

STRATEGY-ORGANIZATION CONFIGURATIONS IN CORPORATE VENTURE UNITS: IMPACT ON PERFORMANCE AND SURVIVAL

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Forthcoming in *Journal of Business Venturing*. December 2007.

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 versus exploitation and (b) the internal versus external locus of opportunity they pursue. Following configurations logic, we argue that the structures and systems used by venture units will be a function of their strategic role, and that their performance will be higher when internal elements are aligned. We also argue that exploitation-oriented units will survive for longer than exploration-oriented units. Using primary data collected on 95 venture units during 2001-2003, we use configurational analyses to test and find support for our hypotheses.

EXECUTIVE SUMMARY

Despite the decline in private equity investment following the early-2000 collapse in the dot-com sector, corporate venturing continues to be an important activity among large firms. It is, however, an activity fraught with complexity - including a rather bewildering array of contemporary corporate venturing forms - as well as one beset with many basic questions remaining still unanswered. One fundamental set of questions pertains to the performance and survival of different types of corporate venture units. In this paper we make an attempt to address this neglected research domain by investigating whether different types of corporate venture units do indeed demonstrate differences in performance and survival rates.

We draw on well established concepts in the strategic management and corporate entrepreneurship literatures to identify 4 types of corporate venture unit. We categorize venture units based on two dimensions that relate to their *strategic profile*: (a) whether the new venture ideas lie *inside* or *outside* the formal boundaries of the firm (i.e. the locus of opportunity), and (b) whether the venture unit focuses primarily on *exploring* to develop new assets and capabilities for its parent firm, or whether it focuses on *exploiting* the existing assets and capabilities of the parent firm (i.e. the strategic logic of the venture unit). Hence, we identify four types of corporate venture unit:

- 1) **Internal explorer** units invest in opportunities that arise inside the parent firm and actively nurture and develop these so that, over time, they become sources of growth for the firm.
- 2) **Internal exploiter** units attempt to monetize the existing assets of the parent firm (such as patents, technologies, raw ideas and managerial talent) within a short time frame, frequently by spinning them out as new businesses.
- 3) **External explorer** units invest in external companies (typically independent start-ups) predicted to have growth potential in domains anticipated to be of future strategic importance to the parent firm.
- 4) **External exploiter** units invest in external companies with a view to generating financial returns through leveraging the existing assets of the parent firm.

Using interview and survey data on corporate venture units gathered during the period 2001-2003, we find that each of the four venture unit types is associated with a unique *organizational profile* – that is, with a distinctive network of relationships, venturing activities, and management systems. Each organizational profile is aligned with achieving the strategic challenges of that particular venture unit type.

Turning to our research question of whether the different venture unit types perform differently and have different survival rates, we find that two distinctive dynamics are at play for performance and survival.

For the *performance* of corporate venture units, the **fit** of the venture unit's strategic profile and, particularly, the various elements of its organizational profile, are critical to its short-to medium-term performance. In other words, no single venture unit type performs best – even when examined across a stringent performance definition which includes technological, financial as well as entrepreneurial capability dimensions – rather, the better aligned the elements of its

strategic profile and (most importantly) the elements of its organizational profile, the better the performance of the venture unit, irrespective of its type. The critical challenges this poses for managers are two-fold: (a) ensuring that a venture unit has clear and consistent strategic objectives, and (b) ensuring that its networks of relationships, venturing activities, and management systems are internally-consistent to enable the achievement of its strategic objectives.

For the *survival* of corporate venture units, the **type** of the unit is critical (and not fit with any ideal strategic or organizational profile). Specifically, venture units that are geared towards the exploitation of parent firm assets and capabilities – i.e. the internal exploiter and external exploiter venture types - tend to survive longer. Units that focus on exploratory roles are at increased risk of early termination, regardless of their performance track-records.

Why might this be the case? Exploitation-oriented activities tend to drive out exploration-oriented activities both because exploration-oriented activities are more uncertain in their outputs, and because they operate on a longer time horizon than exploitation-oriented activities. Hence, corporate executives may find the performance of exploration-oriented units more difficult to assess objectively in the short-term than that of their exploitation-oriented counterparts. This suggests a difficult tension to be managed at the corporate level: balancing exploration and exploitation, given the structural imbalances in the predictability and timing of their outputs. For the managers and staff of exploratory venture units, the challenge is that much more pressing and immediate. Defending their records in the face of the often-changing demands of their corporate parents likely 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.

INTRODUCTION

Corporate venturing has been a topic of scholarly and practitioner interest since the 1960s (Fast, 1981; Rind, 1981; von Hippel, 1977), although both actual corporate venturing practice and scholarly research efforts have been characterized by waves of heightened then waning interest (Birkinshaw et al, 2002; Chesbrough, 2000). A fairly 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. 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 (Birkinshaw & Hill, 2003; Brody & Ehrlich, 1998; Chesbrough, 2000, 2002).

However, despite the progress that has been made in understanding corporate venturing, two major concerns remain regarding our understanding of CV unit types. First, we have a surprisingly poor understanding of the strategic objectives of corporate venturing units, by which we mean the choices the unit makes about what activities it invests in and for what reasons. Existing typologies tend to focus on operational issues such as the degree of autonomy of the unit vis-à-vis the parent company, or whether venture investments are intermediated or not (Burgelman, 1984; Miles & Covin, 2002). By focusing on these types of organizational or operational matters, there is a risk that researchers are placing the “cart before the horse” and encouraging structural choices to guide strategy.

Second, there is a surprising lack of systematic empirical evidence on the nature of CV units, which limits our ability to develop a solid foundation on which to build subsequent research. This is partly a data problem, by which we mean there is no definitive source of information on the objectives, structures, and activities of corporate venture units. There are good secondary sources of data on corporate venture capital (CVC) units, but these sources provide no information about internal organizational issues and they ignore internal corporate venturing (ICV) units that are typically more focused on internal opportunities. The problem is also partially an analytical one, in that it is extremely difficult to validate the optimum organizational choices that are associated with each different strategic objective a venture unit might take. Previous generations of researchers used contingency theory to examine the “fit” between one aspect of a unit’s internal organization and its externally-focused strategy (e.g. Galbraith, 1973; Lawrence & Lorsch, 1967). More recently, researchers have developed a configurational approach to evaluate the entire set of strategic and organizational choices made by a business unit (Doty & Glick, 1984; Meyer et al., 1993). Despite its complexities as an analytical approach, configurational analysis provides opportunities for important insights that cannot be gained by other methods through its focus on fit across multiple, interactive dimensions of strategy and structure (Miller, 1986, 1996).

This paper attempts to overcome these two major deficiencies in prior research on corporate venturing units. Building on the established traditions of the strategic management literature (Chandler, 1962), we develop and test a typology of corporate venture units that is based around the strategic objectives of those units. We frame our discussion of corporate venturing in terms of the fundamental tension that exists in firms between the need for

exploration-oriented activities and exploitation-oriented activities (March, 1991), as well as in the choice between internal and external sources of opportunities (Miles & Covin, 2002; Sharma & Chrisman, 1999). We then examine organizational aspects of the venture unit, namely the network of relationships it builds with other parties, the activities it pursues and the internal systems it uses to support those activities, in relation to the initial strategic objectives chosen by the unit. Then, in order to test our typology, we adopt a configurational approach which, although very well suited to the complexity of the corporate venturing context, has not previously been employed in a systematic manner in the corporate venturing literature.

The paper makes use of an original data set of 95 venture units (including both CVC and ICV units), incorporating interview and survey data collected over a three-year period. 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 new CV unit typology based on the strategic objectives of the unit. We then derive a number of hypotheses regarding the identification of CV unit types, the configurations of elements that make up those 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

While the term corporate venturing is used in a variety of ways in the literature¹, 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, 1984). 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.

Strategic Classification of Corporate Venture Units

In this section we identify two well-established constructs in the strategic management literature that, taken together, provide insight into fundamental distinctions amongst CV units in a manner that enables sharper discrimination between their strategic and organizational properties. Typically, corporate venturing typologies have focused on the practices and broad motivations of venture units (Burgelman, 1984; Chesbrough, 2002). We believe, in contrast, the most useful typologies are the ones that are built on strategic objectives. For example, consider two well-known typologies in the field of strategic management: Porter's (1980) generic strategies (low cost, differentiation, focus) and Miles and Snow's (1978) strategy types (prospectors, defenders, analyzers), both of which represent the basic choices business units make in how they position themselves in their chosen markets. These choices help business units to make further choices about how they should organize themselves internally to deliver on their chosen objectives. And to the extent that appropriate structures and systems are put in place,

¹ The term "corporate venturing" is sometimes used in a broader sense than ours, to characterize a range of methods of creating new businesses, including alliances, acquisitions and venture capital investments (Keil, 2002, 2004).

superior performance should be achieved (Chandler, 1962; Lawrence & Lorsch, 1967). A recent study by Dushnitsky and Lenox (2006), which highlighted the importance of CVC strategic (versus financial) goals to enhancing value creation by firms, provides further empirical weight to the role strategic objectives play in corporate venturing.

The first dimension in our framework, the *locus of opportunity*, has a well-established tradition in corporate venturing literature (e.g. Miles & Covin, 2002; Sharma & Chrisman, 1999; Sykes, 1986). It refers to whether new venture ideas lie inside or outside the formal boundaries of the firm. Within an increasingly integrated, connected worldview, 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 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 relationships, activities and management systems take.

The second dimension, the *strategic logic* of the venture unit, identifies the relative importance of two different strategic agendas a CV 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. The distinction between exploration-oriented and exploitation-oriented activities is widely used across organizational literatures (Gupta et al., 2006). We propose that it is also potentially useful in the field of corporate venturing. Traditionally, most scholars have focused on the explorative role of CV units (e.g. Burgelman, 1984, 1985; Dushnitsky & Lenox, 2005, 2006; Galbraith, 1973, 1982; Wadhwa & Kotha, 2006)². However, we 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.

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.

Insert Figure 1 about here

² Some recent CVC literature has, however, examined antecedents to exploratory and exploitative learning (e.g. Schildt et al., 2005).

Internal explorer. The purpose of internal explorer units is to invest in new 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 (1984, 1985) 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 (although this emphasis may shift to exploitation later).

An example is Shell's GameChanger programme (Hamel, 1999). 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, frequently by spinning them out. Thus, while there is inevitably an element of exploration in such units, their dominant logic is one of exploiting existing assets and turning them into cash. While the logic of harvesting assets through spin-offs has been recognized in the literature for many years (e.g. Burgelman, 1984, 1985), the creation of dedicated harvesting units only appears to have emerged during the most recent wave of corporate venturing activity (Chesbrough, 2000). 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 these 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, or to generate a "window on new technology" (Dushnitsky & Lenox, 2006). 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., 1996).

An example of an external explorer unit is Siemens Venture Capital GmbH (SVC). It invests strategically in external companies and initiatives that are directly related to Siemens' business activities, either as potential partners or suppliers. SVC typically takes minority equity stakes, in return for which it obtains 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., 2002).

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, terms 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. Also, 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 proposed a theoretically-grounded framework for categorizing corporate venture units, the next step is to formalize and extend our logic through a set of testable research propositions. To do so we adopt a configurational approach, which involves specifying the organizational 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 organizational characteristics is associated with higher performance.

The configurational approach to organizational analysis has its roots in the work of Miller and Friesen (1984) and Mintzberg (1979, 1983) and became well established during the 1990s (Gresov & Drazin, 1997; Miller, 1996). It builds on certain of the principles of contingency theory, namely: that there is no one best way to organize; that different organizational 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). However, configuration theory extends, 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 organization, rather than the more limited set of 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 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.

Application of Configuration Theory to Corporate Venturing

A configurational approach implies the following model for CV 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 versus exploitation. It has an *organizational 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 organizational data was collected) and over time. The fundamental proposition under investigation is simply that the level of fit – that is, the congruence or internal consistency (Drazin & Van de Ven, 1985) - between a unit’s strategic objectives and the elements of its organizational profile will be associated with higher performance (see Figure 2).

Insert Figure 2 about here

While well established in other areas of organization research, this logic has not, to the best of our knowledge, been applied to corporate venturing (Jennings & Hindle, 2004). Configurations logic, however, has demonstrated its utility in empirical tests examining the link between organizational contexts, structures and strategies, and performance outcomes (see Ketchen et al., 1997, for meta-analysis findings). Recent studies suggest, too, that this approach may aid understanding of corporate venturing performance. For example, Weber and Weber (2005), 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 both strategic and financial goals – reported higher levels of goal attainment. Multiple goals created the potential for conflict and inefficiencies in CVC units. Extending this logic, fit with a strategic profile within our proposed typology may enable goal alignment and, accordingly, enhanced performance in CV units.

From a theoretical perspective too, configuration logic seems more suited to the complex context of CV types than does the bivariate logic of contingency analysis. By way of illustration, as we shall explore shortly, CV units have been shown to be embedded within complex webs of relationships, particularly with their parent companies but also increasingly with external parties such as venture capitalists and independent entrepreneurs. It appears unlikely that a simple set of organizational variables will differentiate one CV type from another.

What are the relevant elements of the CV unit’s organizational profile? As no definitive list exists, we reviewed the corporate venturing literature to identify consistently recurring themes. One theme that dominates the literature is the embeddedness of CV units in complex webs of relationships – both with actors in their parent companies and also with external parties such as venture capital firms. Such relationships were recognized in early research (e.g. Galbraith, 1982; Kanter, 1985) and are now an increasingly important part of understanding how corporate venture units gain access to the key resources they need to survive (e.g. Chesbrough, 2000; Maula et al., 2005). The network of relationships surrounding the CV unit can also be linked back to the established Bower-Burgelman process model (Burgelman, 1983, 1984, 1985) that examines the origins of strategic behaviour within the structural and strategic contexts of large firms, and that has been extensively applied to the phenomenon of internal corporate venturing.

Consequently, we identify this network of relationships as the central element of the CV unit's organizational profile.

The other relevant parts of the organizational profile are related to this network of relationships. Specifically, we examine the relative focus on different activities inside the CV unit, and the extent to which these are focused more on the needs of external or internal partners, and we examine the management systems used by the CV unit to support these various choices. More formally, the elements of the organizational profile are as follows:

- (1) The *network of relationships* held by the venture unit. This includes relationships with two key sets of stakeholders: (a) links to VC firms, for access to deal flow and ideas (Brody & Ehrlich, 1998; Sahlman, 1990; 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 (Burgelman, 1984; Galbraith, 1973, 1982; Siegel et al., 1988). It also includes (c) the operating autonomy of the CV unit *vis à vis* the parent company (Chesbrough, 2000, 2002; Fast, 1981; Galbraith, 1982; Kanter, 1985; Sykes, 1986, 1990), and (d) the extent to which the unit takes part in syndicated investments with members of the VC community (Brody & Ehrlich, 1998; Chesbrough, 2000, 2002; Sahlman, 1990; Zider, 1998).
- (2) The *activities* of the venture unit, by which we mean its level of involvement in the various developmental and managerial tasks that could potentially be performed by venture unit. Research has identified a number of 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, 2002; Fast, 1979; Rind, 1981; Sahlman, 1990; Zider, 1998).
- (3) The *management systems* of venture units used to support the choices made above (Block & MacMillan, 1993; Fast, 1979, 1981; Rice et al., 2000). Specifically, we examine the management systems of venture units along two dimensions: (a) the types of measures used to evaluate the performance of the unit, and (b) the incentives provided for venture unit managers.

These organizational elements are expected to vary systematically across the four types of venture units. However, it would be inappropriate to develop formal hypotheses for each element in turn: the logic of configuration theory is that the elements interact with and reinforce one another to create a meaningful whole. Furthermore, the relationships between the elements are expected to vary from type to type, in a manner that uniquely supports performance for each distinctive CV unit type (Doty & Glick, 1994; Miller, 1996). Instead, we develop formal hypotheses that posit holistic relationships between venture unit strategic profile, organizational profile, and performance.

Hypotheses

Consider first the relationship between the CV unit's strategic objectives and its organizational profile. Configuration theory suggests that there should be alignment between the two, so that internal exploiter units typically adopt one organizational profile, internal explorer units adopt another, and so on.

Why wouldn't we expect to find strategic objectives and organizational profiles randomly distributed across CV units? The predictive power of configurations lies in the fact that relatively few alignments are likely to occur (Miller, 1986, 1996). In the words of Miller (1986: 235-236), "elements of strategy, structure and environment often coalesce or configure into *a manageable number of common, predictively useful types* that describe a large proportion of high-performing organizations" (emphasis added). A number of factors, or imperatives (Miller, 1986, 1987), in combination, drive the formation and persistence of these small sets of common configurations of elements. Darwinian selection mechanisms weed out poorly performing organizational forms, and emerging forms are imitated by others through both mimetic and normative isomorphic processes (DiMaggio & Powell, 1983). Managerial selection mechanisms also constrain the range of organizational forms occurring in practice (Drazin & Van de Ven, 1985). The greater the strength of these selection regimes, the more restricted the range of organizational forms one can expect to find (Drazin & Van de Ven, 1985). Strategy and structure, too, serve as mutually constraining influences: "given a particular strategy there are only a limited number of suitable structures and vice versa" (Miller, 1986:234). Once established, these configurations tend to adhere relatively unchanged for substantial periods.

Applying these arguments to the CV context, we would expect learning over the years (Chesbrough, 2002) to have resulted in a number of CV forms being widely reproduced. We would also expect mutually constraining impacts of organizational elements (relationships with parent companies and venture companies, parent company management systems and human resource practices, etc.) and strategic elements (the elements of strategic logic and locus of opportunity) to have narrowed the range of viable CV unit configurations to those that demonstrate congruence (Drazin & Van de Ven, 1985). We thus expect to find the four CV unit types matched to their own unique organizational profiles, i.e. to unique configurations of relationships, activities and management systems.

Hypothesis 1: Each of the CV unit types, as defined by its strategic profile, will be associated with a unique "organizational profile".

The second hypothesis is concerned with venture unit performance. Configuration theory suggests that each ideal type represents a "tight constellation of mutually supportive elements" (Miller, 1986:236) that act synergistically to enhance performance. Put another way, each type embodies an internally consistent pattern of relationships among its constellation of elements; the pattern of relationships between elements is not expected to be the same across all types as each will embody its own form of internally consistent relationships among its elements (Doty & Glick, 1994; Drazin & Van de Ven, 1985). Thus, the more closely an organizational unit resembles the elements of an ideal type configuration, the more likely it will experience synergies that aid its performance.

In the case of our typology, close alignment between the elements of the venture unit's organizational profile and the associated set of strategic objectives is anticipated to result in higher performance. Along with synergies generated from compatible strategies and structures, CV units that have aligned strategies and structures are likely to experience tangible benefits in

their day-to-day working, such as greater clarity of direction and greater ease of coordination amongst staff (Miller, 1996).

This may appear to be an obvious hypothesis, but it is subtly (and importantly) different from a traditional classificatory 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.”

Hypothesis 2: The greater a CV unit’s level of fit to its ideal type, the greater the unit’s cross-sectional performance.

As well as looking at the cross-sectional performance of venture units, we also consider a dynamic view of performance, 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 suggests that the normal life expectancy of a venture unit is between 2 and 6 years. While we by no means suggest that survival should be taken as an exclusive or entirely definitive indicator of corporate venturing “success” (refer to McGrath, 1999, for a discussion of how “failed ventures” can result in learning), survival is an important consideration for two reasons. First, it is clearly a necessary condition for long-term success, and given the high mortality rates in the world of corporate venturing it is not a trivial matter for a unit to survive this long. Second, it provides a barometer for the broad alignment of the unit with the strategic goals of the parent company, rather than simply the internal alignment of the various elements of strategy and organization.

Extant literature provides little guidance on the dynamic performance of the CV unit types. Most literature on the survival of CV units focuses rather on the extreme risks to these units of closure based on factors outside their control, such as economic downturns, a worsening of company fortunes and changes in the political will towards a venture unit (Fast, 1979, 1981; Burgelman & Valikangas, 2005). We propose two alternative hypotheses – each of which makes somewhat different assumptions about the relationship between venture unit survival and venture unit performance.

First, consistent with configurational logic, we predict that those units with strategic objectives and organizational profiles close to those of the ideal type configurations will have greater longevity than those with mis-fitting profiles. 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 (Miller & Friesen, 1984; Ketchen et al., 1993) and, accordingly, to experience higher survival rates.

Second, following a contingency logic, 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

(Levinthal & March, 1993; 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 exploration-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 do 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 alternative hypotheses:

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

Hypothesis 3b: CV 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 and activities, corporate venturing objectives, and factors perceived to influence corporate venturing success.

The second phase, in late-2001, was a survey of CV unit managers. 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. 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 on the investment history of the venture units³.

Responding and non-responding CV units were compared along a number of indices. ANOVAs and cross-tabs 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 (e.g. start-up funding, first 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 (versus North American) respondents was somewhat higher than expected ($\chi^2 = 39.56, p = .000$); the proportion of respondents who expressed a preference for seed funding was higher than that amongst non-respondents ($\chi^2 = 6.70, p = .010$). 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).

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 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

We apply the analytical method developed by Doty et al. (1993) in which the observed organizational profiles (across all elements) of venture units are compared to the “ideal” organizational profiles as assessed by 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 organizational profile described above. Thus, for example, they were asked to rate the level of autonomy that should ideally be given to an internal exploiter unit, to an external explorer unit, and so on. 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 ratings for each element (a measure of inter-rater reliability), which ranged between 0.42 and 0.85 on a five-point scale.

To create the measure of “fit”, we calculated the Euclidean distance from the venture unit to each different venture unit type (Doty et al., 1993), using the following formula:

³ Our self-reported portfolio data 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 ($p = .000$).

$$D_{io} = \sqrt{(X_i - X_o)W(X_i - X_o)'}$$

where

D_{io} = the distance between ideal type i and organization type o ,

X_i = a $1 \times j$ vector that represents the value of ideal type I on attribute j ,

X_o = a $1 \times j$ vector that represents the value of organization type o on attribute j .

and

W = a $j \times j$ 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. In the absence of any strong logic to the contrary, we gave equal weighting to each of the three parts of the organizational profile (namely, networks of relationships, activities, and management systems).

Once distance measures had been created between each unit and all four “ideal” 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, and (b) the “organizational profile” of the venture unit. “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. We developed questions relating to the two dimensions of the framework. Three questions concerned 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 (on a 5-point scale where 1 = “not at all important”, and 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 versus 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; and (4) generate financial returns (where 1 = “never”, 2 = “only in exceptional cases”, 3 = “occasionally”, 4 = “frequently”, and 5 = “almost always”). The former two indicated a relative emphasis on exploration, the latter two indicated a relative emphasis on exploitation.

Organizational Profile. Multiple measures were used to capture the three dimensions of CV units’ organizational profiles, namely: (1) their networks of relationships, (2) the activities they engage in, and (3) their management systems. The following four measures relate to CV units’ *networks of relationships*:

- (1) *Contact with venture capitalists:* Respondents were asked how frequently they communicated with: (1) partner VC companies; (2) other companies or individuals in the VC community; and (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).

- (2) *Contact with corporate executives*: Respondents were asked how frequently they communicated with: (1) senior executives in the corporate parent they reported directly to; (2) other senior executives in the corporate parent/head office; (3) technical/R&D people in the corporate business units/divisions; and (4) 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).
- (3) *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; and (7) decision to pursue IPO for venture business. The mean of responses to the 7 items constituted the measure (Cronbach’s alpha = .92).
- (4) *Deal syndication*: The extent to which a venture unit engaged in deal syndication with VCs 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”, or “small stake <15%”), and (b) the number of other equity partners (including VCs and other companies) in a typical investment project (“>2”, “2”, “1”, or “0”). The mean of responses to the 2 items constituted the measure (Cronbach’s alpha = .74).

Two measures examined *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 ventures*, Cronbach’s 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 ventures*, Cronbach’s alpha= .90].

Two measures examined the *management systems* of the venture units:

- (1) *Use of financial measures*: This variable indicated the extent to which venture unit performance was measured using financial indicators typically associated with VC 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 scored along a 5-point 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).

- (2) *Use of equity-based compensation:* This measure 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) a straight corporate salary (reverse-scored). The response format was as follows: 1 = “never”, 2 = “only in exceptional cases”, 3 = “occasionally”, 4 = “frequently”, and 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 measures of performance, each concerned a distinctive facet of the contribution a venture unit makes to its parent company. The three measures pertain to: (a) financial performance, i.e. the extent to which the venture unit delivered against financial goals; (b) technological awareness, i.e. the extent to which the venture unit developed new and valuable technologies for the parent company; and (c) entrepreneurial capability, i.e. the extent to which the venture unit enhanced the entrepreneurial capability of the parent company.

The use of multiple measures of performance is important given the diverse objectives associated with corporate venturing (Chesbrough, 2002). Specific measures were as follows:

- (1) *Financial performance:* Managers were asked to rate the financial performance of their unit against expectations⁴ over the past 3 years (or its period of operation, if shorter) on 3 key financial objectives identified within the exploratory interviews, 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 anchored by 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 employees (Cronbach’s alpha = .75).

Survival status. This categorical measure –from the follow-up telephone calls in 2003 to the CV units that participated in the survey – recorded whether the unit was active or inactive.

⁴ By measuring performance against expectations, rather than against absolute levels of performance, we take into account that different units may be expected to achieve differing levels of performance along different dimensions.

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 organizational 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 organizational 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 organizational 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 four strategic and organizational profiles. It is evident that there is a moderate level of convergence between the organizational and strategic profiles of the venture units. For example, of the 30 venture units that are most closely rated to the external explorer strategic profile type, 20 have organizational configurations that are congruent with the external explorer organizational profile, according to ideal type ratings. In total, 40% of the CV units have aligned strategic and organizational profiles, which is perhaps rather less than we would have anticipated, a point we return to in the discussion section. The convergence between strategic and organizational profiles is strongest for those units resembling our exploration types (i.e. the internal explorer and external explorer types).

We conducted supplementary post-hoc analysis to investigate where the actual differences in organizational 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 displayed significant differences along individual elements of the organizational 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 organizational elements) rather than that of individual organizational attributes - these tests do indeed demonstrate significant differences between the types on six of the eight organizational 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 organizational configuration.

Hypothesis 2 was concerned with the cross-sectional performance of the venture unit, positing that the greater a unit’s fit to its ideal type, the better its cross-sectional performance. We found mixed support for this hypothesis. Table 5 shows the results of ordinary least squares regression analysis of fit measures on the 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

organizational profile. It is evident that organizational fit is most closely associated with enhanced venture unit performance: the organizational 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 organizational 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 organization.

We also ran a series of ANCOVA tests (controlling for age of venture unit and number of employees) which found that ideal type membership was not significantly associated with venture unit financial performance ($F = 1.30, p = .26$), technological performance ($F = .41, p = .53$) or entrepreneurial performance ($F = .00, p = .97$)⁵. These may provide some indication of equifinality of outcomes across different ideal types, although these tests should be interpreted with due caution given that our measures relate to performance against expectations, rather than to absolute levels of performance.

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 regression (refer to Table 6) to test these hypotheses. We found, consistent with Hypothesis 3b, but contrary to Hypothesis 3a, that the survival of CV units was associated with membership of exploitation-oriented venture types (especially where organizational 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 vividly 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 10⁶. 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 organizational profiles that are to some extent aligned with their strategic objectives; greater internal alignment around particular organizational 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

⁵ These statistics resulted from ANCOVAs using organizational profile to classify the venture units into types. They are consistent with the findings of tests using strategic profile to classify the venture units.

⁶ These analyses classify CV units on the basis of their nearest organizational profile. The equivalent figures where strategic profile is used to classify venture units are: 5 / 34 for External Exploiter units; 10 / 26 for Internal Explorer units; 0 / 3 for Internal Exploiter units; and 6 / 27 for External Explorer units.

was fairly modest. Hypothesis 1 was supported, indicating that the configurations we theorized are found in practice, but the number of venture units whose organizational profiles matched their strategic profiles was only 40 percent of units. And in terms of Hypothesis 2, while fit with the organizational profiles of the four ideal types was associated with improved cross-sectional performance, the level of fit with the strategic profiles of the ideal types showed no sign of being important. It is worth exploring the reasons for these modest findings before broadening our discussion to consider the implications of our research for configuration theory and for strategic management.

Explaining the Configuration Findings

An important starting point in terms of making sense of the results, is that little is known definitively regarding the determinants of venture unit success, despite the occurrence of corporate venturing over at least the past three decades. While there were previous waves of venturing in the 1970s and 1980s, the majority of the current crop of venture units was established with limited attempts to learn from prior waves (Chesbrough, 2002). Hence there was a high level of experimentation in terms of both the objectives they pursued, and the organizational 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, 2000). 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 in some where they were not. This may help 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 may help to explain the weak fit between organizational and strategic profiles. And it may also help to explain the mixed findings for Hypothesis 2. Given blurred objectives, the venture unit could still perform well by creating an internally-consistent organizational profile that allowed it to at least deliver on some of those objectives. It could not, however, 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.

At a more general level, these findings may suggest specific boundary conditions on the formation of coherent, synergistic configurations (Doty & Glick, 1994; Miller, 1986, 1996). These may include volatile and highly uncertain institutional environments in which “experiments” with new organizational forms are frequently curtailed, and where the possibility of learning is therefore constrained. In such environments, mimetic isomorphism may be rife, as may the unwitting creation of hybrid structures. Such conditions may mitigate against the evolution and diffusion of configurations approximating the ideal types.

Implications for Configuration Research

Our use of a configurational approach to understanding venture unit types suggests a number of implications for theory. As per Ketchen et al's (1997) meta-analysis findings, we found overall support for the proposition that fit with ideal types improved performance. Two nuances need, however, to be highlighted: (1) CV unit survival was not explained by ideal type fit, and (2) our analysis indicated that strategic fit mattered less to (multiple dimensions of) performance than did congruence between the organizational elements of the configuration.

Survival, to the best of our knowledge, is not a frequently studied outcome measure in configurations research (see Ketchen et al., 1997). It appears that our study brings into stark relief, once again, the divergent antecedents of these two outcome variables – performance and survival (Meyer & Zucker, 1989). While internal consistency helps CV units to perform better, what appears to matter to decisions regarding unit survival are the objectives of the units. Those that have longer-term and more uncertain objectives are more easily closed down when other priorities take precedence within the parent company. It is, hence, questionable to what extent current configurations logic can help explain survival, especially in highly-socially embedded contexts (such as corporate venturing) where multiple internal parties make decisions on whether an organizational unit is to survive or not.

Furthermore, we found that structural fit mattered to CV unit cross-sectional performance while strategic fit did not appear to. While alignment between strategy and structure is a central tenet in much strategic management literature (Chandler, 1962), as well as an assumption of configurational theory, this finding seems consistent with an interesting theme in the strategy literature that under certain conditions “any old strategic plan will do” (Weick, 1987: 222; see also Egelhoff, 1993)⁷. This line of thinking is not meant to devalue careful strategic analysis, but it highlights that in particular circumstances, such as when there is enormous uncertainty about the appropriate way forward, it may be more important to mobilize effort around a specific set of objectives than to worry too much about what those objectives are.

Implications for Research on Exploration and Exploitation

Our application of March's (1991) exploration-exploitation typology to the CV unit context also holds a number of implications for the corporate venturing and strategic management literatures. Traditionally, business development activities such as corporate venturing are thought of as focusing on exploration (i.e. on the creation of novelty) (e.g. Dushnitsky & Lenox, 2005, 2006; Wadhwa & Kotha, 2006), 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, although invariably they also possess exploration-oriented elements.

Two further points should be made on the exploration versus exploitation dimension. First, while we in no way intend to suggest that survival should be regarded as the ultimate goal

⁷ An alternative explanation is that our strategic profile dimensions may not accurately reflect the most significant strategic choices open to venture unit managers.

of venture units (McGrath, 1999), we observe that, regardless of the venture unit's performance, the survival rate of exploitation-oriented units is greater than that of exploration-oriented units. This creates interesting practical challenges for the managers of corporate venture units 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 likely 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, is that the orthogonal distinction between exploration and exploitation employed here (cf. Gupta et al., 2006) is not always clear-cut in practice. Exploration and exploitation appear better understood, at least in the context of corporate venturing, as meta-level strategic objectives that define how priorities are set and that determine the relative emphasis on different activities in the venture unit, 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, as they all engage in activities such 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. 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 identify or create new sources of value first.

Limitations and Extensions

Finally, a number of limitations should be acknowledged. These include potentially over-sampling externally-oriented venture units (that may be keener to advertise their presence to external entrepreneurs and private equity investors through inclusion in the Corporate Venturing Directory and Yearbook) which may raise questions regarding the generalizability of our findings to internally-oriented units. We tried to counteract this bias through efforts to learn of additional units, including asking the 50 individuals we interviewed and working with executives at industry associations to identify CV units; attending prominent corporate venturing conferences to further our search for additional units; and conducting an extensive web-based search. Beyond these efforts, however, it becomes difficult to obtain a comprehensive sampling frame given that there are no legal requirements for public companies to report the existence of a venturing unit where this is not established as a separate legal entity.

The cross-sectional nature of the survey measures presents a further limitation, preventing us from drawing strong causal inferences from our findings and from investigating the temporal patterns in the venture units. Also, the substantial use of new measures (which we regarded as a necessity given the limited application of many of the constructs to the corporate venturing domain) makes comparability with existing studies somewhat difficult. Furthermore, given the limited nature of public reporting on corporate venturing outcomes (and the confidentially attached to these activities), we needed to rely on self-reported measures given our

desire to assess multiple dimensions of performance. We made attempts, however, to verify the self-reported performance data via, for example, obtaining follow-up CV unit survival data and Venture Economics data on the CV units' investment histories.

There are several areas where this research could be usefully extended. One is to conduct longitudinal analyses 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, and to observe what triggers changes in the configurational elements and how such changes take place. A second fruitful research area may be for empirically-driven taxonomic work to supplement our theoretically-derived typology, to validate our selection of configuration elements and our choice of four CV unit types. A third useful extension⁸ may be to examine the functioning and performance of "portfolios" of venture units within parent firms, where different venture units are established for different strategic purposes. Holding the company constant may provide a useful context in which to examine conditions which enable or limit the development of divergent venturing configurations. From a normative perspective, such investigations may suggest how (and, indeed, whether) parent companies could successfully manage a diverse portfolio of venture units to achieve a range of strategic objectives, embracing both exploration and exploitation, as well as internal and external forms of venturing.

Conclusions

To conclude, this paper sought to develop and test a typology of corporate venture units based on a deeper understanding of their strategic role in the corporation. Building on configuration theory, we showed that the internal alignment of venture unit relationships, systems and activities was important for performance, while at the same time no real performance differences existed across types. Also, building on March's (1991) distinction between exploration and exploitation, we showed that survival after two years could be attributed in part to the extent to which a venture unit engaged in exploitation. 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.

⁸ We are grateful to an anonymous reviewer for the suggestion that individual venture units may form part of a "portfolio" of investments undertaken by a parent company towards the goals of corporate renewal and growth and, consequently, that the overall performance of such venture unit portfolios is also worthy of study.

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FIGURE 1
A Typology of Corporate Venture Units

Strategic Logic	Exploration	1 Internal Explorer	2 External Explorer
	Exploitation	4 Internal Exploiter	3 External Exploiter
		Internal	External

Locus of Opportunity

Note: This framework can also be used more broadly to identify the generic forms of business development a firm can pursue. Q1 includes all forms of exploration where the locus of opportunity is internal to the firm, such as traditional R&D and knowledge sharing networks. Q2 represents exploration-oriented activities where the opportunity is outside the boundaries of the firm, including acquisitions, alliances and joint ventures. Q3 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. Q4 is concerned with exploitation of assets and opportunities internal to the firm, such as licensing of patents and technologies.

FIGURE 2
Configuration Framework

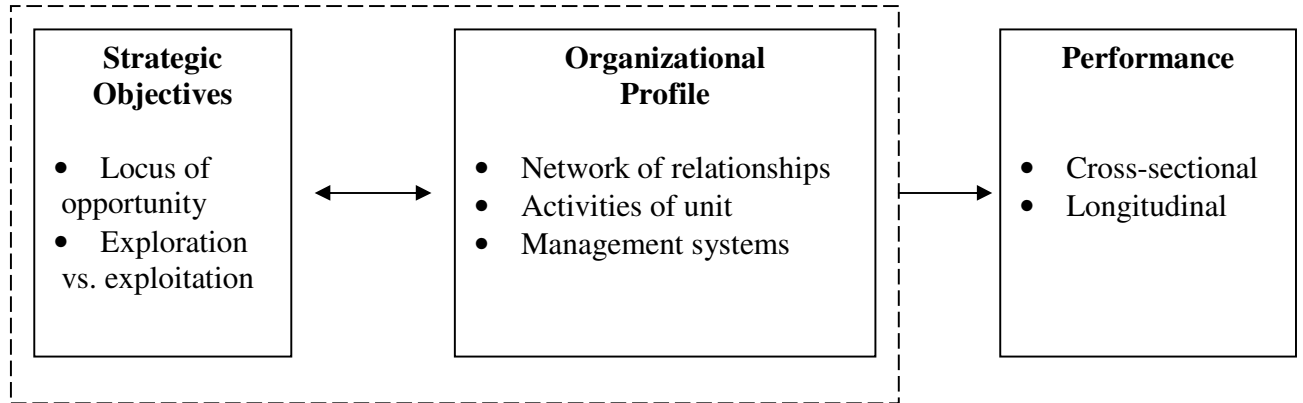


TABLE 1: Correlation Matrix (Whole Sample)

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																			
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 organizational profile ideal type	-11.16	2.97	.28**	.37**	.32**	.14	.17														
Independent Variables																					
<i>Strategic Profile Variables</i>																					
7. Focus on internal ideas	4.75	1.77	-.07	-.14	.04	.04	-.18	-.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								
<i>Organizational Profile Variables</i>																					
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 VCs	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	-.13	.35**

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

TABLE 2
Reliabilities and Rater Estimates of Corporate Venture Unit Ideal Types

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

Note:

IET = Internal Exploiter unit, EER = External Explorer unit, IER = Internal Explorer unit, EET = External Exploiter unit.

¹ 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 Organizational Profiles

		Organizational Profile				<i>Total</i>
		IEt	EEr	IEr	EEt	
Strategic Profile	IEt	4	4	0	0	8
	EEr	5	20	0	5	30
	IEr	4	15	7	2	28
	EEt	9	6	0	3	18
<i>Total</i>		22	45	7	10	84

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

TABLE 4
Mean Ratings of Elements of Organizational Profile for Venture Unit Types

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

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: Impact of Fit with Ideal Type on Performance

Variables	Financial Performance	Technological Performance	Entrepreneurial Performance
Fit with nearest strategic profile ideal type	.003	.031	-.086
Fit with nearest organizational profile ideal type	.125+	.213**	.125*
Venture unit age (control)	.157**	.007	-.090+
Number of employees (control)	.057	.096+	.059
Region (control)	-.210	-.327*	.111
R ² (adjusted)	.17 (.11)	.20 (.13)	.15 (.08)
F (significance)	2.60*	2.98*	2.10+

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

Variables	Survival Status
Fit with nearest strategic profile ideal type	-.241
Fit with nearest organizational profile ideal type	.183
Membership of exploitation-oriented unit	1.848**
Venture unit age (control)	.084
Number of employees (control)	-.136
Region (control)	.929*
-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 R² statistic reported.

+ p < .10

* p < .05

** p < .01

*** p < .001