elements interact with and reinforce one another to create a meaningful whole. Instead, as described below, we apply the analytical method developed by Doty et al. (1993) in which the observed structural profiles (across all elements) of venture units are compared to the “ideal” structural profiles as assessed by expert raters.

Hypotheses

We are now in a position to develop the formal hypotheses that follow from our framework. Consider first the relationship between the CV unit’s strategic objectives and its structural profile. Configuration theory suggests that there should be an alignment between the
two, so that internal exploiter units typically adopt one structural profile, internal explorer units adopt another, and so on. To test this hypothesis, we use expert raters to identify both the strategic objectives (in terms of locus of opportunity and relative focus on exploration or exploitation) and the structural profile we would expect to be associated with each venture unit type, and we look for the alignment between the two.

*Hypothesis 1: Each of the CV unit types, as defined by its strategic profile, will be associated with a unique “structural profile”.*

The second hypothesis is concerned with venture unit performance. Configuration theory suggests that a close alignment between the elements of the venture unit’s structural profile, and between its structural profile and the associated set of strategic objectives will result in higher performance. More specifically, this is tested by examining the proximity of each venture unit to its ideal type, as specified by the expert raters.

This may appear to be an obvious hypothesis, but it is subtly (and importantly) different from a traditional typology logic, because it emphasises the proximity of the unit to its “ideal”, rather than to its membership of one category of venture unit or another. As observed by Doty et al. (1993: 1198), “when the configurations are treated as categories, marginal members of the categories are predicted to be as effective as their central members. When the configurations are treated as ideal types, organizations that marginally resemble the types are predicted to be much less effective than organizations that closely resemble them.” The corollary to this hypothesis, then, is that there will be no significant differences between different types of venture units, and we formally test this as well.
Hypothesis 2a: The greater a CV unit’s level of fit to its ideal type, the greater the venture unit’s cross-sectional performance.

Hypothesis 2b: There will be no significant differences in performance across venture unit types.

As well as looking at the cross-sectional performance of venture units, we also consider a dynamic view of performance (Thornhill & Amit, 2000), or more specifically the likelihood that the corporate venture unit will survive for a period of two years. This time period is chosen on the basis of prior research on corporate venturing (Fast, 1979, 1981; Gompers & Lerner, 2001; Rind, 1981) which suggested that the normal life expectancy of a venture unit is between 2 and 6 years. Survival is important because it reflects the broad alignment of the venture unit with the strategic goals of the parent company, rather than simply the internal alignment of the various elements of strategy and structure.

Extant literature provides little guidance on the dynamic performance of the CV unit types. Accordingly we propose two alternative hypotheses – each of which makes somewhat different assumptions about the ties between venture unit survival and venture unit performance.

First, we predict that those units with structural profiles close to the ideal types will have greater longevity than those with misfitting profiles. This is consistent with the configurational logic outlined above. Where parent companies premise decisions regarding venture unit continuance or closure primarily on the units’ performance record, those units with greater fit to an ideal type are more likely to experience high performance and, accordingly, to experience higher survival rates.

Second, and in marked contrast to hypotheses 2a and 2b, we might expect to see significant differences in survival rates across the different venture unit types. More specifically,
we build on the argument that exploitation-oriented activities tend to drive out exploration-oriented activities (March, 1991), both because exploration-oriented activities are more uncertain in their outputs, and because they operate on a longer time horizon than exploitation-oriented activities. Accordingly, the performance of exploitation-oriented units may be more difficult to assess objectively in the short-term, while exploitation-oriented units may be more able to “work to plan” (Fast, 1979, 1981) and to deliver measurable short-term outputs.

In the specific context of CV units, the implication is that internal explorer and external explorer units may be inherently fragile: they typically have a harder time building credibility for their activities, and turning their investments into positive cash-flow activities than internal exploiter and external exploiter units. For internal exploiter units, the immediate objective is to turn assets into cash, so they typically offer a fast return on investment; while for external exploiter units, there is often additional security and legitimacy provided by the existence of outside investors. Thus we develop the following hypotheses:

*Hypothesis 3a: Venture unit survival (longitudinal performance) is associated with the fit of the venture unit to its ideal type.*

*Hypothesis 3b: Venture unit survival (longitudinal performance) is associated with membership of an exploitation-oriented (rather than exploration-oriented) type.*

Although these hypotheses are posed as alternatives, it is also conceivable that both effects might be at play simultaneously i.e. exploitation-oriented units that evidence high fit with their ideal types may experience the lowest rates of closure.
METHODOLOGY

Research Design

The research consisted of three phases. The first phase, in mid-2001, comprised exploratory interviews with approximately 50 individuals in 40 corporate venturing units across eight countries. These interviews were used to formulate an understanding of current practices, corporate venturing objectives, the types of activities undertaken, the structure of corporate venture units, and factors perceived to influence corporate venturing success.

Building on the insights gained from this round of interviews, the second phase (second half of 2001) of the research consisted of surveying managers of corporate venturing units. The analysis that follows in the paper derives primarily from the responses to this questionnaire. The sampling frame consisted of corporate venturing units listed in the Corporate Venturing Directory and Yearbook 2001 or in Venture Economics (a public database of private equity investments). A number of additional venture units with which the researchers were familiar were also included in the sampling frame. Together these sources yielded 447 potential respondents to whom mail surveys were distributed. Follow-up calls and further investigation found 120 corporate venturing units to be inactive, resulting in a potential pool of 327 corporate venture unit respondents. Responses were received from 95 units: an eventual response rate of 29% from the pool of 327 active corporate venture units. Subjective perceptions of unit performance garnered from the questionnaire were also supplemented with Venture Economics data on CV unit investment history, where such data was available (for 71 CV units). This
secondary data validated survey responses regarding the investment history of the majority of venture units.\(^3\)

Respondents and non-respondents were compared along a number of indices for which comparative data was available for the two groups. ANOVAs and cross-tabs, conducted to test for systematic differences between respondent and non-respondent CV units, did not find any significant differences along age of unit, monetary budget allocated to unit, average annual number of investments made by unit, number of employees per unit, or unit preference for 17 types of funding preference (e.g. start-up funding, first stage funding, second stage funding, and so on). Significant differences were only found for the headquarter location of CV units and their relative preference for seed funding. Specifically, the proportion of European respondents was somewhat higher than expected, whilst fewer than expected responses were received from North American CV units ($\chi^2 = 39.563, p = .000$); the proportion of respondents who expressed a preference for seed funding was higher than that amongst non-respondents ($\chi^2 = 6.695, p = .010$).

Overall, these analyses suggested that respondents were not substantively different from non-responding units in our sampling frame (that is, listed in the Corporate Venturing Directory and Yearbook 2001 or in Venture Economics).

The third phase took place in late 2003. Follow-up phone calls were made to the managers of all the CV units that had participated in the mail survey. Respondents were asked whether the corporate venturing unit for which they had completed the questionnaire was still

\(^3\) As financial returns or other reasonably “objective” measures of corporate venturing unit performance are notoriously hard to come by, the Venture Economics database has been used extensively for research on private equity (Bygrave et. al., 1989; Gompers & Lerner, 1998; Maula, 2001). The self-reported portfolio data captured by the survey was highly consistent with Venture Economics data, thus providing us with a fair degree of comfort in the accuracy of the self-reported performance measures. Specifically, both the number of venture unit investments reported by respondents and the proportion of the portfolio experiencing liquidity events reported highly significant correlations ($p = .000$).
active. If the CV unit was no longer active, respondents were asked to recall the month and year in which the unit ceased operations. Of the 95 CV units in the original questionnaire sample, we were able to speak with a person from 81 of the units (85% of the sample). Of those, 18 units (23%) were found to have closed down subsequent to the survey, while the remaining 63 (77%) were still active in one form or another.

**Development of the Fit Measures**

The majority of the measures are derived from the mail survey. As no other studies (to the best of our knowledge) have examined the structures and management practices in CV units, the measures were developed by the researchers, drawing on prior literature where possible, as well as constructs emerging from the exploratory interviews.

The measurement of the ideal profile, and the creation of a “fit” measure, requires some additional explanation. The ideal profiles were created using expert raters. We asked five academics with extensive knowledge of the field of corporate venturing to rate the four ideal types according to each of the elements of the strategic objectives and structural profile described above. Thus, for example, they were asked to rate the level of autonomy that should be given to an internal exploiter unit, how much for an external explorer unit etc. Table 2 lists the average ratings of the experts for all the elements of the ideal types. The table also lists the standard deviation of the five expert raters for each element (a measure of inter-rater reliability), which in all cases are between 0.42 and 0.85 on a five-point scale.

To create the measure of “fit”, the approach used was to calculate the Euclidean distance from the venture unit to each different venture unit type, using the following formula:

\[ D_{io} = \sqrt{(X_i - X_o)W(X_i - X_o)} \]

where
D_{io} = \text{the distance between ideal type I and organization type o},
X_i = a \ 1 \times j \text{ vector that represents the value of ideal type j on attribute j},
X_o = a \ 1 \times j \text{ vector that represents the value of ideal type o on attribute j}.

W = a \ j \times j \text{ diagonal matrix that represents the theoretical importance of attribute j to ideal type i}.

A critical part of this measure is the weighting applied to each element. Our approach here, in the absence of any strong logic to the contrary, was to give equal weighting to each of the four parts of the structural profile (namely, governance structure, activities, networks of relationships, and management systems).

Once distance measures had been created between the unit and all four venture unit types, we allocated the unit to the venture type it was closest to. This was done in two ways, according to: (a) the “strategic profile” of the venture unit (i.e. locus of opportunity, exploration versus exploitation), and (b) the “structural profile” of the venture unit (i.e. governance structure, activities, network of relationships, management systems). “Fit” measures were then obtained for each CV unit along these two profiles by reversing the applicable distance score (as per Doty et al., 1993).

**Operationalization of Variables**

**Strategic profile.** To measure the venture unit’s strategic objectives, we developed a set of questions relating to the two dimensions of the framework. Three questions were concerned with the locus of opportunity. Specifically, respondents were asked to rate the importance of various sources of new ideas and business proposals: (1) employees inside the corporation; (2) venture capitalists, (3) others, directly from outside the corporation (1 = not at all important, 5 = extremely important). The first of these represented internal locus of opportunity, the second and third represented external locus of opportunity.
Four questions were concerned with the dimension of exploration vs. exploitation. These questions were used individually in the development of the ideal type profiles. Specifically, respondents were asked to rate the extent to which the venture unit invested in new business ideas to: (1) promote organic growth, (2) learn from them and develop strategic relationships, (3) spin them out as separate businesses, (4) generate financial returns (1 = never, 2 = only in exceptional cases, 3 = occasionally, 4 = frequently, 5 = almost always). The former two indicated a relative emphasis on exploration, the latter two indicated a relative emphasis on exploitation.

**Autonomy.** Respondents were asked to indicate who made decisions regarding the investment activities of the CV unit, selecting (a) “decision made exclusively by venture unit managers”, (b) “decision made with ratification by or consultation with corporate board/executives”, or (c) “decision made primarily by corporate board/executives” for each of 7 listed activities. The activities were (1) seed investment in a new business idea (<$100,000); (2) investment of $100,000 to $1 million in a new business; (3) investment of $1 million to $5 million in a new business; (4) investment of more than $5 million in a new business idea; (5) trade sale of a venture business; (6) closure/termination of a venture business; (7) decision to pursue IPO for venture business (Cronbach’s alpha = .92).

**Deal syndication.** The extent to which a corporate venture unit engaged in the syndication of deals as a regular practice was examined through two questions asking (a) the percentage of equity held by the unit in a “typical” investment project (100%, majority stake, minority stake, small stake <15%), and (b) the number of other equity partners (including VCs and other companies) in a typical investment project (>2, 2, 1, 0). The mean of responses to the 2 items constituted the measure (Cronbach’s alpha = .74).
**Venture unit activities.** To assess the relative focus on different activities in the venture unit, we developed a set of questions asking about two specific areas: (1) building and developing the ventures in the unit, and (2) selecting and exiting from existing ventures and investments. Respondents were asked to indicate the extent to which they undertook each activity on a scale of 1-5 (where 1 = never, 2 = only in exceptional cases, 3 = occasionally, 4 = frequently, 5 = almost always). Exact wording of the items was as follows: (a) identifying/seeking out business ideas in which to invest, (b) assessing and selecting which ideas to invest in and which not to, (c) helping to negotiate the exit strategy for portfolio companies, (d) networking with other parts of the corporation to develop support and awareness of our ventures [together forming selecting and exiting, alpha= .77]; and (e) working with individuals to develop their ideas, (f) working with individuals to develop and commercialise their plans, and turn them into viable businesses [together forming building, alpha= .90].

**Contact with venture capitalists.** Respondents were asked to indicate how frequently they communicated with: (1) Partner VC companies; (2) Other companies or individuals in the VC community; (3) CV units in other companies. The response format was as follows: 1 = daily, 2 = weekly, 3 = monthly, 4 = rarely, 5 = never, and “not applicable”. The measure constituted the mean score per unit on the three items (Cronbach’s alpha = .82).

**Contact with corporate executives.** Respondents were asked to indicate how they communicated with: (1) senior executives in the corporate parent you report directly to, (2) other senior executives in the corporate parent/head office, (4) technical/R&D people in the corporate business units/divisions, and (3) front line/middle management in corporate business units/divisions. The response format was as follows: 1 = daily, 2 = weekly, 3 = monthly, 4 =
rarely, 5 = never, and “not applicable”. The measure constituted the mean score per unit on the four items (Cronbach’s alpha = .77).

**Use of financial measures.** This variable indicated the extent to which venture unit performance was based on the financial measures of success typically associated with venture capital operations. Respondents were asked to what extent they used the following measures of performance: (1) internal rate of return (IRR), and (2) financial gain of portfolio companies. Responses were along a 5-point Likert scale, anchored on the left-hand side by 1 (“not at all”) and on the right by 5 (“to a great extent”) (Cronbach’s alpha = .75).

**Use of equity-based compensation.** This variable captured the extent to which a CV unit compensated its managers through variable pay related to the shareholder value of the unit’s investment portfolio. Specifically, CV unit managers were asked to what extent they used the following: (1) carried interest in portfolio businesses; (2) equity and/or options in portfolio companies; and (3) straight corporate salary (reverse-scored). The response format for each item was as follows: 1 = never, 2 = only in exceptional cases, 3 = occasionally, 4 = frequently, 5 = almost always (Cronbach’s alpha = .61).

**Venture unit performance.** Respondents were asked to assess the performance of the venture unit on multiple dimensions. We then factor-analysed the responses to develop three distinct measures of performance, concerned with (a) financial performance, i.e. the extent to which the venture unit is delivering against financial goals, (b) technological awareness, i.e. the extent to which the venture unit is developing new and valuable technologies for the parent company, and (c) entrepreneurial capability, i.e. the extent to which the venture unit is increasing the entrepreneurial capability of the parent company. Specific measures are as follows:
(1) **Financial performance:** Financial performance measured CV unit managers’ perceptions of how well the unit had delivered on three key financial objectives identified within the exploratory interviews. Managers were asked to rate the financial performance of their unit against expectations over the past 3 years (or its period of operation, if shorter) on 3 items, namely: (1) financial return to the corporation (e.g. IRR); (2) contribution to top-line growth; and (3) increased valuation of corporate stock. Response options along a 5-point scale were 1 = below expectation, 3 = equal to expectation, and 5 = above expectation (Cronbach’s alpha = .72).

(2) **Technological performance:** Along the format described above, this scale constituted the mean response of CV unit managers to the following items: (1) creation of breakthrough technology for the corporation; (2) investment in disruptive technologies that potentially cannibalize existing technologies; and (3) development of strategic relationships with external suppliers/customers/competitors (Cronbach’s alpha = .74).

(3) **Entrepreneurial performance:** As per the above two measures, CV unit managers were asked how well their venture unit had delivered on a set of objectives. The scale constitutes the mean value of responses to the following items: (1) creation of stronger entrepreneurial culture; (2) attraction of talented new employees; and (3) retention and motivation of our employees (Cronbach’s alpha = .75).

**Survival status.** This categorical measure – garnered from the follow-up telephone calls in 2003 to the sample of CV units—recorded whether the CV representative classified the unit as active, inactive, or “other” (which were excluded from the statistical analysis).
Control variables. Three control variables were used in the analyses: age of the venture unit (in years), number of full-time employees in the unit, and a dummy variable (‘region’) indicating whether or not the venture unit was headquartered in the United States.

FINDINGS

Hypothesis 1 was concerned with the alignment between the structural and strategic profiles of the CV units. Following Doty et al. (1993), we tested this hypothesis via a maximum likelihood log linear analysis (using a Poisson distribution). This test (Likelihood Ratio \(= 28.67, p = .001\)) confirmed that, in line with our expectations, the strategic and structural profile dimensions are not independent of each other. In other words, the CV units that most closely approximate the internal exploiter strategic profile tend also to most closely approximate the internal exploiter structural profile, and so on for the other three ideal types.

Table 3 displays the contingency table showing the frequency with which the CV units in the sample were associated with the 4 strategic and structural profiles. Examining the table, it is evident that there is a moderate level of convergence between the structural and strategic profiles of the venture units. For example, of the 30 that claim to be external explorer units, 20 have structural configurations that are congruent with the external explorer structural profile, according to ideal type ratings. In total, 40\% of the CV units have aligned strategic and structural profiles, which is perhaps rather less than we would have anticipated, a point we return to in the discussion. The convergence between strategic and structural profiles is strongest for those units resembling our exploration types (i.e. the internal explorer and external explorer
types). The internal exploiter and external exploiter types show weaker convergence between strategic and structural profiles.

To explore in greater detail the structural configurations associated with each of the four ideal types, we conducted supplementary post-hoc analysis around the typology. Specifically, we were interested to explore where the actual differences in structural elements between the unit types lay. Accordingly we ran ANCOVA analyses (controlling for the age of the venture unit and the number of venture unit staff; refer to Table 4) to assess whether the unit types display significant differences along individual elements of the structural profile. While this does not provide a test of hypothesis 1 – which is posited at the level of the configurational profile (i.e. a holistic combination of individual structural elements) rather than at that of individual structural attributes - these tests do indeed demonstrate significant differences between the types on six of the eight structural variables. Thus, the types appear to differ in both their composite configurations as well as in many of the individual variables that contribute (potentially in a non-additive manner; Meyer et al., 1993) towards each structural configuration.

Hypotheses 2a and 2b were concerned with the cross-sectional performance of the venture unit. Table 5 shows the results of ordinary least squares regression analysis of fit measures on three dependent variables examining different dimensions of venture unit performance (i.e. financial, technological and entrepreneurial dimensions of performance).

In Table 5 the key independent variables are (1) the proximity (or fit) of the venture unit to the closest ideal strategic profile, and (2) the proximity of the venture unit to the closest ideal structural profile. It is evident that structural fit is most closely associated with enhanced venture unit performance: the structural fit coefficient is significant at $p < .10$ in all models in Table 5. What this implies, in practice, is that the greater the alignment between the elements of a unit’s
structural profile, the better the unit’s performance. This is what we would expect, and it provides support for the central proposition of this study. Interestingly though, the alignment around strategic objectives does not have any discernible impact on venture unit performance. The results suggest that, to some degree, a CV unit’s choice of which strategic objectives to pursue is less important than gaining coherence among the elements of its internal structure.

Support is also found for hypothesis 2b (the corollary to hypothesis 2a), namely that there are no significant differences in performance across the four venture unit types. Specifically, a series of ANCOVA tests (controlling for age of venture unit and number of employees) found that ideal type membership was not significantly associated with venture unit financial performance \( F = 1.301, p = .263 \), technological performance \( F = .413, p = .526 \) or entrepreneurial performance \( F = .002, p = .966 \).\(^4\) Taken together, we therefore have evidence that (a) ideal type fit (along structural dimensions) is important to explaining venture unit performance, and (b) there is equifinality of outcomes across different ideal types.

Finally, hypotheses 3a and 3b examined the issue of venture unit survival. Here we developed two arguments: one relating to the fit of units with ideal type profiles (hypothesis 3a); the other relating to whether the surviving units are exploitation- or exploration-oriented (hypothesis 3b). We ran binary logistic regressions (refer to Table 6) to test whether fit with an ideal type or membership of an exploitation-oriented venture unit had a bearing on subsequent survival. We found, consistent with hypothesis 3b, but contrary to hypothesis 3a, that the survival of CV units appears to be associated with membership of exploitation-oriented venture

---

\(^4\) These statistics resulted from ANCOVAs using structural profile to classify the venture units into types. They are consistent with the findings of tests using strategic profile to classify the venture units.
types (especially where structural profile is used to classify the venture units into types) and not with ideal type fit.

The higher likelihood of survival amongst exploitation-oriented units is also demonstrated in counts of active and inactive units: 13 of 45 external explorer units, and 3 of 7 internal explorer units, have closed over the study period, whereas the equivalent figures for the internal exploiter and external exploiter types are merely 2 of 23 and 1 of 10\(^5\). Contingency-based arguments thus appear more reflective of longitudinal venture unit performance than do configurational “fit” arguments.

**DISCUSSION AND CONCLUSIONS**

The results offered some support for all our propositions: Corporate venture units develop structural profiles that are to some extent aligned with their strategic objectives; greater internal alignment around particular structural profiles is associated with higher cross-sectional performance; and exploitation-oriented venture units tend to survive for longer than exploration-oriented units. However, we should also be clear that the significance of the findings was fairly modest. Hypothesis 1 was supported, but the number of venture units whose structural profiles matched their strategic profiles was less than half (only 40 percent of units). And in terms of Hypothesis 2, the level of fit with the strategic profiles of the four ideal types showed no sign of being important. It is worth exploring both these points in some detail, before broadening our discussion to consider the wider implications of our research for corporate venturing and strategic management.

---

\(^5\) These analyses classify CV units on the basis of their nearest structural profile. The equivalent figures where strategic profile is used to classify venture units are: 5 / 34 for Ecosystem Venturing units; 10 / 26 for Innovation Venturing; 0 / 3 for Venture Harvesting units; and 6 / 27 for Private Equity units.
An important starting point, in terms of making sense of the results, is that corporate venturing is a relatively immature activity. While there were previous waves of venturing in the 1970s and 1980s, the majority of the current crop of venture units were established with limited attempts to learn from prior waves (Chesbrough, 2002), so there was a high level of experimentation in terms of both the objectives they pursued, and the structural profiles they adopted. One common approach in the late 1990s was to adopt practices that had worked in the field of Venture Capital (Brody & Ehrlich, 1998; Chesbrough, 2001), but our sense from the research interviews is that some of this learning was inappropriate, and that VC-like practices, such as the use of carried interest for venture unit managers, were used somewhat indiscriminately – in both venture units where they were appropriate, as well as some where they were not. This helps to explain the modest support for Hypothesis 1.

A second observation, again drawn from our research interviews, is that many venture units were formed without clear objectives. It was not unusual, for example, for a single unit to take on internal explorer and internal exploiter roles for their parent company, but without any attempt to segment the two activities or the structures, systems or people responsible for each. The presence of these hybrid units helps to explain the weak fit between structural and strategic profiles. And it also helps to explain the mixed findings for Hypothesis 2. Given blurred objectives, the venture unit could still perform well by creating an internally-consistent structural profile that allowed it to at least deliver on some of those objectives. But it could not find a way of satisfactorily delivering on all of those objectives simultaneously. For example, Philips’ corporate venture unit was largely successful in its external explorer activities, but struggled enormously to deliver on its internal exploiter objectives.
This complex picture may be expected to gradually resolve itself over time, as the poorer-performing units learn from and adopt the practices of the higher-performance units. However, as Hypothesis 3 showed, there is also another force at work in corporate venturing, namely the likelihood that changes in strategic logic in the corporate parent will result in the venture unit being terminated, often with little regard for its current level of performance (Fast, 1979, 1981). The fragile nature of corporate venturing (Burgelman, 1984; Rind, 1981), and the lack of learning from prior waves of activity, means that we do not see as much convergence in structural profiles as is likely to be the case in other organizational arenas.

**Broader Implications for Theory and Practice**

It is worth considering the broader implications of this research for the fields of corporate entrepreneurship and strategic management. Our major theoretical contribution was to show how the strategic logics of exploration and exploitation could provide a useful way of discriminating between different types of CV units, and, furthermore, between different forms of business development. Traditionally, business development activities such as corporate venturing are thought of as focusing on exploration (i.e. on the creation of novelty), but a more holistic approach, as adopted here, shows that in fact there can be a significant exploitation component to business development. Indeed, both the internal exploiter and external exploiter venturing roles are established *primarily* as vehicles for the exploitation of existing assets and capabilities, though inevitably they also possess exploration-oriented elements.

Two further points should be made on the exploration vs. exploitation dimension. First, we find confirming evidence for the well-established proposition that exploitation tends to drive out exploration (March, 1991). That is, regardless of the venture unit’s performance, we observe
that the survival rate of exploitation-oriented units is greater than that of exploration-oriented units. The reasons for this are well understood. But it nonetheless creates an interesting practical challenge for the managers of corporate venture units who are seeking to defend their record in the face of the often-changing demands of their corporate parents. There are no simple ways of doing this: it involves emphasising the long-term value such a unit can provide to the corporation, building networks of supporters in the parent company, and showcasing success stories. Ultimately, however, it is the responsibility of parent company executives to manage the tension between exploration and exploitation. Plentiful examples exist of where an economic downturn or a change in corporate strategy has resulted in the venture unit being closed down, despite good evidence that it was performing well (Fast, 1979, 1981).

The second point, which will require further research before it can be fully addressed, is that the distinction between exploration and exploitation put forward here is not clear-cut in practice. Indeed, our research suggests that all venture units engage in a combination of exploration- and exploitation-oriented activities. For example, internal explorer units are primarily concerned with exploration, but unless their ventures are able to show signs of exploiting their ideas or opportunities within 2-3 years, they cannot expect to survive. Internal exploiter units, in contrast, are geared towards exploitation, but in order to deliver on that objective they have to create new sources of value first. This observation hints at an important point, namely that exploration and exploitation are better understood, at least in the context of business development, as higher-level strategic objectives, rather than as discrete activities. The four different types of venture unit described in this research often look quite similar to one another in close-up, because they all engage in such activities as investing, nurturing, networking, and exiting. But, on closer inspection, the relative focus on each activity varies, and
the internal management processes that shape executive decision-making are often dramatically different. Exploration and exploitation are therefore meta-level objectives that define how priorities are set and that determine the relative emphasis on different activities in the venture unit.

**Limitations and Extensions**

Finally, a number of limitations of the study should be acknowledged. These include the cross-sectional nature of the survey measures of venture unit performance; the relatively small sample size; and the reliance on self-report data in the absence of financial indicators of the direct and indirect impacts of corporate venture units on their parent organizations. Attempts have been made, where possible, to remedy some of these weaknesses, through for example the use of CV unit survival data and secondary data on CV units’ investment history. The nature of corporate venturing makes it, however, very difficult to obtain definitive data on performance, and the relatively small number of corporations involved in this sphere of activity limits the size of sample that can be practically be obtained.

There are several areas where this research could be usefully extended. One is to do a further longitudinal analysis of how venture unit activities and roles evolve over time. During the research interviews, we encountered several cases of venture units that had changed types, e.g. from internal explorer to external explorer. It would be very interesting to see if any general patterns emerge, such as exploration-oriented units reinventing themselves as exploitation-oriented units. A second interesting extension would be to examine the nature of business development more generally in terms of its relative focus on exploration vs. exploitation and the locus of opportunity. Figure 1 offered an initial perspective on how various activities might fit
into our research framework, but there is considerable scope for taking this further, by looking at
the activities, structures and systems used in each, and by researching the conditions under which
they are able to achieve their short-term and long-term objectives.

Conclusions

To conclude, this paper sought to build a typology of Corporate Venture units that was
both theoretically-grounded and empirically rigorous. Building on configuration theory, we
showed that the internal alignment of venture unit structures and activities was important for
performance, while at the same time no real performance existed differences across types. And
building on March’s (1991) distinction between exploration and exploitation, we showed that
survival after two years could be attributed in part to exploitation driving out exploration. While
the findings of this research are specific to the context of corporate venturing, it is hoped that the
ideas and methods used can find broader applicability to other aspects of business development
in large corporations.

REFERENCES

Badaracco, J. L. Jr. 1991. The knowledge link: How firms compete through strategic
Birkinshaw, J. 1997. Entrepreneurship in multinational corporations: The characteristics of
applicability of venture capital models. Academy of Management 2003 Best Paper
Proceedings.
of the art and the prospects for the future. London Business School: Centre for the Network
Economy.


Schildt, H., Mauda, M. V. J., & Keil, T. *Explorative and exploitative learning from external corporate ventures*. Forthcoming in Entrepreneurship Theory & Practice.


FIGURE 1

A Framework for Corporate Venturing Units

<table>
<thead>
<tr>
<th>Exploration</th>
<th>Strategic Logic</th>
<th>Exploitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Explorer</td>
<td>Internal Exploiter</td>
<td>External Exploiter</td>
</tr>
<tr>
<td>External Explorer</td>
<td>External Exploiter</td>
<td>Internal Exploiter</td>
</tr>
</tbody>
</table>

Locus of Opportunity:
- Internal
- External
FIGURE 2
Configuration Framework

Strategic Objectives
- Locus of Opportunity
- Exploration vs. Exploitation

Structural Profile
- Governance Structure
- Activities of unit
- Network of relationships
- Management systems

Performance
- Cross-sectional
- Longitudinal
### TABLE 1: Correlation Matrix (Whole Sample)

| Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----------|------|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| **Dependent Variables** | | | | | | | | | | | | | | | | | | | | | |
| 1. Financial performance | 3.06 | .61 | .37** | | | | | | | | | | | | | | | | | | | |
| 2. Technological performance | 3.16 | .62 | .37** | | | | | | | | | | | | | | | | | | | |
| 3. Entrepreneurial performance | 3.19 | .53 | .10 | 16 | | | | | | | | | | | | | | | | | | | |
| 4. Survival status | - | - | .18 | 21 | 12 | | | | | | | | | | | | | | | | | | | |
| **Fit Variables** | | | | | | | | | | | | | | | | | | | | | |
| 5. Fit with nearest strategic profile ideal type | -7.41 | 1.93 | .14 | .13 | -.10 | -.03 | | | | | | | | | | | | | | | | | | | |
| 6. Fit with nearest structural profile ideal type | -11.16 | 2.97 | .28** | .37** | .32** | .14 | .17 | | | | | | | | | | | | | | | | | | | |
| **Independent Variables** | | | | | | | | | | | | | | | | | | | | | |
| Strategic Profile Variables | | | | | | | | | | | | | | | | | | | | | |
| 7. Focus on internal ideas | 4.75 | 1.77 | -.07 | -.14 | .04 | .04 | -1.18 | -1.10 | | | | | | | | | | | | | | | | | |
| 8. Focus on external ideas | 5.01 | 1.19 | .00 | .05 | -.12 | .16 | -.29** | -.24** | -.23* | | | | | | | | | | | | | | | | | |
| 9. Importance of organic growth | 2.11 | 1.27 | .02 | 19 | .09 | -.21** | .31** | .09 | .26** | .24** | | | | | | | | | | | | | | | | |
| 10. Importance of spin-outs | 2.26 | 1.09 | .19 | 16 | .22 | .06 | .11 | .20 | .23** | -.28** | -.39** | | | | | | | | | | | | | | | |
| 11. Importance of learning from start-ups | 3.61 | 1.43 | -.03 | .02 | -.16 | .08 | -.39** | -.29** | -.06 | .39** | -.27** | -.12 | | | | | | | | | | | | | |
| 12. Importance of financial gain from start-ups | 2.28 | 1.59 | .12 | .065 | .02 | .08 | .04 | .09 | -.26** | .21* | -.34** | -.24* | -.19 | | | | | | | | | | | | | |
| Structural Profile Variables | | | | | | | | | | | | | | | | | | | | | |
| 13. Autonomy of unit | 2.00 | .55 | .28* | 10 | .179 | 26* | -.06 | .38** | -.13 | .15 | -.41** | -.06 | .10 | .23* | | | | | | | | | | | |
| 14. Syndication of investments | 3.17 | .83 | .07 | .03 | -.23* | 15 | -.26* | -.38** | -.26* | .39** | -.45** | -.32** | .44** | .20 | .10 | | | | | | | | | | |
| 15. Selecting and exiting ventures | 4.34 | .69 | .14 | 21 | -.00 | .14 | -.09 | .02 | -.21* | .31** | -.18 | -.06 | .17 | .25* | .17 | .25 | | | | | | | | | |
| 16. Building ventures | 2.86 | 1.16 | .06 | .05 | -.16 | -.10 | .06 | .24* | .34** | -.23* | .35** | -.41** | .21* | -.10 | -.22* | -.48** | .16 | | | | | | | | |
| 17. Relationships with VC's | 3.28 | .86 | .17 | .26* | .07 | .25* | -.10 | -.10 | -.22* | .36** | -.31** | -.26* | .28** | .27** | .08 | .41** | .37** | .17 | | | | | | |
| 18. Relationships with corporate executives | 3.43 | .77 | .01 | .16 | .05 | .20* | -.03 | .12 | .02 | .02 | .03 | -.02 | .18 | -.06 | -.03 | .08 | .12 | -.02* | .02 | | | | | |
| 19. Focus on measures of financial performance | 5.32 | 1.71 | .27* | .20 | .24* | .10 | -.10 | .33** | -.05 | .15 | -.13 | .15 | .067 | 28** | .32** | .00 | .30** | .08 | .18 | .15 | | | | |
| 20. Use of equity-based compensation for executives | 1.97 | 1.06 | .09 | .12 | .16 | .10 | -.11 | .18 | -.07 | .10 | -.21* | .01 | -.02 | 35** | .38** | .04 | .31** | .04 | .06 | .35** | .13 | | | | |

Note: Two-tailed Pearson correlation coefficients are reported.  
* p < .05  ** p < .01
### TABLE 2

**Reliabilities and Rater Estimates of Corporate Venture Unit Ideal Types**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Scale Reliabilities</th>
<th>IEt</th>
<th>EEr</th>
<th>IEr</th>
<th>EEt</th>
<th>Inter-rater Reliabilities&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Profile</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Focus on internal ideas, 1-7 scale</td>
<td>Single item</td>
<td>7.00</td>
<td>3.00</td>
<td>6.00</td>
<td>2.00</td>
<td>0.68</td>
</tr>
<tr>
<td>2. Focus on external ideas, 1-7 scale</td>
<td>Formative, 2-item scale</td>
<td>2.00</td>
<td>6.00</td>
<td>3.00</td>
<td>7.00</td>
<td>0.85</td>
</tr>
<tr>
<td>3. Importance of organic growth, 1-5 scale</td>
<td>Single item</td>
<td>1.00</td>
<td>5.00</td>
<td>5.00</td>
<td>1.00</td>
<td>0.58</td>
</tr>
<tr>
<td>4. Importance of spin-outs, 1-5 scale</td>
<td>Single item</td>
<td>5.00</td>
<td>1.00</td>
<td>1.00</td>
<td>3.00</td>
<td>0.75</td>
</tr>
<tr>
<td>5. Importance of learning from start-ups, 1-5 scale</td>
<td>Single item</td>
<td>1.50</td>
<td>5.00</td>
<td>3.00</td>
<td>2.00</td>
<td>0.86</td>
</tr>
<tr>
<td>6. Importance of financial gain from start-ups, 1-5 scale</td>
<td>Single item</td>
<td>2.50</td>
<td>2.50</td>
<td>1.00</td>
<td>5.00</td>
<td>0.42</td>
</tr>
<tr>
<td><strong>Structural Profile</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Autonomy of unit, 1-3 scale</td>
<td>.92</td>
<td>2.50</td>
<td>2.00</td>
<td>1.50</td>
<td>2.70</td>
<td>0.51</td>
</tr>
<tr>
<td>8. Syndication of investments, 1-4 scale</td>
<td>.74</td>
<td>2.80</td>
<td>2.80</td>
<td>1.50</td>
<td>3.60</td>
<td>0.59</td>
</tr>
<tr>
<td>9. Selecting and exiting ventures, 1-5 scale</td>
<td>.77</td>
<td>4.50</td>
<td>3.50</td>
<td>4.00</td>
<td>3.50</td>
<td>0.61</td>
</tr>
<tr>
<td>10. Building ventures, 1-5 scale</td>
<td>.90</td>
<td>4.00</td>
<td>3.00</td>
<td>5.00</td>
<td>2.00</td>
<td>0.8</td>
</tr>
<tr>
<td>11. Relationships with VCs, 1-5 scale</td>
<td>.82</td>
<td>4.00</td>
<td>3.50</td>
<td>2.50</td>
<td>5.00</td>
<td>0.63</td>
</tr>
<tr>
<td>12. Relationships with corporate executives, 1-5 scale</td>
<td>.77</td>
<td>3.50</td>
<td>4.00</td>
<td>5.00</td>
<td>2.00</td>
<td>0.55</td>
</tr>
<tr>
<td>13. Focus on measures of financial performance, 1-7 scale</td>
<td>.75</td>
<td>6.00</td>
<td>4.50</td>
<td>4.50</td>
<td>6.00</td>
<td>0.43</td>
</tr>
<tr>
<td>14. Use of equity-based compensation for executives, 1-5 scale</td>
<td>.61</td>
<td>2.50</td>
<td>2.50</td>
<td>1.25</td>
<td>4.00</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Note:
IEt = Internal Exploiter unit, EEr = External Explorer unit, IEr = Internal Explorer unit, EEt = External Exploiter unit.

<sup>1</sup> Inter-rater reliabilities are the standard deviation of the ratings by the 5 expert raters, averaged across the 4 venture unit types.
**TABLE 3**

Frequency Distribution of CV Units by Strategic and Structural Profiles

<table>
<thead>
<tr>
<th>Strategic Profile</th>
<th>Structural Profile</th>
<th>IEt</th>
<th>EEr</th>
<th>IEr</th>
<th>EEt</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEt</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>EEr</td>
<td>5</td>
<td>20</td>
<td>0</td>
<td>5</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>IEr</td>
<td>4</td>
<td>15</td>
<td>7</td>
<td>2</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>EEt</td>
<td>9</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>45</td>
<td>7</td>
<td>10</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>

Note: IEt = Internal Exploiter unit, EEr = External Explorer unit, IEr = Internal Explorer unit, EEt = External Exploiter unit.
TABLE 4

Mean Ratings of Elements of Structural Profile for Venture Unit Types

<table>
<thead>
<tr>
<th>Variables (and Response Scales)</th>
<th>IEt</th>
<th>EEr</th>
<th>IEr</th>
<th>EEt</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy of unit, 1-3</td>
<td>2.42</td>
<td>1.74</td>
<td>1.46</td>
<td>2.67</td>
<td>27.37***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(VH &gt; EV, IV; PE &gt; EV)</td>
</tr>
<tr>
<td>Syndication of investments, 1-4</td>
<td>3.03</td>
<td>3.33</td>
<td>1.50</td>
<td>3.70</td>
<td>17.55***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(EV, PE, VH &gt; IV)</td>
</tr>
<tr>
<td>Selecting and exiting ventures, 1-5</td>
<td>4.57</td>
<td>4.24</td>
<td>4.07</td>
<td>4.45</td>
<td>1.68</td>
</tr>
<tr>
<td>Building ventures, 1-5</td>
<td>3.41</td>
<td>2.59</td>
<td>4.43</td>
<td>1.95</td>
<td>12.01***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(IV, VH &gt; EV, PE)</td>
</tr>
<tr>
<td>Relationships with VCs, 1-5</td>
<td>3.57</td>
<td>3.29</td>
<td>2.26</td>
<td>3.48</td>
<td>4.79**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(EV, PE, VH &gt; IV)</td>
</tr>
<tr>
<td>Relationships with corporate executives, 1-5</td>
<td>3.41</td>
<td>3.53</td>
<td>3.75</td>
<td>3.16</td>
<td>.997</td>
</tr>
<tr>
<td>Focus on measures of financial performance, 1-7</td>
<td>6.43</td>
<td>4.89</td>
<td>4.79</td>
<td>5.80</td>
<td>5.69***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(VH &gt; EV)</td>
</tr>
<tr>
<td>Use of equity-based compensation for executives, 1-5</td>
<td>2.57</td>
<td>1.71</td>
<td>1.26</td>
<td>2.43</td>
<td>5.51**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(VH &gt; EV, IV)</td>
</tr>
</tbody>
</table>

Note:
IEt = Internal Exploiter unit, EEr = External Explorer unit, IEr = Internal Explorer unit, EEt = External Exploiter unit.
Tests are two-tailed.
Post-hoc comparisons employ the Scheffe test.
+ p < .10
* p < .05
** p < .01
*** p < .001
## TABLE 5

**OLS Regression Analysis: Impact of Fit with Ideal Type on Performance**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Financial performance</th>
<th>Technological Performance</th>
<th>Entrepreneurial Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit with nearest strategic profile ideal type</td>
<td>.003</td>
<td>.031</td>
<td>-.086</td>
</tr>
<tr>
<td>Fit with nearest structural profile ideal type</td>
<td>.125+</td>
<td>.213**</td>
<td>.125*</td>
</tr>
<tr>
<td>Venture unit age (control)</td>
<td>.157**</td>
<td>.007</td>
<td>-.090+</td>
</tr>
<tr>
<td>Number of employees (control)</td>
<td>.057</td>
<td>.096+</td>
<td>.059</td>
</tr>
<tr>
<td>Region (control)</td>
<td>-.210</td>
<td>-.327*</td>
<td>.111</td>
</tr>
<tr>
<td>R² (adjusted)</td>
<td>.17 (.11)</td>
<td>.20 (.13)</td>
<td>.15 (.08)</td>
</tr>
<tr>
<td>F (significance)</td>
<td>2.60*</td>
<td>2.98*</td>
<td>2.10*</td>
</tr>
</tbody>
</table>

Note:
Figures in columns are standardized Beta Coefficients.
Tests are two-tailed.
+ p < .10
* p < .05
** p < .01
*** p < .001
### TABLE 6

Logistic Regression: Variation in Venture Unit Survival

<table>
<thead>
<tr>
<th>Variables</th>
<th>Survival Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit with nearest strategic profile ideal type</td>
<td>-.241</td>
</tr>
<tr>
<td>Fit with nearest structural profile ideal type</td>
<td>.183</td>
</tr>
<tr>
<td>Membership of exploitation-oriented unit</td>
<td>1.848**</td>
</tr>
<tr>
<td>Venture unit age (control)</td>
<td>.084</td>
</tr>
<tr>
<td>Number of employees (control)</td>
<td>-.136</td>
</tr>
<tr>
<td>Region (control)</td>
<td>.929*</td>
</tr>
</tbody>
</table>

-2 Log likelihood: 84.07
Hosmer and Lemeshow chi-squared ratio: 17.220*

_{R}^2 = .39

**Note:**

Figures in columns are Beta Coefficients based on standardized independent variables.
Tests are two-tailed.
Nagelkerke _R^2_ statistic reported.

+ p < .10
* p < .05
** p < .01
*** p < .001