UNIVERSITY OF STRATHCLYDE

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"THE CORPORATE VENTURING PROCESS OF LARGE CORPORATIONS: A CRITICAL REALIST PERSPECTIVE"

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Signed ....Marina G. Biniari....

Date..............20/03/08..............

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This thesis is dedicated to my sister *Katerina*, and to my brother *Anastasios* – the most sensitive, intelligent and strong companion I could have ever asked for.

TABLE OF CONTENTS

TABLE OF TABLES AND FIGURES

ABSTRACT

Corporate venturing (CV) involves entrepreneurial efforts and activities undertaken by large corporations to create new ventures. The objective of the study was to explore how CV was initiated and implemented in large corporations, focusing on its impact on the organisational context. The study used three theoretical perspectives (evolutionary, contingency and agency theory) to examine the CV process. Two levels of analysis guided the empirical enquiry: the CV unit and the corporation as a whole.

Driven by the nature of the research questions and the philosophical influences of critical realism, a qualitative research methodology and a multi case-study research design were employed. Four corporations and their CV units were theoretically sampled and examined. The sample comprised large, UK multinationals, involved in CV activities between 1999 and 2003. Semi-structured interviews were conducted with 18 managers, comprising those directly involved in CV and senior corporate managers. Secondary sources were consulted to allow data triangulation. Analytic induction facilitated the data analysis and interpretation process within each case. Cross-case analysis allowed analytical generalisation.

The study identified the interaction and co-existence of strategy and entrepreneurship sub-processes in explaining the dynamics of the CV process. The study showed that the initiation of CV activities is shaped by the existence of micro processes transforming a stimulus (opportunity) into venturing intent (decision). The dynamics of the relationship between the corporation and the CV unit, and the role of emotions in the CV process were also identified and explained. The key conclusion was that where alignment and adjustment mechanisms to monitor and resolve tensions and conflicts between the corporation and the CV unit were absent, the effect was to restrict the realisation and emergence of positive outcomes for corporations from their involvement in CV activities.

1. CHAPTER 1: INITIATING THE THESIS

1.1 RESEARCH SETTING: CONTEXTUALISING THE THESIS

Corporate venturing (CV) can be defined as the entrepreneurial efforts of a corporation to create new ventures (Sharma & Chrisman, 1999). As a firm phenomenon, it interacts with a corporation's organisational and environmental context (Covin & Slevin, 1991). CV as a process is anticipated to encourage entrepreneurial behaviour among corporate employees and to positively contribute to firm growth. Characterised by cyclicality, CV has experienced three consecutive waves, in the late 1960s, in the 1980s and 1990s.

CV emerged as a significant business strategy during its third wave in response to the *"creative destruction"* (Schumpeter, 1957) caused by changes in the macro-environment. The increased technological uncertainty associated with internet, the globalisation of competition, the disruption of market boundaries, the decrease in product life cycles, and the emergence of new markets with significant purchasing power were among the discontinuities that converged the late 1990s. New entrants and the creation of new markets threatened, or at least appeared to threaten, the capabilities and competencies of large, established companies. This emerging *"competitive landscape"* required a response from large corporations while continuing to grow their economic value (Bettis & Hitt, 1995). Corporate managers needed to demonstrate a flexible and dynamically efficient managerial mindset demonstrated from innovative and entrepreneurial behaviour.

The experience of corporations which had successfully conducted CV activities in the previous waves indicated that CV could deliver both strategic and financial returns to these threatened corporations. Creating new ventures was anticipated to be a means of positively contributing to the development of new competitive advantages and the realisation of new innovation processes (e.g. Pinchot, 1987) for the corporations. CV was positively associated to fostering entrepreneurial behaviour among corporate managers and to defining a new strategic context (Burgelman, 1983c). Moreover, CV could positively contribute to the growth of these corporations by enhancing their profitability, sales and market share in niche markets related to new technologies.

Influenced by such expectations, a large amount of capital (around $18B in 2000) was raised in the late 1990s to cover investments that large corporations made in CV. The number of CV deals between entrepreneurial firms and large corporations significantly increased, [1] contributing to the entrepreneurial hype of the era (Indergaard, 2004). While the majority of corporations involved in CV activities headquartered in North America, European and Asian corporations contributed significantly in the third CV wave, with British corporations amongst the most significant players.

However, by the early years of the new millennium the enthusiasm for CV had waned and corporations began to withdraw from their CV activities. This study looks at CV in the context of its recent third wave, adopting a retrospective view of the phenomenon and drawing from the experience of British corporations. It seeks to explain the rise and fall of the third CV wave in recent economic history.

1.2 KEY DEFINITIONS AND CONCEPTS: PROVIDING CLARITY

The lack of consistency in defining entrepreneurial phenomena (Shane & Venkataraman, 2000; Sharma & Chrisman, 1999) makes mandatory the need for clarity of definitions. CV refers to efforts, activities, events, and decisions which lead to the creation of *"new business organisations within the corporate organisation"* (Sharma & Chrisman, 1999; p. 19) which may reside within or outside the domain of the existing organisation (von Hippel, 1977). It is a manifestation of corporate entrepreneurship, exercised within an organisational context and structure (Covin & Slevin, 1991) by corporate agents, involving new resource combinations (Burgelman, 1984b). The CV phenomenon presupposes the simultaneous existence of a managerial and an entrepreneurial process (Venkataraman et al., 1992).

CV can be both internal and external to the organisational boundaries, but is distinctive from: (1) investments carried out by independent venture capital firms, (2) investments by financial institutions (i.e. investment banks), and (3) equity investments in publicly held companies and in joint ventures. CV's distinctiveness

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[1] Intel carried out 450 investments of a cumulative value of £3.5B between the early 1990s and 1999 through its two CV funds (www.strategy-business.com)

from other type of investments lies in the involvement of non-financial resources (i.e. social and human capital, consultation services) and in its anticipated strategic outcomes. The scope of the current study focuses on the CV units and teams which sought to deliver strategic and financial returns for the parent corporations through: (a) the identification of business opportunities, sourced within or outside the corporation, and (b) the creation of new ventures, which may reside within or outside the corporation.

1.3 RESEARCH RATIONALE AND MOTIVATION: EXPLORING THE CORPORATE VENTURING PROCESS

The involvement of an existing, large corporation in CV activities comprises two main processes: (a) a strategy (or more broadly a managerial) process of pursuing a venturing strategy, and (b) an entrepreneurial process of identifying and creating a new venture (Venkataraman et al., 1992). Entrepreneurial activities such as CV activities are situated within a business and an organisational context (structural and strategic) aiming (a) to utilise and upgrade existing resources and capabilities, in order (b) to create new capabilities and ventures that extend the company's activities and growth path (Zahra, 1996; Burgelman, 1983c).

The entrepreneurship literature examines the involvement in CV activities within the boundaries of opportunity identification and new venture creation which is intended to enhance the growth path of an established corporation. Influenced by a contingency approach, configurations of environmental and organisational characteristics that lead to a positive impact of CV activities on company performance have been examined (e.g. Dess et al., 1997; Zahra, 1993). Entrepreneurial strategy making is treated as a firm characteristic which in alignment with the organisational (strategic and structural) and environmental context of a corporation appears to promote organisational performance and growth (Dess et. al, 1997).

The strategy process literature treats the involvement in CV activities as equivalent to autonomous strategic behaviour which takes place outside the existing structural context of a corporation. Successful venturing activities can contribute to determining a new strategy context (Burgelman, 1983c) for the corporation. Influenced by an evolutionary approach, entrepreneurial activities are treated as facilitators of variation within a company which trigger selection and retention over other strategic initiatives. Entrepreneurial strategy making is treated as the outcome of the strategic context determination process, or as an autonomous, emerging strategic action which challenges the current strategic context of a corporation.

Historically, the involvement of large, established corporations in CV activities has delivered both successes and failures, with the literature focusing primarily on their financial aspect. There are only a few examples where non-financial outcomes have been observed. If CV is able to deliver both entrepreneurial and strategic outcomes, and provide a platform for innovation and strategic renewal for the corporation, why are these outcomes not necessarily realised by the corporations? This was the initial motivation in approaching this study. By examining the venturing experience of a corporation from a processual perspective, the dynamics of the CV process could be unfolded. The interest was on studying the strategy process behind the venturing initiative, its initiation and implementation within an existing organisational context, and the outcomes of the venturing initiative to the organisational context. Secondly, the interest was on the core entrepreneurial process of conducting CV activities and creating new ventures.

This study assumed the existence of a generic process where a CV unit/team is formed and implemented by a corporation as an initiative, and it produces outcomes for the corporation. This process became the conceptual framework around which the study was developed. The research aim was to:

> *"explore and explain the process of involvement in and implementation of corporate venturing by a large corporation and its impact on the organisational context"*

From this statement three main research questions emerged:

(a) How does CV arise within large corporations?

(b) How is CV implemented within an organisational context?

(c) What are the consequences for the CV team and the parent corporation from their involvement in CV activities?

Contingency theory has contributed significantly in unfolding the individual contribution of various organisational characteristics in the CV process. Evolutionary theory has provided a powerful framework to view the variation, selection and retention of new initiatives, such as the CV. Agency theory was also considered in examining the relationship between the corporation and the CV team. Theoretical triangulation (e.g. Allison, 1971) enabled for a better understanding of the CV process to emerge.

1.4 Research approach and methods: Taking a retrospective view

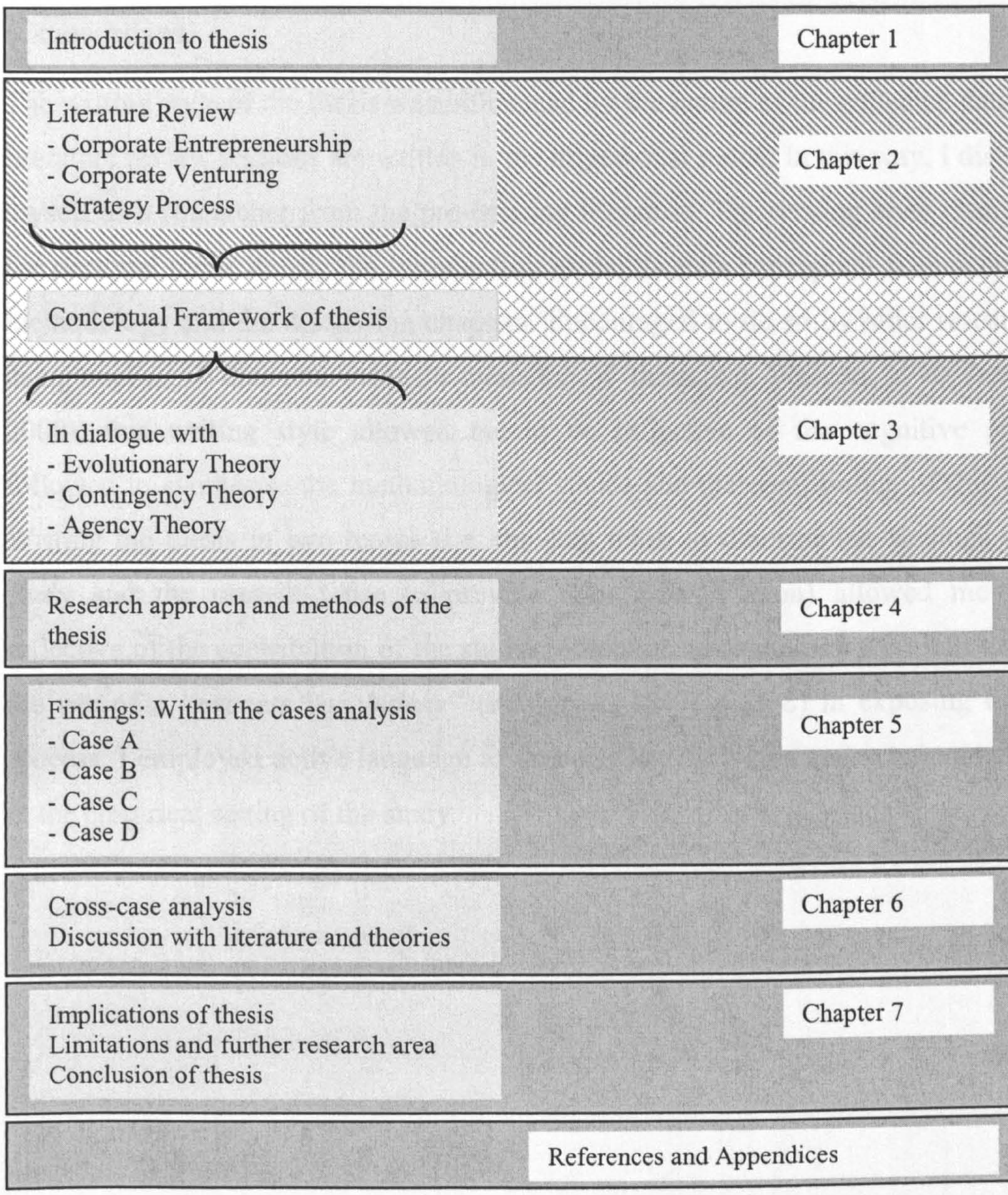
An in-depth qualitative research methodology (Sayer, 1992; Marshal and Rossman, 2006) and a multi case-study research design (Stake, 2000; Eisenhardt & Graebner, 2007) were employed to resolve the format of this study. This method allowed to probe the present and recent past. 18 managers in four large UK multinational corporations were interviewed. The sample included those directly involved in CV activities, as well as senior corporate managers. The focus was on the operations of the corporation's CV units between 1999 and 2003. The corporations were involved in different sectors: one was an energy and environmental company, the second a company operating in financial services, the third a telecommunications company and the fourth an oil, gas and petrochemicals company. Three of the companies had targeted their venturing activities in information and network based technologies, whilst the other focused on environment, rail and biotechnology technologies.

This study has been inspired and motivated by the critical realism philosophical stance. It acknowledges the existence of an objective reality, as *"the word exists independently of our beliefs, is differentiated, and is stratified"* (Benton & Craib, 2001; p. 129). Methodologically, the emphasis was on postulating a mechanism (i.e. a conceptual framework), collecting evidence against or for the existence of the framework (i.e. accessing and investigating the reality of four CV units) and evaluating these events (of CV activities) against the conceptual framework, eliminating any alternatives (Outhwaite, 1987).

1.5 Research outline: Structuring and writing up the thesis

The way the thesis is organised reflects the process I followed to fulfil the research requirements of the study. Figure 1.1 provides an illustration of the thesis's structure.

Figure 1.1: Plan of the thesis



The research enquiry started with a broad literature review in the fields of corporate entrepreneurship, CV and strategic management, leading to the emergence of a conceptual framework. The conceptual framework was enlightened by the theoretical lens of contingency theory, evolutionary theory and agency theory. The methodology chapter which follows outlines the philosophical influences and methodological choices made to answer the research questions of the current study. After a detailed outline of the individual cases, the cross-case comparison and discussion of the findings with the relevant literature and theories is presented. The thesis concludes with an outline of its implications to theory and methods in the field of corporate entrepreneurship, while its limitations and areas of further research are acknowledged.

The writing style of the thesis was influenced by the nature of the collected data. The literature review sections are written in the impersonal mode. In this way, I distanced myself as a researcher from the pre-existing literature. The writing style changes to the personal mode during the introduction of the thesis's conceptual framework, the methodology and the discussion chapters. Encouraged to do so by other researchers using qualitative data and writing a thesis out of them (e.g. Wolcott, 1990; Janesick, 2000), this writing style allowed me to be reflective of the cognitive process followed to synthesise the methodological stance and the contribution of this study. Writing the thesis in two tenses (i.e. the past tense to describe the findings of the study and the present tense to provide their interpretation) allowed me to be reflective of the contribution of the study. Moreover, encouraged by the call towards the use of a *"process vocabulary"* (Pettigrew, 1997; p. 338) in exposing the CV process, I employed active language to describe the decisions and actions identified in the empirical setting of the study.

2. CHAPTER 2: REVIEWING THE CORPORATE VENTURING (CV) LITERATURE

2.1 INTRODUCTION

This study addresses three research questions at the interface of the corporate entrepreneurship and strategy process fields. Accordingly, this chapter draws on the empirical research on CV undertaken in these two fields. It commences with a brief introduction summarising the rationale and characteristics of CV. The following section focuses on the CV process's dynamics, which are primarily embedded in the corporate entrepreneurship literature. The final section presents this study's approach to the CV process by synthesising the strategy and corporate entrepreneurship processes literature. A conceptual framework is proposed outlining the constructs of the current study and their *"presumed relationships"* (Robson, 1993).

2.2 CORPORATE VENTURING (CV): ITS RATIONALE AND CHARACTERISTICS

2.2.1 Historic evolution and influences: CV as a practice and as unit of analysis

Over the years, CV has experienced three consecutive *"waves"* of enthusiasm leading to a significant increase in corporations' venturing intensity at individual (Burgelman & Välikangas, 2005) and population level (Block & Macmillan, 1993; Birkinshaw et al., 2002). The positive venturing climate was followed by periods of inactivity and scepticism, with large corporations reflecting on their relative successes (e.g. Intel in Burgelman's work) or failures (e.g. Kodak in Ginsburg and Hay's work) whilst anticipating the next wave of CV activities in which to become involved.

Reviewing the evolution of the relevant empirical research, it can be observed that academic interest follows the occurrence of these three waves, but with a time delay. With the first CV wave commencing during the 1960s, the first thesis on internal CV dates back to 1967[2], followed by von Hippel's (1973; 1977) and Vesper and Holmdauhl's (1973) work. The main characteristic of this stream of academic research was the conceptualisation of CV as internal corporate entrepreneurship and

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[2] Buddanhagen, F.L. (1967). Internal entrepreneurship as a corporate strategy for new product development. Unpublished S.M. Thesis. MIT

the examination of the role of CV in relation to innovation and new product development activities of a corporation. While the first CV wave was discontinued by the late 1970s, a new wave of empirical studies on CV was published, explaining its failure (Fast, 1978) with Biggadike (1979) warning practitioners of the lengthy time requirements for CV activities to deliver returns comparable to the returns of other core business activities.

In the 1980s, with large corporations regaining confidence in internal CV activities, the academic CV literature began to re-establish itself. CV was associated with corporate entrepreneurship and corporate strategy (e.g. Burgelman, 1983c), while the emphasis was on exploring different structural forms of CV designs. Block's (1982) work, Stevenson and Gumpert's (1985) influential article in the *Harvard Business Review*, Schollammer's (1982) chapter in the *Encyclopaedia of Entrepreneurship*, Kanter's (1985) article in the first issue of the *Journal of Business Venturing* were all part of a stream of research which highlighted the challenges of hosting an entrepreneurial process within the organisational context. At the same time, corporate entrepreneurship started to legitimise its contribution to corporate performance (e.g. Miller, 1983; Wortman, 1987). However, the second CV wave did not manage to deliver the anticipated high returns due to the lack of a clear mission and commitment to venturing by the top management, and an inability to establish efficient compensation schemes to reward venturing activities (e.g. Block, 1989).

The late 1980s and early 1990s, saw the emergence of two new streams of research. A prescriptive stream of literature reflected upon the failures of the second CV wave and identified best practices for internal (e.g. MacMillan & George, 1985; Block & MacMillan, 1993) and external CV activities (e.g. Oakley, 1987) [drawing findings from empirical studies (e.g. Sykes, 1986; 1990)]. An explorative stream of literature aimed to further deconstruct the CV process (e.g. Venkataraman et al., 1992), to explore the moderating and mediating effect of environmental (e.g. Zahra, 1991) and organisational factors (e.g. Siegel et al., 1988; Zahra, 1991; Brazeal, 1993) on the performance of corporate ventures (e.g. McGrath et al., 1992), and to explore the transferability of knowledge from venture capital firms to corporate ventures (e.g. Ruhnka & Young, 1987). The venture capital (VC) model of creating new ventures became popular during the 1990s, due to its efficiency and high success rates, as demonstrated by VC firms. At the same time, the corporate entrepreneurship literature further explored its linkages to strategy-making (Kuratko et al., 1990; Covin, 1991; Hornsby et al., 1993). Entrepreneurship was treated as a firm phenomenon interacting with the organisational context and contributing to growth (e.g. Covin & Slevin, 1991; Zahra, 1993; Kuratko et al., 1993). While the majority of empirical studies in CV used data from North America, McNally's (1997) work was the first empirical study of CV in the UK.

By the late 1990s, corporate entrepreneurship had been associated with strategic renewal (e.g. Stopford & Baden-Fuller, 1994; Baden-Fuller & Volberda, 1997) and the strategy process (e.g. Burgelman, 1996). Entrepreneurial orientation had been crystallised as a construct associated to corporate performance (e.g. Lumpkin & Dess, 1996; Morris & Sexton, 1996), while the construct of entrepreneurial strategy making was introduced (Dess et al., 1997). This turn in the literature contributed further to the integration of corporate entrepreneurship to the strategic management literature (e.g. Hitt & Ireland, 2000; Ireland et al., 2001; Hitt et al., 2001; Hitt et al., 2002; Venkataraman & Sarasvathy, 2001) building on the conceptual work of Stevenson and Jarillo (1990), Day (1992) and Sandberg (1992).

The enormous growth of the VC industry during the late 1990s provided the CV industry with best practices, business models and structures which could increase the efficiency and success rates of CV investments (e.g. Chesbrough, 2000). The term *corporate venture capital (CVC)* started to dominate the academic literature (e.g. Chesbrough, 2002), whilst large corporations created venturing units which imitated the VC model. The cases of Lucent's New Venture Group and Intel Capital were identified by the media as representative of the VC influence on the third CV wave. By the end of 2001, the difficult macroeconomic conditions and the significant collapse of high-technology stocks had a negative impact on the financial performance of the CV funds. By the end of 2002, most of the large corporations had withdrawn their CV interest (Campbell et al., 2003). Birkinshaw (2005), assessing the dynamics of the CV industry, argues that through the third CV wave the surviving CV units had matured, building on the experience the CV managers gained, becoming more focused and sophisticated in dealing with both the entrepreneurial and strategic aspects of CV. A significant decrease on the number of published articles can be observed after 2002, as indicated in Narayanan's et al. (2006) review of the CV literature.

In summary, the historic evolution of the CV literature indicates clear influences from the evolution of the corporate entrepreneurship field, and clear trends in the focus of research on CV activities. Whereas between the 1970s and mid 1980s the interest was on internal CV activities, in the 1990s the emphasis shifted to external CV activities, reflecting the dominance of the VC model. In terms of the geographic distribution of published research into CV, it can be observed that progressively, and especially during the 1990s, there was an increase in CV studies outside the USA (e.g. Abetti, 1997[3]; Birkinshaw & Hill, 2005[4]; McGrath et al., 2006[5]). There has also been a more conscious effort to reach agreement on definitional issues of the CV phenomenon (Sharma & Chrisman, 1999), and the organisational implications of various forms and types of CV, and the practice of CV and its strategic use (Miles & Covin, 2002; Covin & Miles, 2007). In terms of the unit of analysis, it can be observed that the majority of the empirical studies treat the new venture(s) as the unit of analysis. The studies that focus on the CV process and activities as their unit of analysis area are mainly conceptual and case-based (e.g. Burgelman, 1983b; 1983c).

2.2.2 Definitions, taxonomies and forms: What is meant by CV?

Despite the progress in the corporate entrepreneurship literature during the last 35 years, there remains a lack of research frameworks and consistency in the manner in which entrepreneurial phenomena are defined (Shane & Venkataraman, 2000). CV, as a construct, has experienced a similar challenge in reaching a widely accepted definition. The historical evolution of the academic literature indicated that the way CV has been practiced throughout its three waves has produced various forms. The most widely accepted definition of CV is the one proposed by Sharma and Chrisman (1999; p. 19):

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[3] A case study on Toshiba's CV activities in Japan
[4] A study on European (UK, Germany, Sweden, Holland, France, Finland) and North American companies' CV units
[5] An extensive study on Nokia's (Finland) CV activities

> *"Corporate venturing refers to corporate entrepreneurial efforts that lead to the creation of new business organisations within the corporate organisation. They may follow from or lead to the innovations that exploit new markets, or new products offering, or both. These venturing efforts may or may not lead to the formation of new organisational units that are distinct from existing organisational units in a structural sense (e.g. a new division)".*

Three necessary conditions for the existence of CV are suggested by the literature: (a) to involve entrepreneurial efforts, (b) to be instigated by an existing organisational entity, and (c) (its outcomes) to be treated as new businesses. Innovation as a cause or output of CV is treated as a contingent condition, while the organisational form these entrepreneurial efforts take is conditional. CV is an umbrella concept taking various forms according to the variance of its two contingent conditions. This is also explained by the variety of models corporations have adopted in undertaking CV activities throughout the three CV waves. A crucial classification of CV is the one between internal and external, with ***external CV*** referring to CV activities *"that result in the creation of semi-autonomous or autonomous organisational entities that reside outside the existing organisational domain"*, while ***internal CV*** refers to CV activities *"that result in the creation of organisational entities that reside within an existing organisational domain"* (Sharma & Chrisman, 1999; p. 19-20). The involvement of an existing, large corporation in CV activities comprises two main processes: (a) a strategy (or more broadly a managerial) process, of pursuing a venturing strategy, and (b) an entrepreneurial process, of identifying and creating new ventures (Venkataraman et al., 1992).

In accepting that CV involves the *"entrepreneurial efforts"* of corporate managers or groups within an existing organisational context, it is presumed that organisations behave in an entrepreneurial manner (Jennings & Lumpkin, 1989) and hold an entrepreneurial posture (Zahra, 1993). Such firms are risk taking, innovative and proactive (Miller, 1983). The level of a corporation's entrepreneurial posture can be assessed on the basis of the intensity, the formality, the locus and the duration of these efforts (Zahra, 1993). The intensity of entrepreneurial posture is conceptualised as the level of a corporation's commitment to risk-taking, innovative and proactive behaviour, the extent of the entrepreneurial efforts (Zahra, 1993), and the degree and frequency of entrepreneurial events (Morris & Sexton, 1996). The formality of entrepreneurial posture is related to the degree and extent of participation of corporate managers of various or limited organisational levels to these efforts (e.g. Burgelmnan's distinction between induced-formal and autonomous-informal entrepreneurial activities). The locus of entrepreneurial posture is critical in defining the type and form of entrepreneurial activities (i.e. internal or external). The duration of entrepreneurial posture is related to the time requirements for these efforts to be carried out and subsequently developed. Considering that CV is the locus of the current study as a form of entrepreneurial activity, I used the intensity, the formality and the duration of CV activities of a corporation as a measurement of the CV posture of the corporation.

By using the analogy from the strategic management field of distinguishing between strategy content and strategy process, it can be argued that the construct of entrepreneurial posture describes the entrepreneurial content of an organisation. Entrepreneurial orientation is proposed by Lumpkin and Dess (1996) to be conceptually equivalent to strategy process, indicating how an organisation arrives to demonstrate an entrepreneurial posture. Building on Miller's (1983) work, Lumpkin and Dess (1996) outline five dimensions for characterising and distinguishing key entrepreneurial processes which form a firm's entrepreneurial orientation: (a) autonomy, (b) innovativeness, (c) risk taking, (d) proactiveness, and (e) competitive aggressiveness. These dimensions define entrepreneurial orientation whilst entrepreneurship is represented by the new entry of entrepreneurial orientation. The new entry is the organisational form of entrepreneurship (i.e. corporate venturing, intrapreneurship) as *"the central idea underlying the concept of entrepreneurship"* (Lumpkin & Dess, 1996; p. 136).

For the purposes of the current study, relevant typologies and taxonomies of CV were considered. Miles and Covin (2002) provide a review of the CV domain and bring to attention another two significant variables to categorise CV: (a) the focus of the venturing activities (internal or external to the corporation), and (b) presence of investment intermediation (direct or indirect allocation of financial resources to the ventures by the parent corporation). The first distinction between internal and external CV activities dates back to von Hippel (1977) and refers to the relationship between the ventures created, as an outcome of the CV activities, and the corporation (whether they reside within or outside the corporation), and the level of integration of the CV activities within the corporation [fully integrated or an autonomous activity (e.g. Ginsberg & Hay, 1994)]. The second variable, proposed by Miles and Covin, is in recognition of the variety of CV models and the increasing influence of the VC model in the third CV wave. The distinction between direct and indirect CV activities assumes the absence or presence of an independent financial mechanism operating outside the corporate boundaries to link the parent corporation to the venture itself. Chesbrough (2002) presents another two dimensions of corporate venture capital activities: (a) the corporate investment objectives (strategic or financial); and (b) the degree of linkage between the operational capabilities (resources and processes) of the parent corporation and the new venture.

These taxonomies of CV acknowledge its various forms, as well as its operational requirements for and degree of appropriateness to each corporation. These typologies indicate that CV can be approached and implemented through a variety of forms and business models, as a corporation can be aware of the involved risks and benefits, as well as requirements and anticipated outcomes and returns, of each individual form. In the current study, the variety of CV typologies was considered in the process of understanding and defining the phenomenon under investigation. Before reaching a definition and a typology of CV that the study was interested in examining, it was evident that the conceptual distinction between the corporate venture, as a project and the CV, as an activity had to be drawn. The current study is interested in CV as an activity that may or not be organisationally part of the parent corporation. On the basis of this distinction, CV can be characterised as an internal or external activity. Moreover, it was evident that the previously mentioned typologies referred to CV characteristics, related to both its entrepreneurial process (i.e. venture characteristics) and its managerial process (i.e. objectives, level of integration to parent corporation). Table 2.1 provides an outline of the way the construct "*CV activity*" is categorised as internal and external activity.

Table 2.1: CV activity construct: Classification[6]

Construct	Internal CV activity	External CV activity
Activity	Internal to the parent corporation	External to the parent corporation
Entrepreneurial Process		
Resources	Internal to parent corporation	External to the parent corporation
Opportunity	Internally or externally identified	Internally or externally identified
Ventures	May or may not reside within the parent corporation	May or may not reside within the parent corporation
Managerial Process		
Objective(s)	Strategic and / or financial	Strategic and /or financial
Structure	Integrated / Autonomous	Integrated / Autonomous
Association with core operational capability	Strong / Loose	Strong / Loose
Financial mechanism	Direct/Indirect	Indirect/Direct
CV managers	Corporate managers	Non corporate managers

The main two sub-constructs which conceptually separate internal from the external CV activities are the entrepreneurial resources involved in the entrepreneurial process and the actors involved in undertaking the entrepreneurial and managerial process of CV. As an activity, CV presupposes a process in which different individuals of various functional groups and hierarchical positions (Burgelman, 1983b) interact, make decisions and take actions around a new business opportunity, resulting in the creation of a new venture as an outcome of a new, for the corporation, combination of resources. This conceptualisation highlights the role of a team/group (as entity) which bears the responsibility of conducting CV. By this way, CV is perceived as a focused corporate entrepreneurship activity, in contrast to intrapreneurship which is perceived as dispersed corporate entrepreneurship activities (Birkinshaw, 1997). While the creation of the new venture is the direct outcome of the CV process, there may be other indirect outcomes such as strategic renewal and innovation, achieved through the change *"in the pattern of resource deployment – new combinations of resource in Schumpeter's terms –"* transforming *"the firm into something significantly different from what it was before – something 'new'."* (Guth & Ginsberg, 1990; p. 6)

[6] Developed by the author

2.2.3 CV Motives: Anticipations, intentions and expectations

According to Block and MacMillan (1993, p. 20) *"companies venture primarily to grow and to respond to competitive pressures"*. While this quote describes the intentions surrounding the involvement of a corporation in CV activities, it does not provide sufficient explanation for the motives which lead or force such an involvement. Burgelman (1983b) argues that corporations venture because venturing provides these corporations with a platform of discovering new and unique ways of combining resources, some of which allow them to capture rents (McGrath, et al. 1994).

Different theoretical perspectives provide different views on the motivators of venturing activities by large corporations. The ***evolutionary perspective*** views the creation of new organisational entities as a response to an environmental signal of opportunity (e.g. Aldrich, 1999; Burgelman, 1983b). Corporate managers, supported by an experimental corporate culture, identify opportunities and develop these into ventures (Burgelman's conceptualisation of autonomous strategic behaviour). The ***contingency perspective*** views the involvement in CV activities as an induced decision from the top management team which decided on the objectives and anticipated returns of this strategic choice (e.g. Child, 1972) in an attempt to adapt to the changing external environment. The ***resource based view*** puts emphasis on the role of venturing in anticipating and responding to external environmental threats (e.g. Christensen, 1997). The ***institutional theory*** draws on the isomorphic tendency of firms operating in the same industrial context to imitate the behaviour of highly performing firms (e.g. DiMaggio & Powell, 1983). The ***real options-based model*** (e.g. MacMillan & McGrath, 2000) argues that the involvement in CV activities allows a corporation to gain access to the value (i.e. economic, technological) new ventures might bring, while monitoring the high risk and uncertainty these ventures are involved in, without engaging the corporation with a complete financial commitment to the new ventures.

It is evident that the motivators of the involvement of a large corporation in CV activities can be both internal and external to the corporation, as a consequence of autonomous or induced managerial behaviour, in response to an environmental opportunity or threat. The issue remains that quite frequently corporations decide to get involved in CV activities in response to the anticipated outcomes of this involvement, as Block and MacMillan's quote indicate. The empirical literature has examined and conceptually associated CV and in general corporate entrepreneurship to growth and positive financial performance (e.g. Zahra, 1991). The creation of new ventures has been anticipated by the literature as a path for corporations to deliver new products and technologies, and enter new markets. Besides the direct anticipated impacts from the involvement in CV activities, the literature identifies expected outcomes that are indirect, such as the occurrence of learning, the promotion or enhancement of innovative culture, the development of new competencies, and the enhancement of entrepreneurial behaviour, which may occur at both the managerial and organisational levels (Kuratko et al., 2005).

2.2.4 CV Outcomes: Desirable success and anti-failure bias

Corporate entrepreneurial activities such as CV involve high risk and uncertainty with regard to anticipated returns (Block & MacMillan, 1993). However, the CV literature had been dominated by an optimistic and success biased approach to the outcomes of the CV process. After each CV wave, there was an enormous literature outlining prescriptive lists of factors (related either to the corporation or the venture itself) on how to secure the success of corporate ventures (e.g. von Hippel, 1977; Block, 1982; Sykes 1990; Campbell et al., 2003). There is only limited research on the failures and disappointments corporations have experienced from an unsuccessful involvement in CV activities (McGrath et al., 1992; McGrath, 1995; McGrath, 1999). McGrath (1999) argues that the success bias taken in studying the outcomes of the CV process might have restricted our understanding of the CV process (i.e. the impact of both positive and negative outcomes). She argues that recognising and simultaneously examining both positive and negative outcomes might provide a more integrated examination of the process.

A variety of possible outcomes follow from the motivators for initiating the involvement in CV activities. The majority of the literature focuses on economic value-related outcomes which are measured through traditional financial terms (i.e. profitability), while implying the occurrence of other forms of value (i.e. strategic). There is some evidence for the occurrence of strategic benefits assigned to the creation of new ventures: (a) ***learning***, embodied in new capabilities that an existing corporation develops during the venturing process of developing a new combinations of resources (e.g. Burgelman, 1994) and which are beneficial for the corporation if not for the venture itself; (b) the ***creation of new capabilities*** (i.e. expertise, skills, knowledge) and routines (i.e. business development procedures and models), and (c) the ***development of behavioural traits*** among the individuals involved in the CV activities which may contribute to the exemplification of entrepreneurial behaviour within the corporate boundaries by corporate actors (Kuratko, et al., 2004).

The majority of empirical studies dealing with the outcomes of the CV activities have focused on examining the ***performance of the ventures***, rather that the outcomes of the CV process itself. They measure their performance at the individual or portfolio level, evaluating both tangible and intangible outcomes. While their tangible outcomes are related to R&D (new businesses, products and technological patents) generating economic value (ROI), their intangible outcomes are related to the creation of new routines (i.e. innovation processes). The majority of empirical studies looking at ventures' performance examine the survivability rates of new ventures and their financial performance. This literature has focused on understanding and predicting the moderating and mediating role of business, firm and venture level factors on the ventures' performance. Environmental uncertainty, involving competitive hostility (Zahra & Covin, 1995), market and customer conditions (Zahra, 1991), and industry life cycles (Covin & Slevin, 1990), has been found to affect venture performance[7]. Characteristics assigned to the parent corporation, such as corporate strategy (Block & MacMillan, 1985; Dougherty & Hardy, 1996), structural context (Zahra, 1991; Chrisman et al., 1998), governance and rewards system between the corporation and the CV team (Zahra, 1996; Block & Ornati, 1987) appear to have contributed positively in enhancing the performance of the venture in market terms.

The strategic success of new ventures within the organisational context has been examined on the basis of the level of legitimacy the new venture manages to gain, while competing with other routines and activities (Dougherty & Heller, 1994).

[7] Among these factors, competitive hostility only affects negatively venture performance.

Aldrich and Fiol (1994) proposed two forms of legitimacy: (a) cognitive legitimisation, referring to the spread of knowledge about the new venture, and (b) socio-political legitimatisation, referring to the process through which a new venture gains acceptance by key stakeholders. Top management commitment to the new ventures (Thornhill & Amit, 2002) and resource relatedness (e.g. Miller & Camp, 1985; Sykes, 1990) between the parent corporation and the new ventures appear to contribute positively in the legitimisation process of the latter. Most of the empirical studies concerning venture-based characteristics and their contribution to venture performance focus on two factors: (a) entrepreneur and team characteristics (i.e. prior CV experience [Day, 1994; von Hippel, 1977], R&D competence [Zahra, 1991; 1993], and team composition [Zahra, 1996]), and (b) size and age of the venture (i.e. Venkataraman & Low, 1994). Overall, the literature suggests that a close relationship (fit and relatedness) between the new venture and the parent corporation increases the survivability rates of the former, contributing positively to the profitability of the latter (Sorrentino & Williams, 1995; Thornhill & Amit, 2002).

Considering the importance of the teams/units which have the distinctive role in conducting CV activities on the behalf of a corporation, it is interesting to find only limited literature and empirical studies which have examined their performance (Birknishaw & Hill, 2003). In their pioneering study, Birkinshaw and Hill (2003) define the CV unit as a separate entity established by the corporation in an attempt to identity and nurture new business opportunities for the corporation. They examine the ***performance of the CV unit*** combining subjective perceptual measurements of the strategic value created by the unit and performance based measurements of the unit's investment portfolio. Their study recognises the intangible nature of outcomes that may emerge from the operation of the CV unit, as well as the difficulties in using *"objective"* measures of the unit's performance, due to confidentiality. The CV units' strategic value included four sub-constructs: (a) creation of new companies that increase demand for the corporation's products or technologies, (b) increased visibility/awareness of corporation, (c) creation of spin-out companies, and (d) increased recognition across the corporation of the importance of new business development. The investment portfolio performance was measured using two constructs: (a) number of investments per year, and (b) portfolio liquidity event ratio.

Their study provides an interesting dimension in accessing the outcomes of the CV process, as it presents the CV teams and the individuals involved in these focused corporate entrepreneurship activities as generators of both economic and strategic value. The significance of the role of the *"venturing team"*[8] is echoed in McGrath's et al. (1994) proposed model of five antecedent conditions for a venture to deliver its anticipated rents. They argue that venturing team proficiency contributes positively in creating rents for the new venture, and they bring forward issues such as team dynamics, members' characteristics, commonly shared objectives and interpersonal trust, which moderate team proficiency.

Looking further at the literature on the ***outcomes assigned to the CV process***, the majority of conceptual and empirical studies draw conclusions from the corporate entrepreneurship literature. Associating conceptually the CV process as a manifestation of a corporate entrepreneurship process, the entrepreneurial posture and entrepreneurial orientation of a corporation has been hypothesised to contribute positively to corporate performance (e.g. Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra et al., 1999). Corporate performance is conceptualised as an economic variable of two main dimensions: profitability (i.e. revenue generation) and growth (i.e. sales and market share growth). Lumpkin and Dess (1996) and Zhara (1993) argue that measuring the performance of corporate entrepreneurship should also include *"overall performance"* and non-financial criteria, such as the corporation's reputation, public image and goodwill, and the perceived fulfilment of the initial goals and objectives of the corporation. They acknowledge that the impact of corporate entrepreneurship needs to incorporate both efficiency and effectiveness measurements, as well as the evolution of the priority given by a corporation in evaluating its entrepreneurial posture and orientation. This literature examines the moderating and mediating role of organisational factors such as structure, strategy, strategy making processes, firm resources, organisational culture and top team management characteristics in the entrepreneurial orientation-performance and

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[8] I use the term as conceptualised by McGrath et al., (1994, pp. 355-356) with the venturing team having a role *"in creating and preserving heterogeneity among firms"* and *"create potentially durable sources of uniqueness for a firm by establishing new 'bundles' of assets, together with routines through which they are combined and manipulated", while "teams are to a large extent responsible for the organisational memory that allows a firm to 'learn' "*

entrepreneurial posture-performance relations[9]. Environmental factors and industry characteristics have also been hypothesised to play a role in these relationships.

In their review of the literature on the entrepreneurial behaviour of corporate managers, Kuratko et al. (2004) and Kuratko et al. (2005) argue towards the espoused positive effects of corporate entrepreneurship on growth, strategic renewal and innovativeness (Baden-Fuller, 1995), new combinations of resources (McGrath, et al. 1994) and international success (Birkinshaw, 1997). Moreover, they argue that the occurrence and continuous reinforcement of innovative and creative managerial behaviour is critical in allowing higher level, long-term outcomes to occur (besides financial performance). The literature proposes the willingness of a corporation to continue implementing a corporate entrepreneurship strategy and the willingness of corporate managers to behave in an entrepreneurial manner as crucial contributors to the occurrence of various forms of value for the corporation and its managers.

For the corporate personnel, value might be created from the tacit knowledge and social capital they develop by being involved in and implementing a corporate entrepreneurship activity. Middle-level managers have the potential to act as change agents (Bower, 1970) within an organisational context due to their possession of knowledge (Floyd & Lane, 2002), expertise and perceptions of the organisation's core competences (King et al. 2001). They may cause organisational change by championing strategic alternatives and fostering organisational innovation (Quinn, 1985). Kuratko et al. (2004) argue that middle-level managers, as part of a corporation's human capital, potentially may be a source of competitive advantage to the firm.

At the organisational level, value may also be created from the enactment of entrepreneurial behaviour through the rationalisation and dissemination of organisational tacit (Floyd & Wooldridge, 1999; Hitt et al., 1999) and explicit (Pizarro-Moreno et al., 2007) knowledge, the creation of new value-creating core competences, the emergence of a pro-entrepreneurship organisational culture, the enhancement of innovation capability, and strategic diversification (Burgelman &

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9 Covin and Slevin (1991) and Lumpkin and Dess (1996) provide a detailed review on this literature

Grove, 1996). It is evident that looking at dynamic processes which connect the enactment of corporate entrepreneurship, organisational performance and value creation is still an emerging field in the corporate entrepreneurship literature.

2.3 Dynamics of the CV process: An activity in between two contexts

One of the most complex issues surrounding the CV phenomenon is its unique combination of diverse mentalities and behaviours around the same core activity, namely the creation of new ventures. It is this uniqueness that makes it a highly complex and uncertain process to study and to understand (Venkataraman et al. 1992). While CV is an enactment of entrepreneurship, it takes place within the context of a corporation. While creating new ventures involves its own challenges and barriers to survivability, CV is confronted with extra challenges peculiar to its organisational context, as inherited from the parent corporation, which hosts the CV process.

2.3.1 CV embedded in the corporate entrepreneurship process

Our knowledge of the ***institutional challenges*** that the CV process is confronted with originates primarily from the literature that examines the interface and interrelationship between corporate entrepreneurship and strategic management (e.g. Sandberg, 1982; Drucker, 1985; Stevenson, 1985; Stevenson & Jarillo, 1990; Day, 1992; Hitt et. al. 2001). The examples of 3M, Intel (Burgelman, 2002) and AT&T (Morris & Trotter, 1990) demonstrate the successful institutionalisation of entrepreneurial processes within complex large corporations. They also highlight the harmonious co-existence of managerial (administrative) and entrepreneurial practices, when managed effectively and efficiently.

The pioneering work of Stevenson (1985) and Stevenson and Gumpert (1985) conceptualise corporate entrepreneurship as a management approach of contrasting characteristics to the administrative management approach. Distinguishing large corporations between those that have an entrepreneurial focus and those with an administrative focus, Stevenson explores their different approaches to management across six dimensions: (a) strategic orientation (driven by perceived opportunity vs. controlled resources), (b) commitment to opportunity (action vs, analysis driven), (c) commitment to resources (minimal vs. complete), (d) control of resources (episodic use vs. complete ownership), (e) management structure (flat vs. hierarchical), (f) reward philosophy (based on value creation vs. on seniority and responsibility), (g) growth orientation (rapid vs. slow) and (h) entrepreneurial culture (explorative vs. planning oriented). The way a corporation approaches these dimensions both individually and collectively appears to influence the enhancement or absence of an entrepreneurial approach to management (Stevenson, 1985).

Moreover, these dimensions highlight the areas of ***internal conflict and pressure*** between the two managerial approaches when they co-exist or when a corporation is in the transitional phase moving from one approach to the other (Mitzberg & Waters, 1982). Van de Ven and Engleman (2004), recognising the complexity which characterises large corporations, argue that it is not possible for top management teams to personify entrepreneurial activities, but instead they ***need to establish relationships*** within and outside their corporations with individuals and groups who could do so. The top management teams also need to mobilise and align these entrepreneurial activities with innovation, and to create institutional structures and procedures which legitimise and enable them. They argue that the ***legitimisation process*** of innovation and corporate entrepreneurship within a corporation has both cognitive and socio-political dimensions, with the managers directly involved in entrepreneurial ventures being active participants of the entrepreneurial process and affecting it through their negotiation and political behaviour.

Covin and Slevin (1991), made a significant contribution with a conceptual model of corporate entrepreneurship as a firm phenomenon. This introduced the notion of organisations as entrepreneurial entities, viewing entrepreneurial firm-level behaviour as a pervasive and integral part of an organisation's operations. Their model emphasises the entrepreneurial behaviour of individuals within large corporations and how this behaviour affects organisational actions by giving *"meaning to the entrepreneurial process"* (Covin & Slevin, 1991; p. 8). They model ***external, strategic and organisational variables as moderators of a corporation's entrepreneurial posture***, and propose a positive effect of the latter on firm performance. The construct of external variables is composed by technological sophistication, environmental hostility and dynamism, and the industry life cycle stage of the corporation. The construct of strategic variables includes the strategy mission, business practices and competitive tactics of a corporation. The construct of organisational variables refers to top management values and philosophies, organisational resources and competencies, organisational culture and structure. The model proposes the individual moderating role each groups of constructs has on a corporation's entrepreneurial posture.

In the same rationale, Zahra (1991) proposes a model in which ***environmental, strategic and company related constructs jointly influence the entrepreneurial activities of an organisation.*** In detail, the environmental variables relate to the hostility, dynamism and heterogeneity of the environment. Regarding the strategic variables, Zahra proposed the importance of the content of the corporate strategy as a moderating factor of the company's entrepreneurial activities with the emphasis being on growth and stability strategies. Regarding the organisational factors that can be important predictors of corporate entrepreneurship activities, the focus was on organisational structure and organisational values. The pursuit of entrepreneurial activities was modelled to influence organisational performance.

Butler (1991) proposes the existence of two processes during the enactment of entrepreneurial behaviour within a large corporation: (a) an entrepreneurial process, of opportunity *"noticing"*, and (b) a managerial process, of actions taken on *"noticed opportunities*". A significant contribution of his proposed model is the distinction between ***inside and outside (the organisational boundaries) entrepreneurial behaviour.*** His argument is that there is a relationship between noticing opportunities within and outside the organisational and industry boundaries of a corporation: as the level of inside entrepreneurial behaviour and action decreases, the level and proportion of outside entrepreneurship increase. Butler attempts to explain, with this proposed relationship, the process through which corporate entrepreneurs create new ventures outside the organisational boundaries, as a reaction to being frustrated by the inability of the corporation to take action on opportunities they noticed. Consequently, organisational flexibility [10] to identify external or internal

[10] Organisational flexibility is conceptualised as the ability of the firm *"to deal with its marketing, production, and technical opportunities, while also creating and maintaining a climate that supports creativity and innovation (Albetti & Stuart, 1986)"* as cited in Butler (1991; p. 256)

opportunities has a moderating effect on the proportion of internal to outside entrepreneurial behaviour.

2.3.2 Focusing on the CV process itself

The literature which unfolds the CV process is limited and dated between the second and third CV wave. Consequently, it is preoccupied with internal CV activities. Venkataraman et al. (1992; pp. 489-491) distinguish the venturing activities which compose the CV process into three distinctive challenges faced by corporate managers: (a) business founding[11], (b) managing the hierarchical process[12], and (c) managing the institutional context[13]. They view the dynamics of the CV process across its evolutionary path, as the fulfilment of four conditions: ***definition, penetration, contagion and institutionalisation*** within the organisational context of a large corporation. The definition stage of the proposed CV process involves actions, structures and strategies that aim to clarify and develop *"the current and expected future positions of a new idea or initiative"*. The second stage involves actions, structures and strategies that aim to take the outcome of the definition stage into implementation forcing market entry. The third stage involves actions, structures and strategies that aim to cope with growth, while the fourth stage involves actions, structures and strategies that aim to integrate the *"new initiative with the body of the corporate or mainstream of the firm"* through processes of legitimisation and socialisation, preparing *"the new business for corporate citizenship"*. It is clear that these four stages or conditions of the CV process run across the three areas of challenges, implying ***three distinctive levels of analysis*** with regards to the hierarchical position of the actors involved at each level: (a) the venture level with the main actors being the venturing managers, (b) the venture level with the main actors being the venturing champions interacting between the venturing team and the institutional context, and (c) at the venture population level with main actors being

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[11] This challenge involves the creating and developing of competencies and infrastructure to develop, manufacture, market, distribute and service the product, comprising a set of founding sub-processes
[12] This challenge involves activities (gaining political support, currency and resources) to fostering the venture created while managing the hierarchy, comprising a set of fostering sub-processes
[13] *"Business founding"* and *"managing the hierarchy"* take place within the institutional context. The latter involves activities of developing the repertoire of routines and styles that foster firm vitality and innovation at a macro-organisational level, comprising a set of context-managing processes

the top management team dealing with institutional context. The model stresses the ***importance of champions*** for hierarchical management of the CV process, illustrating its characteristics as a process that cuts across the ***micro and macro organisational levels*** of actions, decisions and outcomes.

The model assumes that the main concerns *"of the top management of a corporation from a corporate venturing point of view are to ensure that a wide variety of new ventures are initiated within the firm and to ensure that as many ventures survive and succeed as possible"* while *"firms may differ in the styles they adopt to manage the process of variation, selection, and retention"* (Venkataraman et al., 1992; p. 507). Even though Venkataraman et al. recognise that they approach the top management team from the CV perspective, their model does not deal with the case where the CV process is competing at the macro organisational level with other alternatives of innovation and growth, for resources and acceptance from the top management team. It presupposes an *ex ante* top management team's strategic vision on the utilisation of CV. However, in an even higher level of abstraction than the one proposed in their model, top management teams deal with other variations part of which is CV (i.e. CV might be competing with acquisitions, M&A).

Burgelman's (1983c) work takes a step further to a higher level of abstraction, and treats the strategic vision of the top management team towards the management of entrepreneurial systems from an *ex post* approach (i.e. internal CV). He introduces an experimentation-and-selection approach of dealing with entrepreneurial activity[14]. Using internal CV activities as an exemplification of autonomous behaviour within the organisational context of a large, established corporation, he unfolds three levels of processes: (a) a process model of internal CV (Burgelman, 1983b), (b) an evolutionary framework of the strategy making process of the established corporation (Burgelman, 1983a), and (c) the dynamic forces model driving the evolution of a firm (Burgelman, 1994). CV, approached as an intra-organisational activity, is linked with the strategy process of a corporation, and the industry-corporation interface in guiding the evolution path of the corporation within an

[14] This is a similar debate to the top-down vs. bottom-up vs. middle-up-bottom notion of strategy process (Nonaka, 1988).

industry. Burgelman's (2002; p. 17) process model of internal CV *"documents the simultaneous as well as sequential strategic leadership activities"* of three generic levels of corporate management: (a) venture team, (b) middle/senior management, and (c) corporate management, across two levels of strategy-making: (i) corporate-level and (ii) business (or venture) level.

The corporate-level strategy-making involves two overlaying processes of the determination of the structural and strategic contexts of the corporation. The ***structural context*** determination is perceived as the *"administrative and cultural mechanisms that top managers can use to maintain the link between strategic action and the existing corporate strategy"* (Burgelman, 2002; p. 12). The ***strategic context*** determination is the *"political mechanisms through which middle managers question the current concept of strategy and provide top managers with the opportunity to rationalise, retroactively, successful autonomous strategic behaviour"* (Burgelman, 1983c; p. 1350).

The business-level strategy making involves two core processes to the CV process: (a) a ***definition process***[15], and (b) an ***impetus process***[16]. These two processes deal with the way a new venture is defined as a business idea, and how it is managed to gain momentum and be accepted within the organisation. These are quite similar processes to the ones proposed by the Venkataraman et al.'s model. While the structural context of a corporation, as set by the top management team, defines the boundaries of action of all activities including venturing, the definition process introduces new ventures' initiatives, as the outcome of the strategic leadership actions of operational and middle-level managers. These are two opposing forces, as the structural context attempts to maintain the existing strategic context, while the development of new ventures through the impetus process challenges it.

With this model, Burgelman emphasises the role of different management levels in the CV process. ***Operational managers*** at the venture team, by ***questioning*** the existing structural context, generate new business ideas and focus on the technical

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[15] *"Activities involved in articulating technical-economic aspects of an internal CV project"* Burgelman, 1983b (p. 229)

[16] The process through which an internal CV project *"gained and maintained support in the organisation"* Burgelman, 1983b (p. 229)

and market development of them. ***Middle-level managers***, by ***negotiating*** with the existing structural context, attempt to delineate the strategic contexts of the new ventures, whilst they coach and manager the venture portfolio, providing organisational ***championing*** for the ventures. ***Corporate managers***, by motivating the experimental process towards the creation of new ventures, ***authorise*** the success of them, and determine the internal selection criteria to rationalise and to incorporate the new ventures into the corporate strategy, committing the corporation's full support to them.

Building on the work of Burgelman (1983c) and Bower (1970), Garud and Van de Ven (1992) provide another insightful framework for understanding the dynamics of the CV process. With the emphasis being on the ***premises of actions and decisions*** surrounding the process, they examine the role of the adaptive process of *"trial-and-error learning"* and the role of *"action persistence"* in guiding the development of new ventures. Trial-and-error learning allows venture managers in situations of uncertainty to evaluate the outcomes associated with the course before forming decisions on future actions, eliminating current actions with negative outcomes. On the other hand, due to ambiguity over outcome and the occurrence of slack of resources venture managers might persist in their actions despite the occurrence of negative outcomes. They also introduce two constructs (changes in the external environment and corporate sponsor's involvement) which have an input in the action-outcome relationship. They suggest that under conditions of ambiguity and slack resources action persistence may be accompanied by an insulation of the CV process to the inputs of the external and institutional environment, while the trial-end-error learning process allows the CV process to be more interactive and open to the inputs of the internal and external environment. Their model identifies ***the role of the parent-corporation's top management teams*** as critical in directing the CV process, as mentors, critics and champions of the CV process and its ventures. They argue that these roles can be enacted in an interchangeable fashion according to the outcomes of the process. The level and intensity of the involvement of the corporation's top management team is critical in successfully performing each role.

2.4 CONCEPTUAL FRAMEWORK: A HOLLISTIC APPROACH TO THE CV PROCESS

Having conducted a review of the relevant literature on the characteristics and dynamics of CV as an activity and process, this section focuses on presenting the research rationale and conceptual framework of the study. I perceived the involvement of a corporation in CV activities as an initiative which faces entrepreneurial and managerial challenges during the process of its initiation and implementation, while delivering outcomes to the organisational and business context of the corporation. Birkinshaw (1997; p. 209) argues that *"the initiative process in bounded by the identification of an opportunity at the front end and the commitment of resources to the undertaking at the back end. Note that long-term success of the resultant business activity is a secondary issue. The entrepreneurial challenge is to move from an idea to a commitment of resources; the managerial challenge is to make the resultant business activity profitable"*. Approaching CV as an initiative, I was interested in examining the process of it at two levels: (a) at the CV team level, and (b) at the corporate level. The venture level was examined as a complementary level.

While the existing literature looks at the CV process as occurring around the creation of new ventures, my focus was on examining the involvement of a corporation in CV activities, as an alternative path to growth and innovation. In the 1990s many large corporations lacked extensive exposure to CV. However, a significant number of them across all industries decided to get involved, primarily motivated by the anticipated outcomes of CV. Other strategic options such as M&A, acquisitions, JVs, in-house innovation schemes were available as alternative avenues to growth and innovation. CV though was perceived as the new managerial panacea for large corporations, if applied appropriately. In 1999, the UK government promoted CV as an alternative partnership form between large and small companies, and taxation incentives[17] were granted for both.

[17]The UK government introduced a 20% tax relief on profits to encourage investment in minority share holding in small higher risk taking companies. The intention was to increase the supply of VC to small firms and to reinforce CV activities (Inland Revenue Report, 1999). The scheme was activated in April, 2000. In the same year, CBI released a report on the benefits of CV in an attempt to increase its awareness among small and large companies (www.cbi.co.uk).

Besides being interested in the initiation of CV as an initiative, I was specifically interested in examining the way this action was implemented within the existing organisational context of these corporations. Implementing CV within a pre-existing organisational context is a challenging task. Influenced by the corporate entrepreneurship literature, I was interested in examining the role organisational structure, culture and resources had in this process. I also considered the role of the actors/people involved in the implementation of the CV initiative to be important. While the literature suggests that organisational context has a moderating effect on the implementation of CV activities, I was also interested to examine whether the decision to undertake CV activities had an impact on the organisational context.

In terms of the outcomes of initiating and implementing the involvement in CV activities, I was interested in examining the consequences of such an experience on the corporation, in terms of any occurred changes in the organisational culture, on organisational knowledge and strategy making. I was also interested in examining how the CV experience had affected the CV team. Figure 2.1 provides an illustration of the constructs and their relationships the study focused on.

The research aim of the enquiry can be summarised as:

> *"to explore and explain the process of involvement in and implementation of corporate venturing by a large corporation and its impact on the organisational context"*

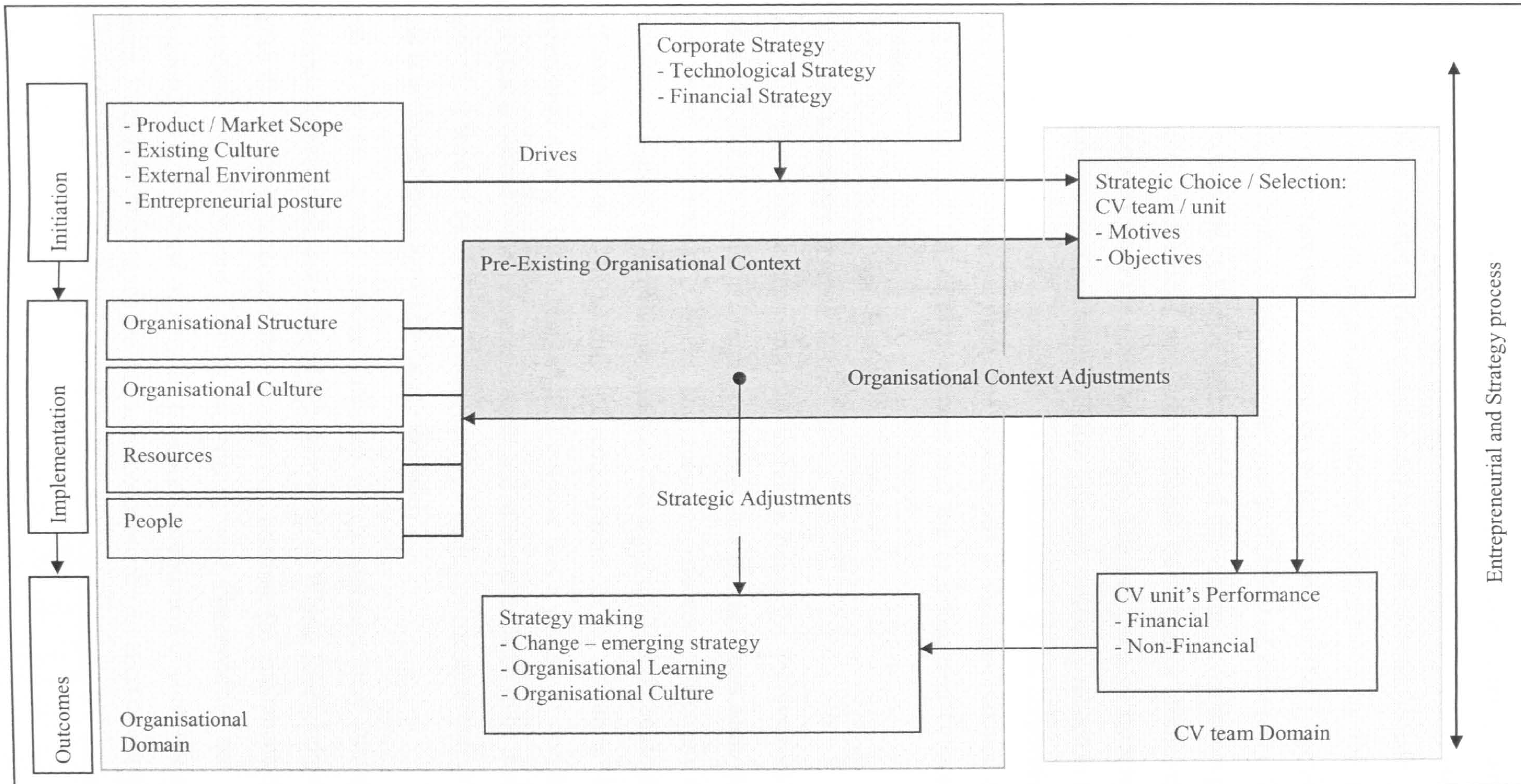
From this statement three main research questions emerged:

(a) How does CV arise within large corporations?

(b) How is CV implemented within an organisational context?

(c) What are the consequences for the CV team and the parent corporation from the involvement in CV activities?

Figure 2.1: Conceptual framework and key constructs[18]



[18] Developed by the author

Following a process model approach, the conceptual framework of the CV process is organised around three stages: (1) initiation, (2) implementation and (3) outcomes. The process runs in parallel in two domains: (a) the organisational domain, and (b) the CV team domain. The organisational domain is composed by the existing strategy context (corporate strategy), and the organisational context (organisational structure and culture, human capital-people, and availability of resources). The CV team domain is composed by the CV unit itself and the venture development process, generating a level of financial and non financial performance from individual ventures or collectively from the venture portfolio. The two domains are related and interact through operational and administrative linkages, primarily related to the way the CV activities have been approached and implemented by the corporation. The outcome of this interaction may generate adjustments to the organisational domain, leading to changes of the strategy context and the organisational culture of the corporation.

2.4.1 CV: As a strategy process

The CV and corporate entrepreneurship literature treats the involvement in CV activities as a discrete decision of strategic importance that produces some outcomes for the parent corporation. CV, as an initiative, involves a decision and the commitment of a group of individuals to action. To argue towards the strategic use of CV (Covin & Miles, 2007), and the employment of a venturing or even entrepreneurial strategy by a corporation, I propose that a pattern of decisions and actions (that occurred before, simultaneously and after the decision to be involved in CV activities) need to be studied. Consequently, a more holistic approach to the CV process is proposed and adopted by the current study.

Influenced by the strategy process literature which addresses how strategies are formulated, implemented and changed (Chakravarthy & White, 2002), I developed a model of the CV process around three stages: (a) initiation, (b) implementation, and (c) outcomes of CV (Figure 2.1). In accordance with Chakravarthy and White's observation that a *"decision"* is only the temporal commitment of corporate actors to an action, I was interested to see the interaction between the decision of a corporation (to be involved in CV activities) and the action taken (conducting CV activities) in response to this decision. It is argued that this interaction is influenced by the corporation's organisational context (structural[19] and strategic context, informal organisation[20], and intentionality[21] or strategic intent) which shapes the way the decision-action interaction develops. The outcome of the decision-action interaction is conceptualised by Chakravarthy and White as the strategy dynamic, i.e. the direction towards which a corporation can move within the strategy space. They propose four forms of strategy dynamics: (a) ***improving/imitating*** (by benchmarking the current strategy content to the one of industry leaders; (b) ***consolidating*** (by monitoring its competitors and improving its strategy content); (c) ***innovating*** (by seeking to innovate); (d) ***migrating*** (i.e. from a cost to a differentiation leadership strategy) in terms of its strategy content. Miles and Snow's (1978) typologies of strategy dynamics categorising corporations as prospectors, analysers, defenders and reactors are among the rare studies that link strategy dynamics and the underlying process that produces them.

The current study aimed to examine whether the decision to be involved in CV activities and the sequence of actions-decisions that followed led to the occurrence of strategy dynamics as an outcome, or more modestly generated the redefinition of the strategy context of the corporation leading to entrepreneurial strategy content. Even though Covin (1991) identified different patterns of strategic behaviour demonstrated by conservative and entrepreneurial companies, his study does not deal with how or whether the same company might move from one type to the other. Mintzberg and Waters (1982) suggest that during its chronological evolution, a corporation moves from an administrative to an entrepreneurial mode of strategy, followed by another phase of administrative mode. Organisational learning and changes in the organisational culture wére proposed by the current study as moderating constructs that could have contributed to any change of corporate strategy. In the case that no

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[19] Based primarily on Bower's and Burgelman's work , structural context involves divisional structure issues, information management, human resources and control systems
[20] As introduced by Barnard (1938), informal organisation is a constructs which involves leadership skills, emotional intelligence, empowerment and issues of procedural justice
[21] Intentionality conceptually is equivalent to the mission of a corporation, influencing the way its managers perceive opportunities, leverage and renew corporate competences

change in the corporate strategy had occurred, I was interested in examining the preventable conditions.

2.4.2 CV: As a corporate entrepreneurship process

Corporations, as organisational entities, follow social and organisational structures, which guide their evolution and adaptation to the external environment. They may act as entrepreneurial entities (Covin & Slevin, 1991) during certain phases of their life cycles (Mintzberg & Waters, 1982), exhibiting a level and degree of entrepreneurial posture. To arrive at the demonstration of entrepreneurial posture, behavioural characteristics such as autonomy, risk-taking, innovation, proactiveness and competitive aggressiveness need to be experienced among corporate managers and a new entry of entrepreneurial orientation need to be exemplified.

While a process is assumed to have guided this scenario, there is limited work on the decisions and actions involved for a corporation involved in entrepreneurial activities. Hornsby's et al. (1993) proposed conceptual model is among the rare attempts to look at the sequence between decision and action of the corporate entrepreneurship process. Even though they refer to the *"decision to act intrapreneurially"* and not directly to the decision to be involved in CV activities, their model is used here for demonstration purposes only. They argue that the interaction between organisational[22] and individual[23] characteristics and *"some kind of precipitating event"*[24] result in the decision to act intrapreneurially. Even though Hornsby et al. do not go into detail to explain the characteristics of such event, they argue that following this decision a set of actions is initiated. Treating the decision to act in an entrepreneurial way as a business opportunity, the primary purpose of the set of actions that follows is to explore the feasibility of it, as well as resource availability and the ability to overcome organisational barriers. Once these actions have been carried out, the implementation phase of the idea follows.

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[22] Management support, autonomy/work discretion, rewards/reinforcement, time availability and organisational boundaries

[23] Risk-taking propensity, desire for autonomy, need for achievement, goal orientation, and internal locus of control

[24] The concept of the *"precipitating event"* shares similarities with Shapero's (1984) conceptualisation of the *"trigger event"* in explaining the antecedents to entrepreneurial activity

Hornsby's et al. model is a step forward in understanding the stages involved in initiating and implementing a corporate entrepreneurship initiative. However, its deterministic and static view of the entrepreneurship process does not capture the dynamic interactions among the proposed constructs. In comparison to Burgelman's model, it can be argued that the latter views the CV process as a change agent, unfolding how the corporation deals with an autonomous, entrepreneurial behaviour. Hornsby's et al. model focuses primarily on the contribution of individual and organisational characteristics in the CV process[25] and the business opportunity exploitation process, while it treats the rest of the organisational context as static and granted. While it is acknowledged that each model and approach has a different focus, the current study proposes that the strategy and the entrepreneurship processes co-exist.

2.4.3 CV and strategic context: An induced or autonomous behaviour

Reviewing the relevant literature, it was observed that there is limited research in unfolding the rationale and main motivators behind the involvement of large corporations in CV activities. Unfolding the initiation process of CV activities can allow for a better understanding of the characteristics and planning of entrepreneurial and strategy processes in carrying out these activities.

The strategic relatedness of a CV initiative to the current corporate strategy of a corporation refers to the degree of newness of the initiative to the organisation. Sorrentono and Williams (1995) and Thornhill and Amit (2000) argue that the degree of relatedness (from being closely related to being completely unrelated) affects the way the CV process requires to be handled creating a variation of challenges and actions a corporation needs to take in order to effectively manage the CV process. This study proposes that arriving at the decision to be involved in CV activities may be a strategic choice to implement the current corporate strategy of a corporation (Covin & Miles, 2007), as an exemplification of induced managerial behaviour.

The literature argues that close relatedness between the CV process and corporate strategy is positively associated with a positive performance for new ventures.

[25] As an exemplification of a corporate entrepreneurship process

Resource dependency theory suggests that an initiative which supports the current flow of resources has a higher chance of survival than an initiative which challenges the existing strategy. However, in a dynamic conceptualisation of the CV process, the degree of closeness or relatedness is subject to amendment, as the direction and content of each of the constructs evolves.

On the other hand, from an evolutionary and institutional theory approach, the decision to be involved in CV activities might be the outcome of a process which involves (a) individuals' interpretations of opportunities within or outside the organisational boundaries related to new products and markets, (b) organisational characteristics, such as the existence of an experimental, innovative, risk-taking culture, and a rewarding attitude towards entrepreneurial behaviour, and (c) a highly entrepreneurial and competitive external environment. This study proposed that operational and middle-level managers, by interpreting these dynamics, initiate and drive the decision to be involved in CV activities.

Following a *"bottom-up"* approach to the involvement in CV activities, the role of middle-level managers is crucial (Venkataraman et al., 1992; Day, 1994; Burgelman, 1983b) in defining the role of the CV activities and in championing the CV process to gain acceptance by the top management team, and eventually survive. The dual role middle-level managers are required to perform (Day, 1994), as product champions and as organisational sponsors, involves a higher degree of challenges than that of an independent entrepreneur. Treating the decision to be involved in CV activities as a venture itself (Hornsby et al., 1993) or treating it as a variation that competes among other variations to be selected by the top management leads to different approaches towards CV. This study proposes depending on the drives of involvement in CV activities different configurations of approaches towards CV arise within an organisation.

2.4.4 CV team or unit: The organisational form of the CV process

Due to the retrospective stance the current study adopted of the CV process of large established corporations, it was assumed that the decision to get involved in CV activities was exemplified by the establishment of a distinctive team or unit to conduct these activities. There is a clear influence from Birkinshaw's (1997) distinction between focused and dispersed modes of corporate entrepreneurship, which conceptualises the establishment of a distinctive organisational unit expressly for the purpose of activities equivalent to focused corporate entrepreneurship. A dispersed mode would be equivalent to entrepreneurial activities possible to arise from all hierarchical and operational levels of a corporation. It also needs to be considered that the current study was conducted just after the end of the third CV wave, during which large corporations tended to conduct CV activities by establishing distinct units to do so.

The construct of the *"CV team or unit"* is treated as equivalent to the organisational design of a *"New Venture Division"* as proposed by Burgelman (1984a; 1985). The basic characteristic of this design is that *"it provides a fluid internal environment for projects with the potential to create major new business thrusts for the corporation, but of which the strategic importance remains to be determined as the development process unfolds"* (Burgelman, 1984a; p. 163). The relevant literature argues that the operation of a venturing team is guided (a) by a set of goals (intentionality) or objectives (strategic and/or financial), and (b) by the establishment of administrative (i.e. governance and control mechanisms) and operational (i.e. communication, information flow, dissemination of skills and knowledge) linkages with the parent corporation. Burgelman (1984a) proposes that the *"New Venture Division"* requires comparatively loose operational and administrative linkages to the corporation, while its strategic and operational relatedness to the corporation is ambiguous. The current study proposes that there is a configuration between the approach taken towards CV, as formed at the initiation of the CV process, and the selection of the features of the organisational design to conduct these activities by the corporation.

2.4.5 CV's core activity: New venture development process

Turning the focus of analysis on the CV team or unit, the new venture development process employed by the venture team was examined. The intention was to use the new venture-level process as a measurement of the approach the corporation was taking towards CV. The stages of the new venture development and the criteria used by the CV team to access opportunities, the level of involvement of the CV team and of other corporate units in this process, are treated as sub-constructs of the approach a corporation was taking towards the involvement in CV. Due to this, the dynamics of new venture process, as summarised at Table 2.2, were considered.

Table 2.2: Dynamics of the new venture process

Author(s)	Stages
Hornsby et al. (1993)	1. Precipitating event 2. Decision to act entrepreneurially 3. Business feasibility planning 4. Idea implementation
Venkataraman et al. (1992)	1. Ideating (the concept business: variations and selection) 2. Forcing (development of transactions with stakeholders & identification of resources) 3. Rollercosting (dealing with complexity and interdependency & increasing demand) 4. Revitalising (maintaining innovation & efficiency)
Gartner (1985)	1. Founding opportunity 2. Accumulation of resources 3. Marketing of product 4. Product production 5. Building of organisation 6. Responding (government & society)
George & MacMillan (1985)	1. Venture creation 2. Momentum stage

Examining the new venture development followed by a CV unit allows direct access to the entrepreneurial behaviour of the venturing/operational managers and the middle-level managers at two levels of analysis: (a) at the venture level, and (b) at the CV team level. The literature suggests that venture characteristics such as strategic relatedness, venture team characteristics, and venture team efficiency contribute positively to the survival rates of new ventures. The current study examines how these variables affected the evolution of the ventures (as a portfolio) and the evolution of the CV team. With regards to the evolution of the team, the interest was on examining how the CV team developed capabilities and used them in the CV process. Team efficiency is argued by McGrath et al. (1994) to contribute positively to the success of ventures, and is implied as being a contributor to the realisation of competences and knowledge at the organisational level.

2.4.6 CV and organisational context: Establishing linkages

Considering the institutional challenges that the CV process is confronted with, the current study examines the configuration of organisational constructs in relation to the way the decision to be involved in CV activities is implemented and developed within the existing organisational context. The relevant literature (e.g. Kuratko et al. 2004) argues that intra-organisational conditions (related to appropriate use of rewards, managerial support, organisational culture, resource availability, time availability and work discretion) contribute positively in enhancing entrepreneurial behaviour and in facilitating an organisational context appropriate for the flourishing of corporate entrepreneurship activities. Burgelman (1984a, 1985) argues that for the *"New Venture Division"* to facilitate its purpose in conducting CV activities, the interfaces between the division and the rest of the corporation need to be considered. Burgelman (1985) and Venkataraman et al. (1992) argue that the top management team has the responsibility for providing an adequate structural context for the ventures to operate, and for establishing a process for defining and determining the strategic context of the CV activities, in order to achieve integration and institutionalisation by the corporation. Covin and Slevin (1991) argue that organisational structure and culture, organisational resources and top management's philosophy and values have a moderating effect on the degree of entrepreneurial posture of a corporation.

Summarising the relevant literature, the current study decided to focus on four constructs related to the organisational context of large corporations: (a) ***organisational structure***, (b) ***organisational culture***, (c) ***resources*** and (d) ***people*** involved in the CV process. The constructs of *"organisational structure"* and *"organisational culture"* are conceptualised as equivalent to the administrative and operational linkages chosen by a corporation to define the relationship between the CV unit and its activities to the rest of the corporation (Burgelman, 1984b). The constructs of *"resources"* and *"people"* involved in the CV process are conceptualised as equivalent to two forms of capital (financial and human) required in organising the CV unit and providing the bases for organisational action.

The construct of ***"organisational structure"*** is conceptually equivalent to Burgelman's construct of "structural context", and specifically to the administrative mechanics of maintaining control, communication and information flow between the CV unit and the corporation. The relevant literature argues towards *"an 'appropriate' structural form"* of decentralised decision-making, minimal hierarchical levels, free-flow of communication, and closely integrated operational functions for entrepreneurial activities to flourish (Covin & Slevin, 1991; p. 18).

Following the same rationale, the *"organisational structure"* construct was composed of the following sub-categories:

(a)The structural design of a corporation [e.g. differentiation and decentralisation (Miller, 1983)];

(b) The communication linkages between the CV unit and the rest of the corporation (Antoncic & Hisrich, 2001; Keil, 2004);

(c) The reporting linkages between the CV unit and the top management team and other stakeholders (Zahra, 1996; Burgelman, 1984a);

(d) The establishment of formal and informal, direct or indirect relationships between the CV unit and other operational units, as evidence of strategic relatedness and emergence of synergies between the CV unit's activities and the core business activities (Burgelman, 1984b); and

(e) The changes in structural context of the CV unit, as the unit and the corporation evolve, as evidence of the integration or isolation of the CV process and activities by the rest of the corporation

Examining the cultural mechanisms employed to associate the CV unit with the rest of the corporation, the relevant literature highlights the existence of a supportive organisational culture (Brazeal, 1993; Kanter, 1985; Kuratko et al. 2005) as a key determinant of the encouragement of entrepreneurial activities within an organisation (Badguerahanian & Abetti, 1995). Floyd and Wooldridge (1992), building on the work of Miles and Snow (1978), examine the association between the four types of organisational cultural contexts (prospectors, analysers, defenders and reactors) to four strategy-making processes (championing, facilitating, synthesising and implementation). Their findings argue that managers who were influenced by the organisation's culture demonstrate different propensities towards the four strategy making processes[26]. Considering that culture reflects the way an organisation acts and reacts towards opportunities and changes (Miles & Snow, 1978), the construct of ***"organisational culture"*** was composed of the following sub-categories:

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[26] i.e. Managers from prospector firms reported significantly higher levels of championing activities than managers in defender firms

(a) The values and attributes of the parent corporation's organisational culture towards innovation and novel routines;

(b) The values, beliefs, attitudes, expectations and assumptions which compose the cultural context of the CV unit;

(c) The role of the existing culture in creating and facilitating linkages between a newly established CV unit and the rest of the corporation;

(d) The cultural barriers and constraints in accepting the CV unit and the new ventures created, as evidence of cultural inertia (Burgelman, 1985; Block & MacMillan, 1993);

(e) The level of cultural relatedness[27] between the new routines introduced by the CV unit and the core businesses, and;

(f) The changes of the cultural context of the parent corporation and of the CV unit, with both entities evolving, as evidence of the integration or isolation of the CV process and activities by the rest of the corporation

The construct of ***"resources"*** was conceptualised as one of the forms of capital contributed by the parent corporation to the CV unit to enable the latter to conduct CV activities. The other form of capital considered was human capital leading to the development of the ***"people"*** construct. The literature argues that availability of resources, including time, contributes positively in encouraging continuous engagement in entrepreneurial behaviour by operational and middle-level managers (Kanter, 1985; Sykes, 1986; Stopford & Baden-Fuller, 1994). The CV capital literature, influenced by the venture capital model of carrying out CV activities, argues towards the allocation of a committed fund by the corporation to carry out CV activities (Chesbrough, 2002), implying a secured access to financial resources and autonomy of the decision making regarding the venture portfolios of the CV units. The construct of ***"resources"*** was composed of the following sub-categories:

(a) The type of resources involved in the CV process and in organising the CV unit;

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[27] In the sense of the *"way we do things around here"* (Deal & Kennedy, 1982)

(b) The characteristics of the allocation system of resources to the CV unit;

(c) The control mechanisms employed by the top management team to supervise the use of resources by the CV unit (Barringer & Bluedorn, 1999; Zahra, 1996);

(d) The level of availability of resources (Burgelman, 1983c); and

(e) The changes in the types and in the allocation system of resources, as the CV unit, its portfolio and the corporation evolved

The construct of ***"people"*** involved in the CV process examines the human capital involved in the initiation and implementation of the CV activities. The CV and the corporate entrepreneurship literature highlight the role and the importance of behavioural characteristics of individual actors who identify a business opportunity, champion it, sponsor it and legitimise it within an organisation (e.g. Kuratko et al., 2004). The managers composing the team of the CV unit, and the senior managers involved in the CV process are a focus of the current study. The emphasis is also on the composition of the CV team and the dynamics of it, as part of its demonstrated team efficiency (McGrath et al., 1994). The construct was composed of the following sub-categories:

(a) The hierarchical level and the characteristics of the managers involved (i.e. experience and capabilities in CV activities) in the CV process;

(b) The composition of the CV team and personnel transfers (Burgelman, 1985);

(c) The role and responsibilities of the CV unit's champions (Day, 1994);

(d) The formal and informal mechanisms employed by the top management team and the CV unit in motivating and rewarding the managers directly involved in the CV process; and

(e) The changes in the individuals involved in the CV process, as the CV unit, its portfolio and the corporation evolved

The current study also examines how the pre-existing organisational context (as a configuration of the four organisational constructs) impacts the implementation of the CV process and the way the CV activities are conducted by the corporation. Moreover, influenced by Covin and Slevin's (1991) proposed model, the current study examines the impact of the decision to be involved in CV activities on any of the four organisational constructs. The examination of these two impacts is based on the rationale that the requirement to successfully undertake entrepreneurial activities would have initiated a series of organisational adjustments in the organisational context for incorporating the new activity (i.e. the CV unit, its activities and its rationale).

This study also aimed to examine the role control and evaluation mechanisms have on monitoring the CV process and the decision of a corporation to be involved in CV activities. It was assumed that the pre-existing organisational context of the corporation influences the way CV is perceived and evaluated. The degree and level of organisational adjustment a corporation was going through to incorporate the CV activities were treated as moderators of their performance.

2.4.7 CV process's outcomes: Direct and indirect impact

The interaction between the decision to be involved in CV activities (initiation) and the action to conduct CV activities within the organisational context of the parent corporation (implementation) produces a series of outcomes. The literature is preoccupied with the outcomes of the CV process as represented by the creation of new ventures. This stream of literature examines the performance (financial and strategic) of new ventures. The current study distinguished itself from this stream of research, by examining other areas of outcomes related to the impact of the CV process at two levels: (1) at the CV team and individuals involved in them, and (2) at the organisational level. Drawing primarily from the corporate entrepreneurship and internal CV literature, the emphasis was on examining:

(a) The direct outcomes of the involvement of a corporation in CV activities at the CV team level;

(b) The indirect impact of the CV team on organisational processes, such as learning, culture and strategy; and

(c) The direct impact of the involvement of a corporation in CV activities at the organisational level: operational level (financial performance); managerial level (cultural change and learning, reputation); and strategy level (emergence and adoption of entrepreneurial strategy)

Influenced by the work of Burgelman (1983a; 1983b) and Covin and Slevin (1991), the current study proposes that during the initiation and the implementation phase of the CV process, the corporation is going through a period during which an opportunity (investing resources in new ventures) is exploited and a new initiative (corporate entrepreneurial behaviour towards business development) attempts to gain legitimacy. The proposed occurrence of organisational adjustments to fit the new initiative leads to a further re-definition of the strategic context of the corporation. The degree of strategic adjustment is proposed to be in proportion to the organisational adjustment.

The characteristics of the re-defined strategic context are proposed to be closely related to the entrepreneurial strategy mode (Dess et al., 1997). The experience that the corporation has gained by conducting CV activities is proposed to have enhanced the characteristics of proactiveness, risk-taking and innovative outlook. Entrepreneurial activities and behaviour are encouraged and rewarded, while top management has generated processes and mechanisms to allow for such behaviour to flourish.

The current study proposes that the occurrence of learning through the involvement in CV activities at the level of the CV unit is disseminated to the rest of the corporation. The tacit knowledge gained from the involvement in entrepreneurial and innovative activities contributes positively to the change of the current strategy context to a more entrepreneurial oriented strategy context. Barr's et al. (1992) cognitive model of organisational renewal proposes top managers' attention to and interpretation of changes in the organisational environment as moderating factors in changing the cognitive models and processes of these top managers in order to cause organisational renewal. In the context of the CV process, attention by the top management team to the capabilities and routines that the CV unit is introducing to the organisational context and the meaningful interpretation of them are expected to contribute positively to the integration of an entrepreneurial mode of strategy in the corporation. The capabilities, routines and competences that the CV unit develops through the engagement in CV activities can be realised and integrated through the effective use of the administrative and operational linkages between the CV unit and the corporation (Zahra et al., 1999).

The involvement of the CV unit in CV activities is proposed to have generated a distinctive entrepreneurial culture within the unit. The dissemination of values and attributes to the rest of the corporation are expected to create an organisation-wide climate of tolerance and acceptance of entrepreneurial activities, making the overall organisational culture more open to CV activities. The occurrence of cultural change as an outcome of the involvement of the corporation in CV activities is proposed to contribute positively to the change of the current strategy context to a more entrepreneurial oriented strategy context. The familiarisation of the corporation with entrepreneurial activities is proposed to have created a positive climate and approach towards entrepreneurial behaviour. While the mechanisms of organisational learning and cultural change are proposed to be contributors to the strategy content change, the current study proposes that the occurrence of positive financial and non-financial performance by the CV unit moderates their impact.

2.6 CONCLUSION

This chapter presented the foundations and influences of the current study from the corporate entrepreneurship, the CV and the strategy process fields. The emphasis was on discussing the existing literature about the CV process. The review indicated that there is limited published research which adopts a holistic view of the CV process, and even more limited research on unfolding the dynamics of this process. Based on this identified research gap, a conceptual framework (Figure 2.1) was developed proposing a holistic view to the CV process, as initiated and implemented within the organisational boundaries of a large corporation. The framework outlines the constructs of the study and proposes relationships linking them, guiding the research enquiry and research questions during the fieldwork of the study. The next chapter views the conceptual framework from three different theoretical perspectives in an attempt to crystallise further the notion of the research rationale of the current study.

3. CHAPTER 3: IN DIALOGUE WITH THEORY

3.1 INTRODUCTION

In the present chapter, the study moves further from the corporate entrepreneurship and strategy process empirical literature, and presents its theoretical stance. The aim is to integrate evolutionary, contingency and agency theories, approaching the conceptual framework (as presented in Chapter 2) of the current study from a theoretically triangulated view. The chapter starts by exploring the theoretical triangulation process, justifying and explaining the selection of the theories. The synopsis, criticism and application of each theory on the CV process research follows. The chapter concludes with the implications of the three theories on the conceptual framework of this study.

3.2 THEORETICAL TRIAGULATION: JUSTIFICATION AND PROCESS

The dialogue between the conceptual framework and three theories was initiated in recognition of the suggestion by Ireland et al. (2005; p. 123) to *"entrepreneurship researchers ... to use several theoretical frameworks to capture the complexities of entrepreneurship as a multifaceted phenomenon"*. Chakravarthy and White (2002) propose the necessity of an integrative theoretical basis to overcome the individual limitations of each theory, when applied in the strategy process field. Allison's (1971; p. 2) work, on the Cuban missile crisis, draws attention to the impact *"conceptual lenses"* have on *"what we see and judge to be important and accept as adequate"*. The theoretical dialogue proposed in the current study was significantly influenced by these calls for a more holistic and integrated approach on the way corporate entrepreneurship, strategy and organisations are viewed. The current thesis contributes to these calls.

Given the exploratory aim of the study[28], theory testing is not the primary objective. On the contrary, the thesis adopts a theory development approach. Since the initial stages of the thesis, my interest was on gaining understanding around the involvement of large corporations in CV activities and how this involvement impacts the corporations. These research questions guided the selection of the appropriate

[28] The methodological stance of the current study is presented and justified in the chapter that follows

literature from the fields of corporate entrepreneurship, CV and strategy process. The outcome of the initial literature was illustrated at the conceptual framework of the study.

Reviewing the conceptual framework, it was revealed that there were two main theoretical perspectives that influenced its development: contingency theory and evolutionary theory. The conceptual framework examines whether the involvement in CV activities is an outcome of an environmentally driven adaptation choice (e.g. Lumpkin & Dess, 1996; Zahra, 1993) or whether it is an outcome of an internally created entrepreneurial process (e.g. Burgelman, 1983c). The conceptual framework acknowledges the pre-existence of a structural context within which the CV activities are located, but at the same time examines whether the implementation of CV activities leads to the initiation of a change in the structural context. The conceptual framework looks at the outcomes of the corporations' CV activities and process, as an impact on organisational performance, as well as an impact on the structural and strategic contexts, leading potentially to a corporate entrepreneurial strategic context.

By acknowledging these influences, it was understood that the research questions were handling two different perspectives: one that dealt with a dynamic, path-dependent perspective that welcomed random variation and selection within an organisation (evolutionary theory) and one that dealt with the adaptive behaviour of an organisation to external environment (contingency theory). Each of the two theoretical perspectives provided interesting insights on the rise of CV activities within large corporations, how these activities are internally implemented, and what outcomes this involvement had for the corporation.

During the data collection phase of the current study, the relationship between the corporation and the CV unit emerged as critical and significant on determining the way the CV involvement of the corporation evolves and what impact it had for the corporation. Agency theory appeared to provide significant theoretical tools in understanding better the empirical setting of the collected data. Approaching the corporation as the principal and the CV team as the agent, the relationship between the two provided an extra theoretical lens in understanding the implementation phase of the CV process of these corporations. Theoretical triangulation was not intentional; rather it emerged in order to deal with the research questions of this study.

Even though theoretical triangulation is a tool not widely used in the corporate entrepreneurship or strategy process empirical work, its power can be acknowledged and highly considered. Denzin (1970; p. 306-307), elaborating on Westie's (1957) work, argues that the main advantages of theoretical triangulation can be summarised to: (1) acknowledgment of competing propositions around the same unit of analysis, (2) wider theoretical use of any set of observations, and (3) systematic continuity in theory and research. Theoretical triangulation appears to allow the co-existence and co-occurrence of the various perspectives invited in the dialogue with the theory, leading to a better understanding of the phenomenon. With regards to the challenges theoretical triangulation imposes to carrying out research, Denzin (1970) warns that it is inevitable that each theory requires a different set of relevant data, making the triangulation impossible. Denzin (1970; p. 311) advises the researcher that the only solution to this challenge is *"to select one common data base and simply force the theories to be applied to those data ... it may be adventurous to apply the theories to data that commonly are not accepted within their domain. This maximizes the appearance of negative cases and hence uncovers the weakest elements in the theories"*.

Consequently, it can be argued that the benefits of theoretical triangulation on a research enquiry may be identified: (a) at *the conceptualisation phase*, on forming research questions with an integrative and holistic view on the unit of analysis, and (b) at *the methodological phase*, on enhancing the data interpretation process. This study has directly benefited in the methodological phase from initiating the dialogue with the three theories. Even though the theoretical triangulation was not directly present at the conceptualisation phase of the current study, the assumptions and perspectives of each one of the three theories were individually present through the revised empirical literature on corporate entrepreneurship and strategy process. Having elaborated on the process followed in reaching theoretical triangulation, it is critical to unfold each theory's domain. The following three sections are dedicated to each, exploring the perspective through which they view the CV process.

3.3 EVOLUTIONARY THEORY: FOCUSING ON SELECTING CV ACTIVITIES WITHIN A CORPORATION

3.3.1 Theory Synopsis

With its origins in biology and the Darwinian biological population ecology theory, organisational ecologists attempt to explain *"how social, economic and political conditions affect the relative abundance and diversity of organisations and attempt to account for their changing composition over time"* (Baum & Shipilov, 2006; p. 55). Three main assumptions frame organisational ecology: (a) diversity is a property of aggregates of organisations, with no analogue at the level of the individual organisation; (b) organisations often have difficulty devising and executing changes fast enough to meet the demands of uncertain, changing environments; and (c) the community of organisations is rarely stable, with organisations arising and disappearing continuously (Baum & Shipilov, 2006).

The theoretical framework of variation-selection-survival-reproduction-transmission of individuals, as introduced by Darwin, presented organisational theorists with a powerful mechanism and analytical tools to explain the emergence of new organisations and populations (Aldrich, 1979; 1999). Campbell (1965) is the first to introduce evolutionary theory to social sciences. The four basic processes of variation, selection, retention and competition are reflected in changes in organisational population and within organisations (Campbell, 1965; Aldrich, 1979; McKelvey, 1982), through which *"technology, language, social organisation, and culture"* evolve (Campbell, 1969; p. 69). These four processes are necessary and sufficient to account for evolutionary change (Aldrich, 1999), as the existence of variation and retention processes in a system which are subject to selection processes will lead to its evolution.

Ecology theory and research distinguishes among four levels of unit of analysis: (a) intra-organisational ecology, (b) demography ecology, (c) population ecology and (d) community ecology. The focus is on reviewing the intra-organisational ecology literature, due to the focus of the current study on the CV process occurring within a corporation. Intra-organisational ecology applies ecological concepts to explain the processes occurring within organisations (Galunic & Weeks, 2002). It attempts to *"describe how organisations' internal contexts and individuals' purposeful and* *accidental use of variation, selection and retention processes in organisations influence rates of creation, transformation and death of organisational routines and strategies"* (Baum & Shipilov, 2006; p. 57). Routines are defined as the regular, predictable and discernible actions and mental processes that pattern organisational activities (Galunic & Weeks, 2002), as *"a set of ways of doing things and ways of determining what to do"* (Nelson & Winter, 1982; p. 400). Routines, as genes in biology, are reproduced by human agents and have an impact on organisational outcomes. Firms are perceived as organisational forms *"of certain capabilities and decision rules (genes) that overtime are modified by both deliberate problem solving (search) efforts, entrepreneurial discovery and random events (mutation). Decision rules are the generators and selection is the rest"* (Mahoney, 1992; p. 131).

The variation processes involve mechanisms through which *"any departure from the routine or a tradition"* occurs (Aldrich & Ruef, 2006; p. 18). Variations of routines, within an organisation, can be intentional, accidental or a mixture of both, with the produced variety leading to a selection process. The sources of variation vary according to the cause of variation (i.e. intentional or accidental). Administrative mechanisms (i.e. formal experimentation programs, incentives systems) and cultural traits that enhance playfulness among individuals and sub-groups are examined by the literature (e.g. Burgelman, 1983c; Miner, 1994; Moorman & Miner, 1998) as predominant sources of intentional variation. On the other hand, in the case of accidental variation, variety may occur from everyday errors, trials, observations and occurring knowledge at the organisational job level, or even within groups, as collective responses to a novel situation, in which the organisation lacks prior experience.

The selection processes involve mechanisms that *"differentially select or selectively eliminate certain types of variations"* (Aldrich & Ruef, 2006; p. 21). A critical role in this set of processes is the type of selectors employed to undertake the selection. These selectors may be internal and external to the organisation. Environmental selectors might be related with discontinuities or changes in any of the sphere of the external and business environment within which an organisation operates (i.e. political, economic, technological, social, competitive). Aldrich (1999; p. 40) clarifies that the external selection processes do not have a deterministic role in explaining the selection and survivability of organisations, as *"indeterminacy is a key feature of evolutionary analysis, and human agency is very much part of the explanation"*. The evolutionary perspective introduces internal selectors that can be irrelevant to the urge for environmental fitness (Meyer & Zucker, 1989). Aldrich (1999; p. 26) identifies three types of internal selectors *"contributing to the loose coupling of internal selection and environmental fitness: (1) pressures towards stability and homogeneity (Campbell, 1969); (2) the persistence of past selection criteria that are no longer relevant in a new environment (Campbell, 1994); and (3) the willingness of some organisational founders and leaders to accept a low performance threshold (Gimeno et al., 1997)"*. The evolutionary perspective differentiates between managers' intensions behind certain variations and the basis on which selection occurs. Selection takes place on the basis of the outcomes of the variations rather than on the intended results of the latter.

The retention processes involve mechanisms that preserve and serve for the *"maintenance of positively selected variations"* (Aldrich & Reuf, 2006; p. 23). The preservation and duplication of variations leading to the future selection of selected structures, routines and competences describe this set of processes. The management systems that preserve social order within an organisation hold a critical role in this set of processes. In the retention processes, individuals and groups, structures, policies and programs, are used to maintain the relevance of the selection criteria and of the selected variations. Practices and policies related to the replication of hierarchical structures (i.e. specification of job roles), to the construction of organisational members (i.e. recruitment practices), to the creation of certain organisational behaviours and habits (i.e. organisational cultural programs), to the appraisal and control of organisational members (i.e. rewards systems) can be employed to retain certain organisational forms. Such processes allow groups and organisations to capture and extract value from existing, beneficial for the organisation, routines (Miner, 1994). Changes in the external environment can be managed and the organisation continues to exist through the replication of selected variations. Central to the retention processes within an organisation is the occurrence of learning and knowledge with regards these practices, procedures, policies and structures. The occurrence of learning and knowledge, as an outcome of the learning process, provides individuals and groups within an organisation with experience, inherited abilities and memory to deal with new situations, and preserving organisational forms that continue to fit relevant selection criteria.

Even though the processes of variations, selection and retention can be identified as distinctive processes embodying their own characteristics, they are not sequential. Aldrich (1999) warns researchers that these three processes overlap each other. It is also significant to consider that scarcity of and competition for resources underlines the selection processes, as well as the search for effective variations. Resources such as capital, labour, social capital, and time are in scarcity within organisations. Adopting an individualistic approach towards organisations (Georgiou, 1973) which leads to a greedy behaviour among individuals to gain access and commitment to these resources, Aldrich (1999; p. 32) argues that such a scarcity *"creates a need for organisational control systems and mechanisms for distributing incentives"*.

These three processes, at the intra-organisational level of analysis, impact the ecology of organisational routines. Galunic and Weeks (2002) identify two evolutionary processes to describe the ecology of routines: (a) interaction, and (b) replication processes. The first set of processes treats routines as ecological entities, involved in mutual interaction of competition and complementarity. The second set of processes treats routines as genealogical entities, following the history of emergence and growth of new routines, and the decay, replacement and death of existing ones. Galunic and Weeks (2002) identify the empirical work of Campbell (1969), Weick (1969), Aldrich (1979), McKelvey (1982) in general, and of Nelson and Winter (1982), Burgelman (1991; 1994) and Miner (1991; 1994) in specific, to have contributed significantly in establishing intra-organisational ecology as a theoretical domain.

Organisations have routines at all stages of their development. Some of these routines interact, while others do not interact in any meaningful way. The literature deals with two forms of interaction: competition and compatibility among routines. Focusing on the routines that compete with each other, it is the empirical work of Burgelman (1994), Galunic and Eisenhardt (1996), and Miner (1991) that contributed significantly. Competition between two routines occurs when there is risk to the survival of one routine due to the presence of another (Galunic & Weeks, 2002). Even though both routines equally meet an objective, one does so with greater efficiency, effectiveness, legitimacy, and embeddedness to the organisational context or with a better access to scare resources. This routine survives, becoming the dominant one within an organisation. The losing routine faces inattention, relegation or termination. Empirical work has examined conflict-free cases of routines' competition, when one is progressively following the other. The assumption requiring the losing routine to die is challenged, as Galunic and Eisenhardt (1996) and Fox-Wolfgramm et al. (1998) have shown. The losing routine may be relegated to another task or temporarily suspended, as part of a cyclical fluctuating competition between the two.

In the same line, Birkinshaw and Lingblad (2005) propose a theoretical framework of intrafirm competition of units, building on Galunic and Eisenhardt's (1996) concept of organisation charter[29]. Conceptualising a unit's charter as the product markets served, the capabilities held by the unit and the intended charter as communicated to the rest of the corporation, Birkinshaw and Lingblad propose that the relationship between two unit charters is defined by the percentage of the overlap between two charters (low or high) and by the clarity of boundary definition of each unit charter (fluid or sharp). They propose four types of relationships between organisational units: (a) loose federation, (b) tight federation, (c) coexistence, and (d) dynamic community. Looking at the origins of intrafirm competition, they model both internal[30] and external[31] factors as moderators of its emergence. Birkinshaw and Lingblad's proposed model can contribute as a conceptual basis in examining the competitive dynamics between routines, existing in the same organisational context.

Complementarity between routines may occur in technical and symbolic terms, (Galunic & Weeks, 2002) with the presence of one routine contributing to the

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[29] An organisation unit's charter is defined as the business or elements of the business in which a division /unit actively participate and for which it is responsible for within the corporation (Galunic & Eisenhardt, 1996; p. 256). According to Birkinshaw and Lingblad (2005; p. 676) a charter, besides its operational domain, also contains an institutional component, as the part of a shared understanding of the organisational domain a unit has staked out for itself.

[30] Decentralisation of decision making, normative integration, and fungibility of unit capabilities

[31] Environmental equivocality, industry maturity, and market heterogeneity

efficiency, development and survival of the focal routine. Behind this interaction between routines is the notion of configuration and consistency among organisational elements leading to organisational efficiency and effectiveness (Miller & Friesen, 1984). Complementarities also may occur between routines of different levels (Brown & Eisenhardt, 1997), as routines can be distinguished between meta-routines and sub-routines, regarding the direct or indirect impact of one routine on another. In both cases of competition and complementarity between routines, the empirical research indicates that besides organisational performance, the level of adaptability of a routine to the incumbent is the main selector mechanism.

The variety and reproduction of new routines to initiate any competition or complementarity with the incumbent is the focus of the second set of processes discussed by intra-organisational ecology. As argued by Galunic and Weeks (2002), organisations tend to reproduce existing routines, as reproducing new is a more demanding task. The creation of new routines is the outcome of variation in routines. Environmental turbulence (Zhou, 1993) may initiate collective improvisation processes (Weick, 1998) and generate accidental variation of routines. On the other hand, considering Schumpeter's view of innovation as a recombination of existing knowledge, new routines can be treated as modification of existing ones.

Besides the easier task for organisations to reproduce routines rather than create new ones, cost implications still exist (Nelson & Winter, 1982). It also requires knowledge transfer at the tacit level (Nokana & Takeuchi, 1995) and it depends on how observable and articulated the routine is (Lippman & Rumelt, 1982). Aside from these difficulties, organisations tend to imitate routines which originate in their institutional context, because such routines have proven their efficiency for other organisations (Nelson & Winter, 1982). Additionally, organisations are under pressure to meet social expectations leading to a mimetic isomorphism within their institutional context (DiMaggio & Powell, 1983; Greenwood & Hinings, 1996). With regards to routines which die, these can be the *"victims"* not only of competition, but also of their life-cycle or of non-institutional integration of them to the organisation.

Strategy, as a routine, has been the focus of both theoretical and empirical work in the intra-organisational ecology domain. The 1996 special issue in the *Strategic*

Management Journal is an illustration of this. Barnett and Burgelman (1996; p.7) argue towards an evolutionary perspective on strategy proposing the development of *"dynamic, path-dependent models that allow for possibly random variation and selection within and among organisations"*. Strategy outcomes and their developments are examined, with the assumption of *"historical efficiency as part of the research agenda"* and being attentive to *"the pace and path of strategic change"* (Barnett & Burgelman, 1996; p. 6). Such an approach, allows for variations in the possible strategies organisations may pursue and permits to study the pace and path of innovation within organisations when strategic initiatives are launched within them (e.g. Burgelman, 1983a; Garud & Van de Ven, 1992).

With regards to selection processes involved in the strategy change pace and path, empirical work indicates that they do not operate solely as an optimising force. Moreover, they operate within an existing 'strategic context' (Burgelman, 1983a) and may be equally internal or external to the organisation. Internal and external selection processes impact on the strategic context of an organisation, determining its evolvement. Besides Burgelman's work, Barnett and Hansen (1996), Noda and Bower (1996), Lovas and Ghosal (2000) have contributed in strengthening this domain. These works build a well-established strategy process research, and in specific in the works of Bower (1970), Mintzberg (1978) and Quinn (1980).

3.3.2 Criticism on evolutionary theory

Besides its significant contribution to organisational studies, evolutionary theory has attracted critics and scepticism. The debate focuses on the assumptions of evolutionary theory *"on the relative influence of organisational history, environment and strategic choice, on patterns of organisational change as advanced by structural inertia theory"* (Baum & Shipilov, 2006; pp. 55-56). This implies environmental determinism and loss of human agent in explaining organisational change (e.g. Perrow, 1986).

Baum and Shipilov (2006) argue that human agent and the actions of individuals within organisations are not neglected by evolutionary theory, but it is acknowledged that in situations of uncertainty and ambiguity, individuals' actions are constrained in conceiving and implementing correctly changes to improve the survivability of organisations. In the strategy process research, as argued by Charkavarthy and White (2002; p. 202), the *"evolutionary perspective handles dynamic interactions, but does not easily accommodate managerial intervention in the process"*. Lovas and Ghosal's work attempts to handle this limitation. In the same line of argument, Galunic and Weeks (2002) advice researchers to be inclusive of the role individual's perceptions and other subjective elements play in intra-organisational ecology processes.

Considering that evolutionary theory emerged in the 1970s, as an alternative view to the organisational theory to challenge the dominance of contingency theory, it has attracted significant critique from contingency theorists. The main issues composing the debate between the two theories are grouped around environmental determinism and organisational change as an outcome of an adaptation or a selection process. The different assumptions of each theory lead to different arguments on these two issues and it is important to acknowledge these differences, prior to characterising any of them as more appropriate to explain the process of organisational change. It is understood that evolutionary theory attempts to explain this process, while contingency theory is explaining the contribution of individual or sets of components in the process.

3.3.3 Evolutionary lens on CV process research

Campbell (1969; p. 78) underlines the importance of evolutionary theory in understanding innovation within organisations, as the *"variation-selection-retention theory strongly predicts independent invention"*. Influenced by Campbell's work, Aldrich's evolutionary approach to the study of entrepreneurship has been identified among the most significant in establishing entrepreneurship in the evolutionary field (Shane, 2004). Using the concepts of variation, adaptation, selection and retention, Aldrich (1999) argues that evolutionary theory offers a powerful framework to unite entrepreneurial outcomes, as well as the processes and contexts making them possible. As Aldrich and Martinez (2001; p. 42) argue, *"an evolutionary approach studies the creation of new organisational structures (variation), the way in which entrepreneurs modify their organisations and use resources to survive in changing environments (adaptation), the circumstances under which such organisational* *arrangement lead to success and survival (selection), and the way in which successful arrangements tend to be imitated and perpetuated by other entrepreneurs (retention)".* However, Aldrich's approach deals with the demography and population ecology level of analysis in the evolution of new organisational forms.

In the intra-organisational ecology empirical literature of internal CV activities, Noda and Bower (1996) highlight the importance of the process model of strategy making as proposed from the work of Bower and Burgelman (B-B). The B-B process model illustrates *"multiple, simultaneous, interlocking, and sequential managerial activities over three levels of organisational hierarchies"* (Noda & Bower, 1996; p. 160). Corporate entrepreneurial activities (i.e. carrying out interval CV activities) are treated by Burgelman as autonomous strategic initiatives (Burgelman, 1983c). Intra-organisational strategy process is conceptualised as a set *"of four subprocesses: two interlocking bottom-up core processes of 'definition' and 'impetus', and two overlaying corporate processes of 'structural context determination' and 'strategic context determination'"* (Noda & Bower, 1996; p. 160). Strategic initiatives are determined within the organisation at the *"definition process"* (variation), and selected at the *"impetus process"* by the corporate context, which acts as an internal selector mechanism, (selection). These two processes lead to the *"determination"* of the structural and strategic context of the corporation (retention).

Besides the contribution of the B-B model in the strategy process research, it needs to be acknowledged that the model examines the ecology of a strategic initiative which survived the competition, while the intra-organisational processes operate outside and in addition to the formal mechanisms of an organisation. Lovas and Ghosal (2000) propose a theoretical framework in which the role of top management is to actively intervene in the ecological processes, trying to leverage evolutionary forces to manage the strategy formulation and implementation processes.

Applying an evolutionary perspective in the evolution of a new venture within a corporation, created by a CV team, Garud and Van de Ven (1992) introduce the importance of learning processes (trial-and-error learning processes) in the CV process and how it might impact on the ecology of the venture. Learning processes have also been identified in Burgelman's work to interfere with the CV process.

However, Garud and Van de Ven (1992) emphasise the role trial-and-error learning process plays in managerial behaviour in dealing with negative and positive outcomes of the CV process.

In both cases of the above mentioned research projects, the emphasis has been on the internal CV activities undertaken by large, complex organisations. They do not deal with the external CV activities and the ecology of this involvement. They presuppose that entrepreneurial activities originate at the middle and low levels of managers and are exercised through a bottom-up process. In the case of external CV activities, the decision to be involved in CV activities lies most probably with the top-management team, with an exogenous routine being introduced to the organisation. This study was interested in exploring this area further.

3.4 Contingency Theory: Focusing on Designing CV Activities within a Corporation

3.4.1 Theory Synopsis

The notion of contingency has been among the most influential to shape and endure organisation studies, with respect to the design of organisational forms (Donaldson, 1996; 2001). The contingency hypothesis maintains that *"organisations with forms that 'fit' their environmental context will out-perform organisations with forms that do not"* (McGrath, 2006; p. 578). Consequently, the effective management of organisations lies in conceiving and implementing the appropriate organisational form, given the characteristics of the external environment.

Contingency theory deals primarily with the fit between organisational characteristics and contingencies, reflecting on the situation of the organisation, and the impact of such fit on organisational effectiveness (Burns & Stalker, 1961). Consequently, individual organisations aim or should aim towards the achievement of such fit. Drazin and Van de Ven (1985) argue that every theory is in reality a contingency theory, as long as assumptions are made regarding starting premises, boundaries and system states, for any proposition of relationship to hold. However, it is a complex theory as *"a conditional association of two or more independent variables with a depended outcome is hypothesised and directly subjected to an empirical test"* (Drazin & Van de Ven, 1985; p. 514).

A contingency is *"any variable that moderates the effect of an organisational characteristic on organisational performance"* Donaldson (2001; p. 7). The external environment, the size and the strategy of an organisation have been used extensively in organisational contingency theory, as sources of contingencies. Contingencies may be identified within and externally to the organisation, with the external affecting the internal, and both having an impact on a given organisational characteristic (e.g. organisational structure, human resource management, strategic decision-making process).

Chandler (1962) is among the first to identify hierarchical structure as the main mechanism through which co-ordination of strategy implementation is achieved. Even though Chandler (1962) argues that once a strategy has been chosen, the appropriate structure will be implemented, other scholars such as Burns and Stalker (1961), Lawrence and Lorsch (1967) and Thompson (1967) take a *"more contingent view of structural choice"* (McGrath, 2006; p. 578), arguing that certain structures are more appropriate for certain environmental conditions and for serving different purposes within a single organisation.

The majority of empirical work from contingency theorists is pre-occupied with organisational structure as the characteristic to define the appropriate organisational design to achieve fitness to the external environment. Structural contingency theory deals with three main issues: (a) the level of centralisation of activities and decision-making, (b) the level of formalisation and specialisation of activities and decision-making, and (c) the level of structural differentiation of divisions horizontally and vertically. The first two elements characterise the organisational structure of an organisation to be organic or mechanistic (Burns & Stalker, 1961). Lawrence and Lorsch (1967) introduce the importance for the internal organisational structures to serve both needs for integration across units and differentiation of unit activities. Thompson (1967) identifies two groups of units for which different structural requirements are appropriate. He argues that an organisation has some units open to external influences permitting flexibility for the organisation, and the rest of them representing the *"technical core"* of the organisation, reinforcing efficient performance given the external environment.

Treating strategy (content) as a source to contingency and examining its relation to structural design affecting organisational performance have dominated the strategic management field (Donaldson, 2001). Historically, Hofer (1975) is among the first to treat strategy content as an organisational contingency, introducing a contingency approach to strategic management. Harvey (1982; p. 81) proposes that *"the contingency approach to strategy suggests that for a certain set of organisational and environmental conditions, an optimal strategy exists"*. In their review of the contribution of contingency theory in strategy research, Ginsberg and Venkatraman (1985) identify the important contingency role the choice of strategy holds, for designing administrative forms (designs, mechanisms, decisions) such as organisational structure, management and control systems and management of key personnel. *"Treatment of strategy either as a dependent variable or as a variable directly influencing performance emphasises a formulation perspective. Viewing strategy as the exogenous variable that influences the organisational context or that influences performance through the organisational context adopts an implementation perspective"* (Ginsberg & Venkatraman, 1985; p. 423).

Their proposed *"input-process-outcome"* systems model of contingency approach to strategy research involves strategy formulation and strategy implementation variables. It identifies four possible types of relationships: (1) the influence of the external environment on strategy content, (2) the influence of organisational variables on formulating strategy choices, (3) the influence of performance outcomes on strategy formation, and (4) the influence of chosen strategy on the organisational context and on performance outcomes through a certain organisational context. The conceptualisation and treatment of strategy to involve both formulation and implementation processes is acknowledged by other authors (Bourgeois, 1980; Quinn, 1980; Lenz, 1980), recognising of the inseparability of the two (Mintzberg, 1978).

With regards to the characteristics of the strategy-decision making process, a contingency approach has also dominated the empirical work on the strategy-making process – performance linkages (e.g. Fredrickson, 1983, 1986; Miller, 1987, 1989; Hart & Banbury, 1994). Modes of strategy-decision making processes have been identified (e.g. Miles & Snow, 1978; Galbraith & Schendel, 1983; Mitzberg, 1987;

Hart, 1992) and this research stream examines the appropriateness of certain modes of strategy making process to dominant organisational characteristics given the external environment. Fredrickson (1986; p. 282), following the review of the relevant literature of strategy formulation, proposes six characteristics of the latter: (a) process initiation, (b) the role of goals, (c) the means/end relationship, (d) the explanation of strategic action, (e) the comprehensiveness of decision making, and (f) comprehensiveness in integrating decisions. Organisational characteristics are proposed to affect the decision-making behaviour (Fredrickson, 1986; Sutcliffe & McNamara, 2001) of an organisation. The most frequently studied organisation characteristics are related to structural centralisation, formalisation, and complexity (Fredrickson, 1986). These characteristics are matched up with proposed strategy-decision making process dimensions, such as adaptiveness, integration, innovation, risk-taking (Miller & Friesen, 1978; Miller, 1983), comprehensiveness, proactiveness, rationality, assertiveness (Fredrickson, 1986). This research stream argues towards the direct impact of structure on facilitating, constraining and shaping the strategy-decision making process and its outcomes.

The *"input-process-outcomes"* systems model implies the need for fitness within each one of the four relationships to influence directly and indirectly the survivability and performance of the organisation. Fitness is crucial in contingency theory, and Venkatraman (1989) warns strategy contingency researchers of the existence of its different types: (a) *fits as moderation*, interested in the interactive effect of two variables on a depended variable (Gupta & Govindarajan, 1984; Prescott, 1986); (b) *fit as mediation*, interested in the intervention effect of a variable on the relationship between an independent and a dependent variable (Prescott et. al, 1986); (c) *fit as matching*, interested in the matching between two variables and the positive effect of the matching on a dependent variable (Chandler, 1962; Bourgeois, 1985); (d) *fit as gestalts*, interested in the frequently occurring internal congruence among multiple variables, forming efficient gestalts or configurations on organisational performance (Miller & Friesen, 1984); (e) *fit as profile deviation* or pattern analysis, interested in the adherence consequences on efficiency for an organisation from an externally identified ideal profile of multivariable coherence (Van de Ven & Drazin, 1985); and (f) *fit as co-variation*, interested in the covariant effect of the internal consistency pattern among a set of underlying theoretically related variables on organisational performance (Venkatraman & Prescott, 1990). The conceptual and methodological implications of each approaches to fitness needs to be considered when operationalised.

Efficiency is treated as the main depended variable in the deterministic model of contingency theory. Even thought organisational efficiency may have different meanings being a broad construct, it has been mainly treated by contingency theorists as equivalent to performance outcomes: such as profitability (the majority of contingency empirical and theoretical work in organisational studies), as employee satisfaction (e.g. Dewar & Werbel, 1979), and as innovation rate (e.g Hage & Dewar, 1973), as cited in Donaldson (2001). Parsons (1961) and Yuchtman and Seashore (1967) conceptualise efficiency as the ability of an organisation to achieve set goals, and as the ability of the organisation to function well as a system, retrospectively. It appears to be more appropriate to examine the efficiency of a process, of a strategic action or initiative.

The proposed concept of fitness among characteristics and contingencies to achieve efficiency assumes a trade-off of flexibility for the organisation (McGrath, 2006). Contingency theory perceives organisational change as organisational adaptability over time to the constantly changing contingencies, creating an association between characteristics and contingencies (Burns & Stalker, 1961). A possible misfit between characteristics and contingencies, when the latter change, could be avoided by changing the organisational characteristics to fit the newly formed contingencies (Donaldson, 2001). The paradigm of contingency theory is argued to be quite dynamic as it involves the time elements and attempts to explain how an organisational characteristic changes or better adjusts its level to meet the fit with a contingency aiming to higher effectiveness or performance (Donaldson, 2001). However, it needs to be acknowledged that the identification and adoption of a structural design that fits the given environment introduces rigidity in the organisational system. McGrath (2006) argues that this reduces the flexibility required by an organisation to change its design and respond to a new, changing environment. The understanding of the debate can be summarised as the ability of the contingency perspective to explain how an organisation efficiently arrives at a situation of fitness between characteristics-contingencies-environment, but not to explain how an organisation changes such fitness and meets new environmental needs.

3.4.2 Criticism on contingency theory

Contingency theory has attracted significant criticism mainly questioning its *"imposed"* functionality and rationality on the way and the reasons organisations change. Schoonhover (1981) identifies five areas of concern with regards to the clarity in the theoretical assumptions contingency theory, the non-acknowledgement of the interactive relationship between organisational characteristics and contingencies, leading to the third problem of non specification of the form of this interaction, as well as the embedding of symmetrical and non-monotonic assumptions in its theoretical arguments.

Institutional theory and ecology population theory are among the main critics of contingency theory. Institutional theory, as advanced by DiMaggio and Powell (1983), Rumelt (1974), Armour and Teece (1978), argues towards institutional isomorphism, with organisations becoming increasingly similar through institutional forces and not necessarily through fitness efforts to the environment. Organisational change is conceptualised as less rational than suggested by contingency theory. Mimetic behaviour towards strategic decisions of other organisations (Fligstein, 1985), business fashion (Rumelt, 1974) are proposed as irrational reasons forcing organisations to change their organisational structure, while there may be absence of performance benefits for change after a period of time, besides the initial benefits (Armour & Teece, 1978). Ecology population theory, as advanced by Hannan and Freeman (1977), argues that adaptation is the outcome of changes in the membership of the organisations population, rather than an outcome of an organisational change. In the case of a large corporation, structural inertia prevents organisational change, while it may occur through population adaptation.

Besides its philosophical limitations, the contingency approach has faced difficulty to achieve empirical support (McGrath, 2006), possibly due to the difficulty to establish a universally accepted locus of fitness (Schoonhover, 1981). However, considering that the contingency approach to organisational studies started from a very functionalistic and deterministic view on organisations and managerial behaviour, current research *"has de-emphasised ... the idea of clear-cut connections between structural attributes, within a firm, its boundaries, and the environment in which it must function"* (McGrath, 2006; p. 582). The incorporation of the *notion of complementarily* and interdependencies between organisational elements[32], of *the notion of equifinality*[33] and of *the notion of co-evolution*[34] are among the new research directions contingency theory has taken.

The dominance of contingency theory in strategy content and strategy decision-making process research has been demonstrated in the previous section. Even though the majority of the empirical research has separately examined strategy formation and strategy implementation, the current study is interested in the simultaneous examination of both. The generic Ginsberg and Venkatraman's (1985) model has been considered, alongside with the work of Fredrickson (1983; 1986), Miller (1983) and Miller and Friesen (1984).

3.4.3 Contingency lens on CV process research

Reviewing the empirical and conceptual work in the fields of CV and corporate entrepreneurship, it is understood that a contingency approach in establishing performance linkages between CV activities and environmental conditions has dominated the field. This assumption is imprinted in the conceptual work of Covin and Slevin (1991); Zahra (1993); Zahra and Covin (1995); Block and MacMillan (1993); Lumpkin and Dess (1996); Dess et al., (1997); Dess et al., (1999); Miles and Covin (2002), to mention a few of the most influential works in shaping corporate entrepreneurship and CV research during the 1990s. Influenced by the strategy contingency approach, the corporate entrepreneurship contingency approach treats entrepreneurial orientation (e.g. Lumpkin & Dess, 1996), entrepreneurial posture (e.g. Zahra, 1991) and entrepreneurial activities as firm characteristics, aiming to identify contingencies with strategy, other organisational characteristics (structure, culture)

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[32] Proposing that the configuration of organisational elements is more appropriate to determine fitness
[33] Acknowledging the appropriateness of different designs to produce equivalent levels of fitness
[34] Proposing that organisations and environments co-evolve and moving away from the notion of environment as exogenous to the organisation

and environmental conditions (uncertainty, competition) and to establish linkages to firm performance and growth.

The theoretical frameworks proposed by Hornsby, et al. (1993) and Kuratko et al. (2004) illustrate the contingency effect organisational characteristics related to structure, governance and culture (i.e. managerial support, time availability, decision discretion) may have on triggering entrepreneurial behaviour and the decision to carry out corporate entrepreneurship activities within an organisation, given a highly completive and rapidly changing environment. Hornsby et al. (1993) move further to argue that resource availability and obstacles to corporate entrepreneurship activities have a moderating effect on the implementation of the decision to carry out CV activities. Even though key organisational and managers' behavioural constructs are identified, there is no discussion on the dynamics of this process and how the involvement in corporate entrepreneurship activities (i.e. CV activities) manages to be implemented and how the proposed managerial and organisational outcomes and consequences (Kuratko et al., 2004) are achieved.

3.5 Agency theory: Focus on relating the CV unit to the corporation

3.5.1 Theory synopsis

Considered among others in the organisation economics literature, agency theory enhances understanding of the causes and consequences of goal disagreements (Barney & Hesterly, 2006). Originally developed by Jensen and Meckling (1976), agency theory looked at the relationship between managers and stockholders. More recently, intra-organisational relationships such as the ones between different managers within the same organisations have attracted the interest of agency theory (Barney & Hesterly, 2006). The importance of agency theory lies in the conflicts arising at contractual relationships between organisational entities and in identifying efficient ways to manage them.

Agency theory is primarily concerned with the relationship characterising the agency structure of a party (the principal) who delegates a task to another party (the agent), who executes the task. The two parties are engaged in a relationship that requires cooperative behaviour, but quite frequently conflict of goals and different attitudes towards risk (agency problem) might be observed in their relationship (Jensen &

Meckling, 1976; Eisenhardt, 1989a). The delegation of a task from the principal to the agency may be problematic for three main reasons: (a) the interests of the principal and the agent may diverge, (b) the principal is unable to perfectly monitor and control all actions of the agent, and (c) the principal is unable to perfectly monitor and have access to the information the agent holds. The core of the agency problem is the possible occurrence of opportunistic behaviour by the agent. The metaphor of a contract (Jensen & Meckling, 1976) is used to illustrate the governance and structure of the agency relationship. If agency costs exist, both the principal and the agent have common interest to minimise them by producing a monitoring, boding and incentives structure to define their relationship and the way it is exercised in order to achieve efficient outcomes, as if information exchange was costless (Pratt & Zeckhauser, 1985).

Agency theory lifts two main assumptions of the neoclassic economic theory: decisions within a firm are made under conditions of perfect knowledge and the firm aims solely to maximize profits (Grant, 1996). Information is treated as a purchasable commodity affecting the relationship between the principal and the agent (Eisenhardt, 1989a). Moreover, individuals are characterised by self-interest, bounded rationality and risk aversion, and there is partial goal conflict and information asymmetry between participant and agent, while efficiency is the effectiveness criterion.

The contract between the two parties may include two types of rewards to the agent for the cost of performing the work for the principal: (a) behaviour based returns and (b) outcome based returns (Eisenhardt, 1989a). In the case of a behaviour-based contract, the principal rewards (or penalises) the agent on whether the agent behaves in alignment to the interests of the principal. Rewards of the behaviour-based constructs include the salaries and hierarchical governance for the agent. In the case of an outcome-based contract, the principal rewards (or penalises) the agent on whether the agent delivers outcomes in alignment and in accordance to the interests of the principal. Rewards of the outcome-based contracts include commissions, market governance, transfer of property rights, and stock options.

Agency theory attempts to resolve two problems that may occur in agency relationships (Eisenhardt, 1989a): (1) the problem arising from conflict or lack of alignment between the goals of the principal and those of the agent, and the cost consequences for the principal to control the agent, and (2) the problem arising from the different risk preferences between the principal and the agent and the consequences of risk sharing. Agency problems can be resolved and agency costs minimised through monitoring and bonding structures, as arranged by the contract between the principal and the agent (Barney & Hesterly, 2006). Monitoring involves the mechanism and governance to observe the actions and performance of the agent by the principal. Bonding refers to the rewarding or penalising mechanisms of the agents' actions when considering in alignment or not with the principal's actions, accordingly. Delegation of task by a principal to an agent to carry out is inevitable within the context of large, complex, multinational organisations. In such an organisational context, a single individual *"may be unable to engage in all these business activities in a timely and effective way... due to (their) bounded reality and real constrains on time and energy"* (Barney & Hesterly, 2006; p. 123).

There appear to be two main streams of theorists in agency theory: the positivist theorists and the principal-agency relationship theorists. The positivists are primarily concerned with the goal conflict between the two parties and the governance mechanisms that limit the free-riding, opportunistic behaviour of the agent causing to the principal agency costs (Jensen & Meckling, 1976). This stream focuses on the identification of governance mechanisms that limit this self-interest behaviour by the agent (Fama & Jensen, 1983; Eisenhardt, 1989a). The proposed mechanisms from the literature are grouped around information systems (e.g. Fama, 1980), which are used to monitor the behaviour of the agent by the principal, as well as around incentives/compensation schemes (e.g. Gomez-Mejia, 1992), which reward the outcomes of the agent's actions and performance (outcome-based contract).

The principal-agent theorists are primarily concerned with the determination of contract structures that deal effectively with factors such as outcomes uncertainty, goal conflict and risk aversion, as well with the factors determining the time horizon of the agency relationship (Eisenhardt, 1989a). Each type of contract (behaviour or outcome based contract) performs more effectively under each level of the above mentioned factors. In the simple model of the principal-agent relationship, goal conflict and risk aversion is assumed with complete or incomplete information from the principal on the actions of the agent.

In the case of complete information of the actions of the agent, a behaviour-based contract is more efficient (Eisenhardt, 1989a). In the case of incomplete information regarding the actions of the agent, agency costs emerge as the two parties have different goals and the principal is not in position to determine how appropriately the agent has acted. Arrow (1985) identifies two categories of agency problems: hidden action (*moral hazard problem*) with the agent lacking the agreed-upon effort, and hidden information (*adverse selection*) with the agent misleading the principal on the skills and expertise it posses to carry out the delegated work. In any of the cases, the principal has either the option to invest in information systems (i.e. reporting and budgeting systems) (Barney, 1996) or to determine an outcome-based contract to monitor the behaviour of the agent (***monitoring costs***) (Eisenhardt, 1989a). In the last option, risk might be transferred to the agent and outcome uncertainty needs to be considered to review the outcomes of the agent's performance. Outcome uncertainty is dependent on both external and internal factors that are beyond the control of the agent and might jeopardise its outcomes (Eisenhardt, 1989a).

Different contracts might be more effective when the risk aversion assumption is relaxed. Eisenhardt (1989a) proposes that in the case the principal becomes more risk averse, the risks are more likely to be transferred to the agent, positively related to an outcome-based contract. In the case of relaxing the goal conflict assumption, Eisenhardt (1989a) proposes that as goal conflict decreases, maintaining the assumption of risk aversion, behaviour-based contracts become more attractive. Moreover, the principal may contribute positively in decreasing goal conflict by *ex ante* and *ex post* efforts (Bergen et. al. 1992), by carefully selecting and training the agent before delegating the work to it, and by engaging the agent in *ex post* socialisation activities (Ouchi, 1979), or when the self-interest behaviour is transformed to selfless behaviour by the agent (Perrow, 1986). From agent's perspective, these considerations summarise the ***bonding cost*** undertaken by the agent to guarantee that it will not develop certain agent behaviour that will harm the principal's interests. On the other hand, the principal suffers ***residual losses*** emerging from the actions taken by the agent which differ from the actions the principal would have taken (Jensen & Meckling, 1976).

Another two characteristics of the contract in the principal-agency theory are related to the actual task delegated to the agent to perform and these are task programmability and measurability of outcome of the task (Eisenhardt, 1989a). The difficulties occurring with regards to the specification of appropriate agent behaviour prior to commencing the task (programmability) and with regards to measuring the outcomes (measurability) of it might require a different contract to determine the relationship between the two parties. The more the task programmability decreases (i.e. entrepreneurial activities), the more effective an outcome-based contract will be (Eisenhardt, 1989a). The more the outcome measurability decreases, the more effective a behaviour-based contract will be.

Hendry (2002) argues that objective specification and honest incompetence are two additional agency problems, causing ***incompetence costs***, ***specification costs***, ***training costs*** and ***guidance costs***. Incompetence costs result from the deviation between objectives and outcomes an agent is expected to deliver but fails to do due to its limited competences. Specification costs result from the distance between the satisfaction of a principal's overall objectives and that of the objectives specified in the contract. Training costs result from expenditures aiming to improve an agent's competences, while guidance costs result from the allocation of expenditures for communicating the general objectives outside the contract specification.

With regards to the time horizon of the relationship between the two parties, the literature argues that a long-term agreement and relationship between the principal and the agent negatively affects the occurrence of agency problems (Leninthal, 1988; Eisenhardt, 1989a; Jensen and Meckling, 1976). A long-term agreement between two parties regarding the delegated task is expected to allow the principal to gain information and knowledge about the agent's behaviour (Eisenhardt, 1989a) increasing the likelihood for the principal to detect problems of moral hazard or adverse selection from the agent. Having a long-term agreement also allows the principal to distinguish between outcome uncertainty due to exogenous (mainly environmental) factors and underperformance due to the moral hazard by the agent Holstrom (1979).

Moving further from the contribution of Eisenhardt in identifying the relevance of agency theory to organisational theory, the work of Pratt and Zeckhauser (1985) contributes towards the same direction. Their interest is also in the principal-agency relationship and in specific on overcoming information asymmetries by determining contracts that induce the agent to serve the principal's interest even when there is information asymmetry with regards to the actions of the agent. They introduce motivation, as associated to economic incentives, to minimize agency costs created from information asymmetry. Reward systems, may be designed by either the agent or the principal or might be a joint negotiation on setting up a contract structure, which positively influence the agent's behaviour while being rewarded enough to continue carrying out the task.

3.5.2 Criticism of Agency Theory

With its origins in economics, agency theory has not been well perceived by organisation theorists. Agency theory's view on human and organisational behaviour (e.g. Hirsch et al., 1990), its realism on dealing with the processes of governance (Pettigrew, 1992a) and its philosophical stance (e.g. Perrow, 1986) have been the focus of the criticism it receives.

Agency theory takes an unrealistic view of human behaviour, with individuals primarily motivated on the grounds of financial gains (Hirsch et al., 1990). However, organisational cultural traits may be motivators for individuals, as well as employment expectations regarding appraisals of their performance. Rousseau and McLean Parks (1993) argue that agency theory oversimplifies the behaviour of organisations as a nexus of contracts, paying little attention to the internal mechanisms such as organisational culture and social relationships, as formed between mangers and units within organisations, which can *"control"* the outcomes of tasks, as undertaken by individuals.

With regards to the view agency theory takes on organisations, Barney (1996) argues that it is one-sided, with most of the literature written from the perspective of the principal and not from the agents. Moreover, agency theory perceives organisations and agents as autonomous entities, not affected by the environments within which they operate (Vibert, 2004). The changing nature of employment relationships within organisations are not incorporated in the agency model. Demsetz (1997) also argues that information asymmetry might occur not only in actions of the agent, but are due to the uncertainty involved in problems such as product choice, investment practices, and the scope of operations, primarily affecting the degree of task programmability.

Davis and Useen (2002; p. 233) perceive agency theory as "prescriptive theory, that is, not an explanation of what *is* but a vision of what *should* or *should be*"[35]. Pettigrew (1992a) recognises the importance of agency theory in identifying input and output variables in the governance process between the two entities, but stresses its inability to provide mechanisms and processes that link inputs and outputs of the process. Perrow (1986) claims that agency is not dealing with an actual problem, but maintains an inherent investor's focus. Barney and Hesterly (2006) defend the neutral framework of agency theory arguing that it can be equally applied on the concerns of agents (e.g. Shleifer & Summers, 1988).

Recognising the limitations of the assumptions and main focus of agency theory, Eisenhardt (1989a) argues that agency theory is not the panacea to answer all problems that preoccupy organisational theory, but it can provide another view of phenomena involving a cooperative relationship. She suggests using agency theory with other "*complimentary theories*" to "*capture the greater complexity*" of the world (Eisenhardt, 1989a; p. 71).

3.5.3 Agency lens on CV process research

In the context of CV, as conducted by a CV unit or team, there are two levels of principal-agent relationships: (a) between the patent corporation and the CV unit/team, and (b) between the CV unit/team and the internal or external entrepreneurs. The second level relationship shares many similarities with the agent relationship between a venture capital (VC) firm and the entrepreneurs, which has been extensively examined in the literature (e.g. Lerner, 1995; Sapienza & Gupta, 1994). However, the focus of the current study is on the relationship between the

[35] Emphasis as in the original.

parent corporation and the CV team/unit, which has not sufficiently explored by the existing literature. This first level relationship shares some characteristics with the relationship between a VC firm and their fund providers which, in most cases, is a limited partnership. In the case of the CV team/units there is no legal agreement or written contract creating bonding costs for the unit, and quite frequently monitoring and bonding mechanisms are absent or not appropriate for the CV contract.

The relationship between the corporation and the CV unit/team, and the relationship between top-level managers and CV managers, as well as the elements that define and affect it, appear to impact the dynamics of the corporate entrepreneurship process of a large, complex organisation (Jones & Butler, 1992). Jones and Butler (1992) propose a theoretical framework where the distinction between entrepreneurship and management in the hierarchy of a firm, once an opportunity has been acted upon, is the source of agency problems in the hierarchy. As they argue, *"the basic agency problem in entrepreneurship arises, because by definition, entrepreneurial behaviour is action in the context of uncertainty so that it is impossible or prohibitively expensive to evaluate the effectiveness of an agent's behaviour. Thus, the risk or opportunistic preferences of the parties to the exchange become the salient issue."* (Jones & Butler, 1992; p. 736)

Jones and Butler (1992) argue that there is interchange between the roles of the principal and the agent in the case of corporate entrepreneurship activities. While senior managers are agents to the principal shareholders, they become principals to middle-level managers who are the agents in carrying out corporate entrepreneurship activities (i.e. CV activities). The stance of the current study is on treating senior managers as principals, and the CV managers as agents delegated to carry out CV activities. Uncertainty with regards to the outcomes of the CV activities and to the performance of the CV team (agent), as well as the differences between the time horizon of the contract (carrying out CV activities) and the time horizon for the CV activities to perform, causes to the senior managers (principals) agency problems.

Influenced by Butler's (1991) model, Jones and Butler (1992) propose that the rise of agency problems in the relationship between senior managers and CV managers decreases the levels of inside entrepreneurship and increases the levels of outside entrepreneurship, with CV managers exiting the firm to create their own ventures. In order to minimize the agency problems and increase inside entrepreneurship, Jones and Butler (1992) propose the employment of a multidivisional organisational structure to accommodate the CV activities and an equitable reward system to meet the needs of the CV managers. However, they acknowledge the limitations of their propositions. In the first case, they argue that the political and strategic relationships between the two parties might be fragile (Fast, 1977). Moreover, issues of perceptual and distributive justice need to be considered in applying any reward system to manage agency relationships, and maintaining a long term entrepreneurial behaviour.

3.6 IMPLICATIONS OF THEORETICAL TRIANGULATION ON CONCEPTUAL FRAMEWORK

The review of the three theories and their application to the theoretical and empirical work on CV are summarised in Table 3.1. The differences and limitations of each are presented, while it is important to notice their conceptual tools in examining the CV process. Figure 3.1 illustrates how each of the theories contributes in understanding this process. The evolutionary theory follows the dynamics of this process, proposing a series of adjustments in the corporate entrepreneurship and strategy process. The contingency theory highlights the individual and configurable impact the external environment and the organisational context have on the two processes. The agency theory illuminates the relationship between the corporation and the CV team.

In detail, viewing the conceptual framework of the current study from an ***evolutionary theory perspective***, the role of operational and middle-level managers is acknowledged. This study proposes that the entrepreneurial behaviour of these managers is the internal source of the variation to undertake CV activities. The way these managers interpret industry and technological trends is proposed to be the main source of external variation to undertake CV activities. Treating the involvement in CV activities as equivalent to the emergence of a new initiative, this study proposes

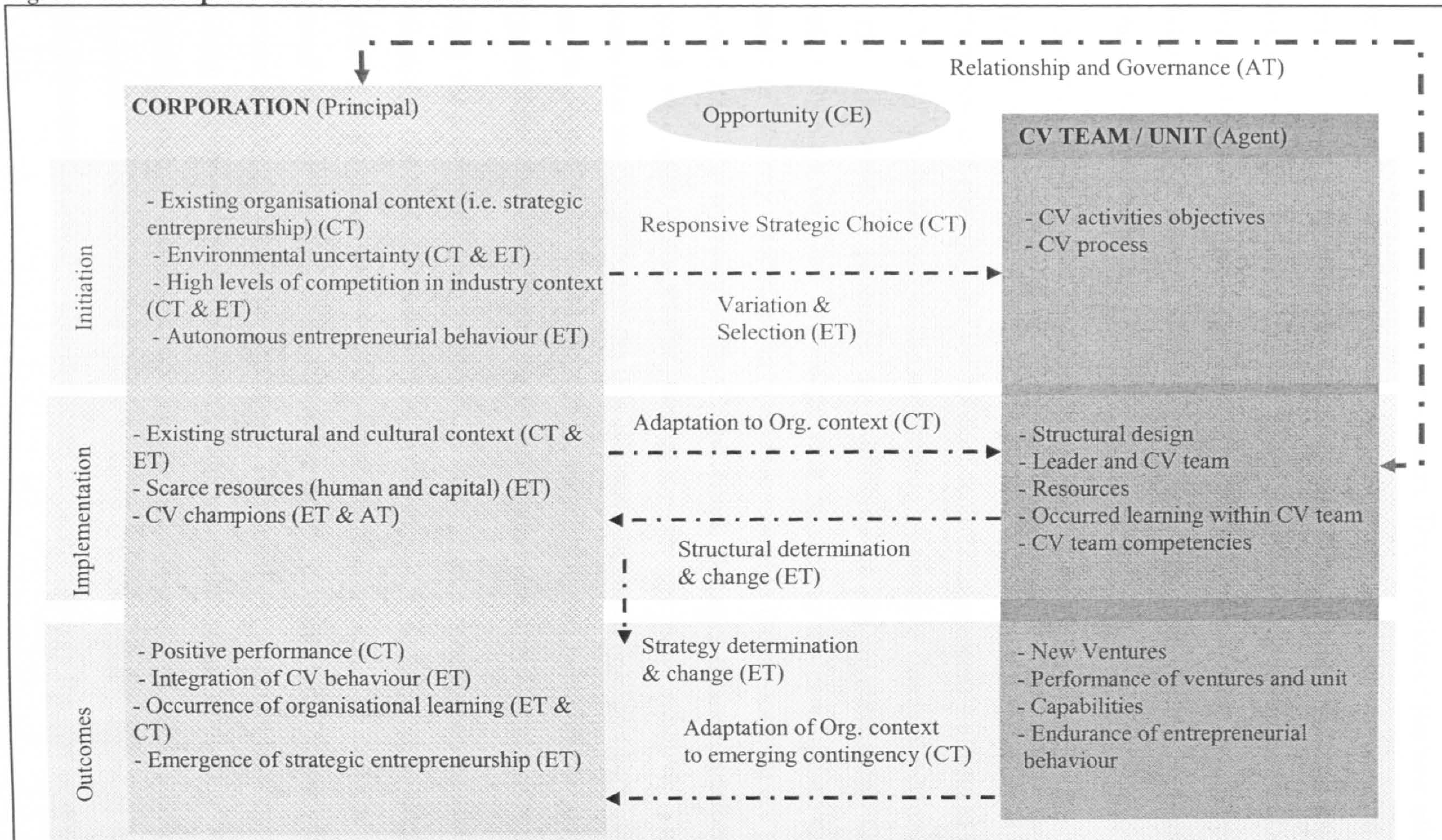
Table 3.1: Attributes of the three theoretical lenses[36]

Attributes	Evolutionary theory	Contingency theory	Agency theory
Key question	How organisations emerge, survive and change over time? (Aldrich, 1999; Nelson & Winter, 1982; Campbell, 1969)	Which fit between organisational characteristics and environmental conditions leads to higher organisational effectiveness? (Burns & Stalker, 1961)	How the relationship between two entities (principal and agent) can be managed and controlled better to lead to organisational efficiency?
Focus on	Variation, Selection, Retention, Competition Organisational transformation	Fitness Organisational performance Design of organisational characteristics	Governance mechanisms Relationships within an organisation Managerial behaviour
Unit of analysis	- Routines and competencies (Nelson & Winter, 1982; Aldrich, 2000) - Organisations (Aldrich, 2000) - Communities and populations (Aldrich, 2000)	- Organisational characteristics (structure, strategy) (Donaldson, 1996; Fredrickson, 1986)	- Contract – relationship between the principal and the agent (Eisenhardt, 1989a)
Level of analysis	- Individual - Group - Organisation - Society / Population	- Individual - Organisation	- Individual - Group - Organisation
Assumptions	- Individual (Bounded reality, heterogeneity) - Organisation (Scarcity of resources, imperfect environmental matching, variety of experimental solutions, behavioural continuity, profit-induced growth, limited path-dependency; Nelson & Winters, 2002)	- Organisation (rational goal-seeking entities [Lawrence & Lorsch, 1967], structural adaptation to environment to operate effectively [Donaldson, 1996]) - Environment uncertainty - Information asymmetry	- Individual (bounded reality, self-interested, opportunistic, and risk averse, Eisenhardt, 1989a) - Organisation (Goal incongruence, Efficiency criterion, and asymmetric information between principals and agents, Eisenhardt, 1989a)
View on environment	- Source of uncertainty and turbulence, an external source of variation - Environmental capacity of resources - Survivability of organisation depends on the selection of the organisation by the	- Source of uncertainty, not defined with precision – contingency - Determines organisational characteristics (i.e. structure, content of strategy) - Adaptation to environment determines	- Source of uncertainty, undermining the contract's performance

[36] Developed by the author

	environment – organisations do not adapt to environment, they are selected by it - Subject to managers' interpretation and perceptions	organisational performance (Burns & Stalker, 1961; Lawrence & Lorsch, 1967)	
View on organisation	- As a historic entity, having emerged through a cumulative causal process (Tsoukas & Knudsen, 2002) - An ecology of routines, competences which emerge in patterned ways and compete for limited resources in order to increase their relative importance within the organisation (Burgelman, 1991)	- As open organic systems - As organised systems to complete tasks	- As collective contracts of delegated tasks by the principals (shareholders, top managements, organisations) to agents (managers, middle managers, external parties)
View on managers	- Bear the capacity for internal variations (Aldrich, 2000)	- Make decisions on organisational designs that fit the environmental demands (Lawrence & Lorsch, 1967) - Limited freedom in choosing organisational forms, but have the choice of strategic actions when conditions of power politics emerge within organisations (Child, 1972)	- As entities of the agency relationship - As agents: motivated by financial incentives to perform - As principals: bear the responsibility to control the relationship with the agent, bear the responsibility to establish governance system - Risk preferences of managers affect the contract
View on strategy	- Differentiation between autonomous and induced strategy (Burgelman, 1983c), as a form of routine - Focus on strategy process	- Organisational contingency that can affect organisational performance (e.g., Hofer, 1975) - Focus on strategy content and strategy decision-making process	- Corporate goals: alignment or conflict between managers and shareholders (Grant, 2000) - Focus on strategy content
View on CV activities	- A selected strategic initiative among other variations	- A strategic choice to adapt to the environment	- A contract
View on effectiveness	- Survivability of new routines - Organisational change and evolvement	- Efficiency - Performance	- Efficiency in operations - Efficiency in the relationship between agent and principal

Figure 3.1: Conceptual framework and theories[37]



[37] AT: Agency Theory, CT: Contingency Theory, ET: Evolutionary Theory, CE: Corporate Entrepreneurship / Developed by the author

that the initiative with the greatest expected contribution to the corporation and the greatest support from the top management team is more competent to survive.

This study proposes that the new initiative (involvement in CV activities) is selected by the top management team of a corporation. The selection of the new initiative is proposed to be based on both internal and external to the corporation factors. External selectors of this process are anticipated to be technological uncertainty and business hype in the industry context related to similar initiatives. Internal selectors are anticipated to be the compatibility of the new initiative to other existing corporate operations and its positive financial performance, contributing to the overall organisational performance.

The retention of the new initiative proposed to be influenced by the level of compatibility of the new initiative with the existing organisational context (culture, structure, rewards systems) and the level of senior management's efforts to integrate the CV activities to the rest of the corporation. A positive financial performance of the new initiative is proposed to contribute to its maintenance. Occurring organisational learning and knowledge with regards to the new initiative, and the existence of learning dissemination mechanisms within the corporation are proposed to contribute to the retention of the CV activities. Negative financial performance is proposed to trigger a suspension mechanism for the new initiative. This study proposes that the integration of the new initiative enhances entrepreneurial behaviour across the corporation. The emergence of entrepreneurial behaviour is proposed to lead to the determination of a new structural context (entrepreneurial strategy mode).

Viewing the conceptual framework of the study from a ***contingency approach***, it is proposed that the strategic choice to be involved in CV activities is in alignment to the existing strategy and the rest of the organisational context. The strategic choice is proposed to be formulated in consideration of the existing level of entrepreneurial behaviour among the corporate managers. This level of pre-existing entrepreneurial behaviour is proposed to influence the implementation phase of the CV activities. The configuration of organisational characteristics is proposed to be a reflection of the approach the corporation is taking towards CV activities (internal or external). The organisational context is also proposed to define the way the involvement in CV activities is evaluated and perceived within the corporation. The organisational context is proposed to adjust to fit the requirements of the new strategic choice. This adaptation process is anticipated to enhance the performance of the strategic choice.

An appropriate configuration between the approach taken towards the new strategic choice and the configuration of organisational characteristics is anticipated to positively affect the performance of the strategic choice. A positive financial performance from the involvement in CV activities is proposed to enhance the emergence of an entrepreneurial strategy mode within the corporation. A positive non-financial performance from the involvement in CV activities is proposed to enhance the emergence of an entrepreneurial strategy mode within the corporation. The occurrence of organisational learning from the involvement in CV activities is proposed to have a positive impact on amending the corporate strategy to a more entrepreneurial mode.

Viewing the conceptual framework from an ***agency perspective***, this study conceptualises the CV process as the contractual relationship between a principal (parent-corporation) and an agent (CV unit). It is acknowledged that agency theory primarily focus on the dynamics of the implementation phase of the CV process rather that its initiation. This study conceptualises the agency relationship of the two entities to be defined: (a) by corporate resources, which the corporation allocates to the CV team, (b) by a task, for the CV team to deliver pre-defined financial and strategic outcomes to the corporation, and (c) by the establishment of a governance system to monitor and to manage the relationship between the two entities. This study propose that agency costs may emergence in the occurrence of: (a) *goal asymmetry* (the CV team adopts goals different from the corporate ones), (b) *moral hazard* (the CV team is not meeting the effort requirements of the contract with the principal), and (c) *adverse selection* (the CV team under-representing its resources and capabilities). This study proposes that depending on the nature of the CV activities (internal vs. external) different agency relationships are formed between the corporation and the CV team, impacting the implementation phase of the CV process. It is proposed that internal CV activities may require different governance and reward systems than external CV activities.

3.7 CONCLUSION

This chapter established the theoretical stance of the study. Influenced by the calls from the relevant literature for a more holistic and integrated approach in researching CV, this thesis presented its influences from three theoretical perspectives (evolutionary, contingency and agency theory). The first section of this chapter was dedicated in justifying the theoretical triangulation stance of this study. In the second section, each theory was presented and criticised. More importantly, the application of the each theory to the CV field, as drawn from the existing relevant literature, was discussed. Acknowledging the individual strengths of each theory in unfolding the CV process and appreciating the diversity of focus of each theory, the third section of the chapter was developed. Initiating the dialogue with the three theories in respect to the three research questions of the study, three *"points of view"* of the conceptual framework were presented. For each *"point of view"* a series of proposed relationships of this study's constructs were presented aiming to enhance the empirical enquiry.

4. CHAPTER 4: RESEARCH APPROACH AND METHODS

4.1 INTRODUCTION

The aim of this chapter is to demonstrate and justify the methodological rationale adopted to resolve the format of the study. The chapter starts by addressing the peculiarities of the study as emerging from the nature of the research questions. It continues on presenting and justifying the ontological and epistemological assumptions of the study. The research strategy of the empirical enquiry follows, accompanied by the methods and techniques employed to collect and analyse the data. The chapter concludes by evaluating the selected research design and methods, identifying and addressing their limitations and drawing on the gained learning from the involvement in this study.

4.2 LOCATING THE THESIS: RESEARCH AIM AND PECULIARITIES

4.2.1 Research aim: Synthesis and composition of research questions

The development of a generic conceptual framework (Figure 2.1) in the previous two chapters allowed me to position this research enquiry with respect to the relevant literature of the study (Holliday, 2002). The framework was composed with constructs, as obtained from the relevant literature, while its suppositions were also crafted by my participation in relevant academic[38] and practitioners'[39] conferences between 2000 and 2003.

The context of the research comprised large complex corporations. The phenomenon under investigation is CV activities and the research objectives are twofold:

(a) to explore and explain the process of involvement in and implementation of CV by a large corporation; and

(b) to explore and explain the impact of the CV process on the corporation

The CV process comprised from the initiation, implementation and the outcomes of a CV unit or team within a large corporation became the research focus of the study. Process is perceived as a sequence of events that describe how things change over

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[38] Babson Kauffman Entrepreneurship Research Conference, 2002, Bounder Colorado, USA

[39] 1st Corporate Venturing Conference, London, UK – Organised by the Corporate Venturing UK and the Greenhouse Ventures: June, 2003

time (Van de Ven, 1992), with regards to the actions (CV activities) and the individuals (venturing and senior corporate managers) within large corporations. The unit of the analysis (Gartner, 2001) was the CV unit/team's initiation, as occurring within a large company.

The types of questions that I was interested in investigating did not deal solely with *"what"* is happening when a large corporation decides to get involved in CV, but also *"why"* and *"how"* the CV process evolves within a large corporation. Table 4.1 summarises the *a priori* research constructs of this study, as identified across the three stages of the CV process and the three generic questions of research enquiry. Based on them, the fieldwork questions were conceptualised and developed.

Table 4.1: Research constructs template

Notion of Question	Process		
	Initiation	Implementation	Outcomes
What	- Drivers of involvement - Motives - Justification	- Organisational Structure - Organisational Culture - People - Resources	- Performance (CV unit and corporation) - Impact on corporation
Why	- Intentions - Perceptions - Chronology and timing	- Appropriateness of organisational structure, recourses and people - Conflicts between corporation and CV unit	- Constraints and facilitators of impact on corporation
How	- People involved - Chronology and timing - Justification of CV unit	- Selection of CV model and CV unit objectives - Changes in the CV model	- Evolution of corporation's involvement in CV - Organisational learning

4.2.2 Research peculiarities: The setting

Entrepreneurship, as a scientific discipline, is in its infancy as compared to other disciplines in social sciences. It is characterised by a lack of unified theory and definitions, and a paradigm to advance the field (Brazeal & Herbert, 1999; Bygrave & Hofer, 1991; Bygrave, 1989a, 1989b; Shane & Vankataraman, 2000). The challenges in carrying out research with respect to entrepreneurial phenomena are related to the nature, and the heterogeneous and idiosyncratic character of the disjoined, discontinuous, non-linear (and usually unique) entrepreneurial event (Bygrave, 1989a).

Wortman (1987) and Gartner (1989) warn researchers about the methodological challenges (e.g. articulation of theory, clear definition of concepts, and conscious selection of samples) in conducting research in the entrepreneurship domain with regards to the conceptualisation and the implementation of a research design. In that respect, Bygrave's suggestions to entrepreneurship researchers to *"cultivate independence in their research, to concern less about statistical analyses ... to carry out more field research and to utilise original field-derived data bases"* (Bygrave, 1989a; p. 14) were carefully considered.

With regards to conducting field research at firm-level entrepreneurship, Savage and Black (1995) stress the importance of a researcher to identify the paradigm and philosophical perspective they operate from. The epistemological and teleological assumptions of field research appear to impact on the methodology employed to collect, analyse and interpret the data, leading in diverse conclusions about *"what do we know?"* and enriching knowledge on the multiple facets of firm-level entrepreneurship. Considering the selection of methodology to conduct research in the entrepreneurship field, Smith et al. (1989) and Davidsson and Wiklund (2001) highlight the importance for a researcher to specify and justify the level of analysis of an enquiry, and the nature of the data collected and how this impacts on the reliability and validity of the conducted research.

The relevant literature of strategy process argues towards conducting research in the field by considering the organisational and environmental context within which strategy processes take place (Huff & Reger, 1987). Chakravarthy and White (2002; p. 199) draw attention to the need for the strategy process researcher to be aware of the *"dynamic interactions between context, processes and outcomes"*, as well as of the need to *"incorporate multi-level, longitudinal processes"* in the quest for a more holistic view of the strategy process. Emphasis was also paid in the guidelines and suggestions given by Pettigrew (1992a, 1997) and Van de Ven (1992) to strategy process researchers on clarity of the definition and theory of process from which they draw on.

Researchers of both entrepreneurship and strategy fields identify the need for explicitly identifying and positing the analytical and conceptual assumptions which influence and guide an empirical enquiry. The purpose of the second section of the current chapter is the identification of the ontological, epistemological and axiological assumptions underpinning this thesis. Following this discussion, I explore the methodological assumptions of the research strategy and design of the study. The coherency and continuity among the two levels of assumptions aim to increase the quality of the enquiry.

4.3 PHILOSOPHICAL ASSUMPTIONS AND CONCEPTUAL ISSUES

Initiating a discourse on the philosophical influences of the current study does not aim to *"swear vows of allegiance to any single"* research paradigm (Patton, 2002; p. 136). It is pivotal to state that such a discourse does not aim to identify the *"ultimate truth"* or the most appropriate philosophical stance to carry out research in the field of strategy process and corporate entrepreneurship. There is awareness of the plurality of paradigms (e.g. Burrell & Morgan, 1979; Benton & Craid; 2001) in social science leading to different and distinctive ways of perceiving the world and the acquisition of knowledge.

The plurality of paradigms can be considered as an indicator of the social complexity, as well as of the variety of philosophical research perspectives. I share the view that each paradigm in the social science research domain can claim its importance and quality of contribution in explaining further what, how and why social phenomena exist. Moreover, I take the view that by clarifying the philosophical assumptions of this study, the reader is provided with clarity on its conceptual boundaries. This study argues that a research enquiry needs to move further from the researcher's own assumptions and to identify its own philosophical stand, in a more local perspective, close to the specific research questions and domain of research.

A researcher's ontological[40] and epistemological[41] stance provides the ground assumptions of the research inquiry, producing a different kind of knowledge (Morgan, 1983). Ontology is significant in my axiology determining my approach towards the nature of social sciences and the degree of objectivity/subjectivity in research enquiry. Burrell and Morgan (1979) through a dichotomous typology of

[40] Ontology deals with the nature of knowledge, determining the range of entities and relations recognised within the field of knowledge (Burrell & Morgan, 1979; Benton & Craib, 2001)
[41] Epistemology defines the frames and the borders of the knowledge, as well as the approach towards the investigation (Burrell & Morgan, 1979; Benton & Craib, 2001)

ontological positions represent two extremes of paradigms: the sociological positivistic and the German idealistic. Not in favour of dichotomous views, but accepting the existence of an objective world, I take the view that this objective world is accessible through the subjective views of each individual. I take a reality oriented approach towards the research enquiry and I adopt the view that the world is constituted by mechanisms and causal powers, while social structures and individuals are autonomous entities, independent from each other but interacting.

Epistemology is equally important in my axiology, as it questions the absolute, permanent character of knowledge versus the relative and situation dependence character of it. As in the ontological debate, the emphasis is on the objectivity or subjectivity of the nature of knowledge, and the implications of each position on the character of findings of an enquiry into the social world. Rationalism and empiricism are the two dominating approaches in the epistemological debate (Benton & Craib, 2001). Knowledge is approached as to be fallible, to be the outcome of social practice and scientific experimentation, and to be content dependent but transferable. I take the view that the researcher bears the responsibility to intervene into the business world and through interaction with managers to monitor their experiences in regard to the investigation. Moreover, through a critical perspective the researcher could attempt to identify objective causal powers that operate in the identified research area and the way they interact and combine in order to create the particular events identified in the managers' experiences (Easton, 1998).

4.3.1 Plurality and selection of paradigms

Paradigms, according to Burrell and Morgan (1979), are incommensurable belief systems containing core assumptions to which a particular research community adheres. Agreeing with Kuhn (1970), they ague that paradigms ground ontological and epistemological assumptions on which researchers build their version of a discipline. The selection of a paradigmatic stance for this study is not consequently a simplistic, convenience-driven action, but a decision based on two processes: (a) investigation of the ontological and epistemological assumptions of various paradigms, and (b) evaluation of each paradigm in view of the research domain and questions of the current study. The outcome of these processes led to the development of Table 4.2. Considering the well cited literature on research paradigms (e.g. Burrell & Morgan, 1979; Morgan, 1980; Guba & Lincoln, 1994; Lincoln & Guba, 2000; Easterby-Smith et. a., 2001), I observed that research in organisations has experienced the predominance of positivism and social constructivism, with critical realism gaining progressive recognition[42]. I explored the key features of these three paradigms in four levels: the philosophical, the social and the technical level as suggested by Morgan (1979) and also against the research domain of the current study.

Even though positivism has dominated the entrepreneurship and strategy fields with the predominant use of quantitative research methods and large samples, it fails to consider the idiosyncratic nature (MacMillan & Katz, 1992) and non-linear behaviour of individual and corporate entrepreneurs (Stevenson & Harmeling, 1990). Positivism appears to be appropriate to deal with theory testing of *a priori* hypotheses and relationships identified by the researcher in the existing literature. However, the purpose of the current study is closer to theory development, and consequently positivism was not considered as an appropriate philosophical stance to guide the enquiry.

With an emphasis on the individual as a constructor of entrepreneurial opportunities, social constructivism neglects that entrepreneurial phenomena within the context of a large company are defined, influenced, formed, enhanced, and even restricted by pre-existing structures. CV process is a highly contextualised phenomenon that requires the acknowledgement of both the organisational context, as well as the macro-economic and technological context within which it occurs. On these grounds, the philosophical posture of social constructivism was equally not considered by the current study.

[42] Even though other paradigms such as critical theory, participatory, phenomenology, and feminism are acknowledged, three paradigms (positivism, critical realism and social constructivism) are considered in the current study

Table 4.2: Research paradigms: Comparison and evaluation[43]

	Positivism	Critical Realism	Social Constructivism
Philosophical Assumptions			
Ontology	Naïve Realism - reality is external and objective, but apprehendable (Lincoln & Guba, 2000)	Reality is independent of our beliefs and its differentiated and stratified (Benton & Craib, 2001)	Relativism - locally and specific constructed realities (Lincoln & Guba, 2000)
Epistemology	knowledge is of significance if based on observations of external reality (Easterby-Smith et al., 2001) - objectivist; findings are true (Lincoln & Guba, 2000)	Our knowledge of real world is fallible and theory leaden (Sayer, 1984; Easton 1998)	Subjectivist; science is driven by human interest (Lincoln & Guba, 2000; Easterby- Smith et. al., 2001)
Reasoning	Deductive	Retroductive	Inductive
Researcher and field			
Relationship with enquiry	"disinterested scientist" as informer of decision makers, policy makers and change agents (Lincoln & Guba, 2000)	"transformative intellectual" as advocate or activist (Lincoln & Guba, 2000)	"Passionate participant" as facilitator of multi-voice reconstruction (Lincoln & Guba, 2000)
Role	To focus on facts, to look for causality and fundamental laws (Easterby-Smith et al., 2001)	To intervene in the social world and through interaction to monitor the phenomena, and through a critical perspective to explain the causal mechanisms of the phenomenon (Easton, 1998)	To focus on meaning and to try to understand what is happening (Easterby-Smith et al., 2001)
Methods			
Goal	To identify causal regularities and test in order to predict and control (Gioia & Pitre, 1990)	To identify the mechanisms and causal powers between objects in the social world that produce regularities and explain the necessary and contingent relationships among them (Sayer, 2000)	To describe and explain in order to diagnose and understand (Gioia & Pitre, 1990)

[43] Developed by the author

Techniques	Quantitative methods; hypotheses verification (Lincoln & Guba, 2000) - large samples (Easterby-Smith et al., 2001)	"Retroductive" research strategy (Reed, 2005) – "the postulation of a possible mechanism, the attempt to collect evidence for or against its existence, and the elimination of possible alternatives" Outhwaite (1987; p. 78)	Interpretivistic; hermeneutic /dialectic (Lincoln & Guba, 2000) - small samples investigated over time (Easterby-Smith et al., 2001)
View on research domain			
On organisations	As an objective structure which is external and independent of organisational members (Burrell & Morgan, 1979)	As the intermediate level of social structuring through which more basic or primary level activities are co-ordinated and controlled (Reed, 2005; p. 1634) - organisations like individuals as "resource dependent" (Ackroyd & Fleetwood, 2000; p. 12)	As discursive constructions and cultural forms (Westwood & Linstead, 2001) – social structures are outcomes of discursive practices and rules (Foucault, 2003)
On (strategy) managers	- As exhibitors of organisational structures and regularities (Donaldson, 1996) in a fairly deterministic way (Gioia & Pitre, 1990) - As "rational technicians, dealing with technical issues which are resolvable through the application of superior knowledge" (Johnson & Duberley, 2000; p. 56)	"As being endowed with causal powers (…) by virtue of their being a part of a wider industrial structure" (Tsoukas, 1989; p. 557)	As an actor, an active participant in construction of the their own environment (Mir & Watson, 2000)
On strategy	To identify causal regularities that reoccur over time, organisations and managers	Emphasis on how actually organisations work (Ackroyd, 2004)	Through historical analysis, emphasis in on the micro processes making linkages between organisational realities and large social systems (Mir & Watson, 2000; p. 950)
On entrepreneurship	Emphasis on imposing rationality and determinism in the entrepreneurial process and event (Davidsson, 2003)	Emphasis on recognising the inter-relation and separability of structure (i.e. company structure, social structure) and of the actor (i.e. corporate entrepreneur, individual) with action (i.e. entrepreneurial event) taking place within a context (i.e. organisational, social) (Leca & Naccache, 2006)	Emphasis on the entrepreneur viewing the entrepreneurship process as a creative process in "locally valid accounts" (Steyaert, 1997; p. 22-24)

Supporting the inter-relationship but separability between the actor and the structure, critical realism appears to provide an appropriate philosophical posture to explore the CV process. CV is an entrepreneurial activity quite often initiated by middle-level managers (i.e. actors) who work for, within and on the behalf of a company with a fixed strategic and organisational context (i.e. structures). The experiences of these managers in carrying out CV activities provide the potential to identify causal powers and mechanism that constitute corporate entrepreneurship.

4.3.2 Implications: CV from a critical realism stance

Exploring the ontological posture of the current study, the business world is perceived as one of the layers of a stratified social world. This implies that an empirical enquiry in organisations acknowledges the existence of deeper structures and mechanisms that shape events and regularities at the empirical reality (Reed, 2005). These underlying mechanisms of operation are not dependent on the experiences of individuals, as the latter have their own perceptions and experiences of what the reality of the business world is. These experiences might be out of phase with the mechanisms and events that created them (Easton, 1998). This implies that this empirical enquiry acknowledges that organisations and their members' behaviours need to be theoretically constructed and modelled through a process of conceptual abstraction and retroductive logic (Reed, 2005).

Companies and their business practices are perceived to represent the structures of this business world (as in analogues to the social structures of the social world), and the managers working in them as the agents of the business world (as in analogues to the social agents in the social world). Corporations and managers are independent to each other but interacting, both are real but distinct. The actions of the managers can reproduce or modify/transform companies. However, critical realism argues that these human constructions are assessable and can be evaluated by assessing *"competing scientific theories and explanations in relation to the competing explanatory power of descriptions and accounts that they provide of the underlying structures and mechanisms that generate observable patterns of events and outcomes"* (Reed, 2005; p. 1630). This stance supports the rationale of employing theoretical triangulation, as the means to assess the deeper structure of such a complex and idiosyncratic event as the enactment of CV activities.

Regarding the epistemological posture of the current study, it is acknowledged that current beliefs are countable to change and modification as in response to further investigation. Knowledge is fallible and subject to future changes that questions its validity, but again emphasise the social practice of it (Sayer, 2000). Each theoretical descriptions, understandings and explanations are grounded in knowledge generating processes that are temporally and spatial located in specific historical contexts and social settings (Reed, 2005). This stance supports further for a pluralistic theoretical perspective in framing our preliminary understanding of an organisational event, and makes researchers more aware of the limitations of sole dependence on a single theoretical lens in viewing the empirical setting of their enquiry. The complexity of the business world is considered, as well as the content, time and activity dependence of the individuals in the business world. A retroductive scientific inference is adopted seeking to identify basic or *"tranfactual"* conditions, including structures and causal mechanisms that make the phenomenon possible (Tsoukas, 1989, 1994; Danermark et al., 2002; Reed, 2005; Blundel, 2006). An enquiring epistemological strategy is well fitted in the retroductive science inference (Savage & Black, 1995).

Such a research posture has implications regarding the level of investigation, the relationship between the object and the purpose of the research itself, as well as the degree of emphasis on the exploratory or predictive character of the research (Dobson, 2002). Critical realism is not interested in a single level of investigation with regards to the researched phenomenon, as a flat ontological perspective (concentrating on a single level of investigation) restricts the exploratory power of the research strategy (Reed, 1997). This is in accordance with Reed's (2005) emphasis on duality regarding social structures and social agents, emphasising the intermediate level where these two levels of analysis meet. This stance has inspired further the analytical lens of this study, as it acknowledges a meso organisational level of analysis in which the actions of corporate agents (corporate entrepreneurs) emerge, reproduce and transform the structural mechanism through which social life of an organisation is co-ordinated. It is at this meso level of analysis where CV activities and their organisational form as CV initiatives allow for a collective agency of corporate entrepreneurial behaviour emerging and transforming itself through a dynamic and creative power strange (Archer, 2000) into an organisational structure.

With regards to the importance of the relationship between the object and the purpose of a research, Sayer (1992; p. 4) argues that it must be *"appropriate to the nature of the object under study and the purpose and expectations of the study"*. Outhwaite (1987) highlights that the main step undertaken in critical realism regarding explanation is the clear identification of the possible mechanism under examination, followed by the collection of evidence that either supports its existence or not, while the last step deals with the elimination of any possible alternatives. The primary aim of a research enquiry which follows the critical realism paradigm is explanatory in character rather than aiming for prediction (Dobson, 2002). This is in accordance with the character of this study, which aims to theory development.

Viewing the phenomenon of CV from a critical realism perspective, it is significant to distinguish between necessary and contingent relations that constitute the CV process. Following Sayer's (1984) rationale, the current study perceives the initiation, the implementation and outcomes of the CV process as the phenomena under investigation. The entities/objects involved in the phenomenon are the ones of the parent-corporation, the CV unit/team, and individuals (top management team, CV team and/or champion). A necessary relationship is perceived to be the one between the parent-corporation and the CV unit/team. Without any of these two entities, the notion of CV process does not occur. The external environment and the organisational context variables act as contingencies in impacting the structure of the CV process and producing a variety of events (i.e. organisational forms and outcomes of CV).

4.4 RESEARCH STRATEGY: TRANSITION FROM ASSUMPTIONS TO METHODS

Significant literature in social sciences argues towards a non-necessary connection between the philosophical assumptions and the research strategy of an enquiry, (Bryman, 1988; Hammersley, 1992; Silverman, 1993; Morrow, 1994). The main concern from such perspective is that it does not provide concrete justification on how appropriate and relevant is a chosen methodology. The same literature brings attention to the researcher to be cautious of the purpose and the circumstances of the enquiry (Hammersley, 1992) to choose the appropriate research strategy. The development of the research strategy of this study was in accordance to the philosophical posture of critical realism, aiming at the successful exercise of the chosen methodology (Yeung, 1997).

Morgan (1983; p. 21) argues that methodologies are the *"puzzle-solving devices that bridge the gap between the image of a phenomenon and the phenomenon itself ... link the researcher to the situation being studied in terms of rules, procedures, and general protocol that operationalised the network of assumptions embodied in the researcher's paradigm and favoured epistemological stance"*. However, Morgan's suggestion raises questions about how biased-free is the evaluation and selection of such *"favoured"* methodological stance. My position is that, considering the research question, the ontological and epistemological stance of the researcher can guide the identification and justification of an appropriate research strategy.

The adoption of retroductive scientific inference by critical realism calls for a research reasoning which aims *"at discovering the underlying structures and mechanisms that produce tendencies or regularities under certain conditions through a process of model building, testing and evaluation in which complex and time-consuming procedures are required to unearth them ... to reconstruct, re-interpret and deconstruct, the tacit meanings and motives through which relationships and actions are discursively constructed and represented"* (Reed, 2005; p. 1631). Even though in critical realism there is no clear stance of an appropriate methodology to the paradigm, *"the nature of what exists cannot unrelated to how it is studied ... the social ontology does play a powerful regulatory role vis-à-vis the explanatory methodology for the basic reason that it conceptualises social reality in certain terms"* (Archer, 1995; pp. 16-17). A closer examination of critical realism will demonstrate that its research method *"is a posteriori in that given the social reproduction of knowledge, a critical realist seeks to reconstruct causal structures and their properties on the basis of constant reflections and immanent critique ... the realist method must abstract a posteriori causal mechanism and stipulate their contextual circumstances"* (Yeung, 1997; p. 57).

Considering the purpose and the nature of the present study to be explorative and regarding the process (entrepreneurial and strategy) occurring within a specific organisational context, it can be argued that an intensive research enquiry can be more appropriate to be employed (Sayers, 1992; 1984). The current study emphasises the identification and illumination of substantial relations of connection and interaction among the research's constructs. Moreover, acknowledging the idiosyncratic character of the CV phenomenon, it can be argued that a small number of CV activities rather than the population of them is more appropriate to be examined. A qualitative research approach employing a multi-case study research strategy is agued to be most appropriate for this study (Easton, 1998; Perry, 1998; Healey & Perry, 2000; Dobson, 2002).

4.4.1 Case study research strategy

Retroductive inference and critical realism are in accordance with the employment of a multi-case research strategy (Blundel, 2006). According to Goode and Hatt (1952), a case study is not simply a research technique, but the means to organise social data preserving the unitary character of the social object being studied, approaching social unit from a holistic view. The entrepreneurship (Low & MacMillan, 1988; Ucbasaran et al., 2001; Davidsson & Wiklund, 2001) and strategy process literature (Chakravarthy & Doz, 1992; Chakravarthy & White, 2002; Pettigrew et. al., 2002; Pettigrew, 1992a, 1997; Huff & Reger, 1987) call for contextualisation and more holistic approach when researching entrepreneurial and strategy processes. Emphasis is also placed on integrating different levels of analysis (individual-manager, group-team, and organisation) in reaching a better understanding of the entrepreneurship and strategy process (e.g. Burgelman's work). Moreover, the *"dynamic and eclectic views of key constructs (in strategy process research)"* portray a more complex view of causality, rejecting their exploration through linear systems (Hutzschenreuter & Kleindienst, 2006) and requiring alternative methodological approaches such as case studies (Stacey, 1995).

A case study research strategy provides the researcher with the opportunity of *"an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not* *clearly evident; it copes with the technically distinctive situation in which there will be many more variables of interest than data points; and as one result relies on multiple sources of evidence"*, (Yin, 1994; p. 13) taking *"as their subject one or more selected examples of a social entity"* (Hakim, 1987; p. 61). The data collected from a case study are contextualised, while the reliance on multiple sources of data allows a more holistic approach towards the phenomenon under investigation. Case study research may facilitate the requirements of critical realism through the usage of multiple sources of data, the capability to trace links over time and follow from the actual to the real domain of reality (Easton, 1998; Dobson, 2002).

Yin (1994; pp. 4-5) supports the usage of case study as a research strategy when the nature and character of the study is exploratory, and the research questions deal with questions such as *"how"* and *"why"*, as *"such questions deal with operational links needed to be traced over time, rather than mere frequencies or incidence"*. The entrepreneurship literature calls for further attention to *"how"* and *"why"* research questions contributing to the identification of relationships between established theory and constructs and emerging assertions (Ucbasaran et al., 2001; Ireland et al., 2005). Among the advantages of the case study research strategy are its capacity, (a) as an analytical tool of theory building (Eisenhardt, 1989b) in understanding the dynamics present within single settings, (b) as a method in developing intense, detailed and subtle observations around the unit of analysis (Goode & Hatt, 1952), and (c) as a tool in identifying the unit of the research enquiry (Stake, 2000).

The main limitations of a case study research strategy are gathered around its inability for scientific generalisation[44] (Stake, 2000; Eisenhardt, 1989b), the narrowness and idiosyncratism of its theory outcomes leading to a complex theory that *"lacks simplicity of overall perspective"* (Eisenhardt, 1989b; p. 547), and its inability to prevent equivocal evidences and biased views to influence the direction of the findings (Yin, 1994). Easton (1998, 2003), who recognised the limitations of

[44] Stake (2000) and Easton (2003) strongly argue that scientific generalisation to the population is a requirement emerging from a positivistic posture taken in a research enquiry, which is not the purpose of other paradigmatic postures, e.g. critical realism. Yin (1994; p. 30) argues convincingly that the purpose of the case study research strategy is the analytic generalisation rather than the statistical one to the population

case study research emerging from the rich but descriptive data, draws the attention to the epistemological basis of case study research. He argues that the researcher needs to *"be inquisitive, to look for the roots of things, to disentangle complexities and to conceptualise and re-conceptualise, test and retest, to be both rigorous and creative and above all to seek for the underlying reality through the thick veil which hides it"* (Easton, 1998; p. 81).

As argued by Eisenhardt (1989b), Yin (1994) and Stake (2000), case study research strategy may involve either single or multiple case studies. Deciding on the number of cases needs to be aligned with the research approach of a study, while it has consequences on the levels of analysis of it. Stake (2000) argues that the selection of a case lies on the intrinsic (better understanding of a particular case) or instrumental (better understanding of a particular issue) interest of the researcher in the cases. For the purposes of this study, the usage of instrumental case studies is employed. This is due to the complexity, heterogeneity and idiosyncratic character of the CV phenomenon. Following Yin's (1994) approach, a multi-case approach was adopted with the intention of better understanding and decoding such complexity.

4.4.2 Qualitative research: Promises and criticism

A case study research strategy may involve qualitative research methods for collecting and analysing data or quantitative research methods, or even a combination of both (Yin, 1994). However, frequently a case study research strategy has been associated with qualitative methods (Stake, 2000; Easton, 2003). Qualitative research is perceived as an umbrella concept by Van Maanen (1983; p. 9) covering a series of interpretative techniques aiming to *"come in terms with the phenomena in the social world"*.

Considering the aim and peculiarities of the current study, as well as its characterisation as an intensive study of an enquiring nature, a qualitative approach in terms of methodological techniques needs to be employed (Sayer, 1984). This is in accordance to Harré's classification of research as an intensive and extensive one (as cited in Sayer, 1984; p. 242). According to Sayer, among the most typical methods to conduct intensive research is by utilising qualitative methods in collecting and analysing data.

Qualitative methods can be employed to support the ontological and epistemological assumptions of critical realism. As Patton (2002; p. 91) argues *"to test a claim of effectiveness by bringing data to bear on it, including qualitative data, is to be engaged in a form of reality testing that uses evidences to examine assertions and corroborate claims"*. The self-proclaimed realists Miles and Huberman (1994) argue that realists abandon deductive logic (in regard to methodological practices) and need to employ a more inductive method of study, combining the requirements of transcendemental realism where the occurring events in the empirical world are instances of causal powers.

The appropriateness of employing qualitative research for the current study is also supported by the entrepreneurship and strategy process literature. In the field of entrepreneurship, qualitative research methods are still not widely used but are progressively gaining recognition (e.g. Savage & Black, 1995; Gartner & Birley, 2002). In strategic management and particularly in strategy process research, qualitative studies have contributed significantly to the field (e.g. Eisenhardt, 1989c; Mintzberg, 1973; Gioia & Chittipeddi, 1991). Burgelman (1983b) has also employed a qualitative research in investigating internal CV activities in the context of a large corporation.

Among the advantages of qualitative research methods in strategy studies are: (a) the ability to create a better understanding of complex processes (Miles & Huberman, 1994; Lee, 1999) and of complex relationships without presupposing the presence of variables (Barr, 2004), and (b) the ability to consider the influence of individuals' perceptions and engagement to the phenomenon (Lee, 1999; Patton 2002), as an element of the phenomenon. The various qualitative data collection and analysis methods bear two main advantages: (a) the flexibility over standardisation of individuals' perceptions, and (b) the ability to capture real-time data and to develop detailed understanding of the phenomenon under investigation. Marshall and Rossman (1995) argue in favour of the usefulness of qualitative research in dealing with questions of exploration and in theory building.

The main criticisms of qualitative data collection and analysis methods are the lack of standardised protocols for analysing data, while the outcomes of qualitative research are questioned over the degree of subjective interpretation of the researcher (Golden-Biddke & Locke, 1997). Miles and Huberman (1994) call for greater attention by the researcher on explicitly stating and justifying their research design choices, as well as in being rigorous and thorough in the data collection and analysis procedures followed.

The technique of triangulation was highly considered to decrease the inherent flaws of the study (McGrath, 1982) by obtaining corroborating evidence, and gaining understanding of the phenomenon under investigation (Stake, 2000). Following Denzin's (1970; pp. 301-312) suggestions, three levels of triangulation were followed: (a) *data triangulation* combining both secondary (internal and external to the company) at various chronologic points during the life span of the CV initiatives and primary data (by treating the informants as individuals, as individuals interacting with others and as members of a small group), (b) *within-method and informants triangulation* (three levels of managers were involved forming three groups of analysis – founding team and operational team of the CV initiative, and outsiders but affiliated to the CV group) [45] and; (c) *theoretical triangulation* (viewing the conceptual framework and data from the evolutionary, the contingency and the agency theory perspectives) influenced by Allison (1971) and Beech et al. (2002). *Investigators triangulation* could have not been reached as the current study was carried out from a doctoral researcher for the purposes of developing a Ph.D. thesis.

4.5 RESEARCH DESIGN AND METHODS

Research designs deal with the processes followed to enable the researcher to answer all identified research questions and provide credible findings (either through building or testing theory or both). Yin (1994) defines as research design the action plan that gets the researcher from the initial stage of identification of research questions to the stage where answers are provided for these questions. A structured approach towards the steps and issues to be considered while conducting a qualitative inquiry increases the credibility of the inquiry (Patton, 2002). Table 4.3 outlines the research design of this study.

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[45] As analogous to Glaser and Strauss's (1967) multiple comparison groups technique to increase reliability of the method (Jick, 1979)

Table 4.3: Study's research design

Issues	Position of the study
Research's purpose	Basic research with implications for both the academic and business community
Unit of analysis	A CV initiative/team/unit per each participant company
Sampling strategy	Purposefully theoretical sampling
Types of data	- Primary data: Qualitative data - Secondary data: Corporate news and media releases, corporate presentations, business literature
Analytical approach	Analytic induction
Validity and confidence issues	- Informants triangulation - Data triangulation - Theoretical triangulation
Time issues	Flexible timetable 1. Pilot phase 2. Sample screening phase 3. Fieldwork phase 4. Data analysis phase
Logistics and practicalities	- Gain access through contacts and networking in the CV industry - Geographic distance of informants
Ethical issues	- Provision of confidentiality coverage before the beginning of each interview - Sensitivity regarding the recording of personal and off the record comments during the interview - Anonymity of informants' identity offered
Research resources	- External partial funding to carry out the fieldwork (gained after conducting the fieldwork)

4.5.1 Sampling strategy

The sampling technique adopted to identify the four corporation cases was the one of purposeful sampling. Creswell (1998; p. 62) argues that this technique allows the researcher *to "show different perspectives on the problem, process or event I want to portray"*. According to Patton (2002; p. 230) *"the power of purposeful sampling lies in selecting information-rich cases for study in depth"*. The aim in this sampling technique is the in-depth understanding of rather than generalisation about a phenomenon. As proposed by Eisenhardt (1989b), theoretical sampling can be employed in the case where the study aims to build theory. Stake (2000) argues that depending on the nature of the research (instrumental or collective) the employment of a sampling strategy is required to justify the rationale of the selection of the cases. For Miles and Huberman (1994), the process of case selection is fundamental in setting the boundaries of the research design and the research enquiry in general, having implications on the data analysis process followed.

Considering the aim of the current study, the intention of the sampling strategy employed was to capture cases of companies that were in accordance with the conceptual framework of the study (theoretical sampling) allowing replication to occur (replication logic). With the unit of analysis being the CV activities of large corporations, the typology of CV activities by Miles and Covin (2002) was considered. However, the variable *"focus on entrepreneurship"* was revised in view of the outcomes of the pilot study, which indicated that it was difficult to identify companies which have a focus on entrepreneurship. It was observed though that UK companies were associating their CV activities with innovation related activities. Consequently, the variable *"focus on entrepreneurship"* was amended to *"existence of innovation schemes"*. The classification of the CV activity as internal of external activity did not follow Miles and Covin's typology, but the way the construct of CV activities was defined based on the literature review (see Table 2.1).

Regarding the number of cases selected for carrying out the research, purposeful sampling provides the rationale of supporting a relatively small number of cases. Chandler and Lyon (2001) warn that entrepreneurship research primarily involves the use of relatively small samples. Yin (1994; p. 50) argues on the choice of number of cases that *"as the choice of 'p< .05' or 'p< .01' is not derived from any formula but is a matter of discretionary, judgmental choice, the selection of the number of replications depends upon the certainty that you want to have about your multiple-case results"*. He moves one step further to argue that regarding theoretical replication *"the important consideration is related to your sense of the complexity of the realm of external validity"*. Eisenhardt (1989b), in the case of theory building, argues towards selecting cases until *"theoretical saturation"* is reached. Theoretical sampling, as presented at Table 4.4, identifies four types of CV activities and organisational contexts. Consequently, the decision was made to identify four companies, whose CV activities fell into a different cell of the table.

Table 4.4: Theoretical Sampling

	Internal CV initiative	External CV initiative
Pre-existence of innovation scheme	Corporation A	Corporation D
Initiation of innovation schemes	Corporation B	Corporation C

Initially a pool of 13 companies was identifies based on the following criteria:

(a) The companies needed to be large[46] British[47] corporations that had been involved in CV activities; and

(b) The corporations needed to have been involved in the CV activities between 1999 and 2003[48]

A key informant (CV manager) in each of the 13 companies was identified and contacted in the first instance by letter[49] to participate in the study. Nine companies replied positively, and after the initial meeting with them, the suitability of each was considered by referring to the theoretical sampling strategy. Four companies were identified to fit uniquely in each cell. The opportunity to examine nine companies and their CV activities at the initial stage of the fieldwork allowed me to learn more about the CV phenomenon (Stake, 2000).

Once the four companies were identified, the focus of the research design became the specific CV activity of the company, as identified through a distinctive team or unit. The identification and selection of other individuals within each one of the four companies was carried out on the realisation that needed to be two groups of informants: (a) core managers of the CV team, and (b) corporate managers outside the CV team, who were working with or for the CV team/unit, contextualising the CV activities. Even though I approached senior managers of these four corporations to participate in the study, they declined, supporting McDowell's (1998) observation of the difficulties and of the role of chance in accessing managerial elites.

In accordance with an intensive research approach, the main characteristic of the identified group of informants within each case was the in-between relationship one informant had with the rest of the informants of each group. The titles and job descriptions of the informants were in accordance with the structure of each CV unit and its association with the rest of the corporation. The individuals were not chosen *a*

[46] According to the EU Enterprise Policy, an enterprise is characterised as medium-size enterprise if it has less than 250 employees. I was interested in larger firms, employing more than 250 employees
[47] The selection of the country of origin of the companies was done considering the geographic proximity of the researcher to them
[48] In 1999, the UK CV industry experienced a rapid growth in the number of CV investments undertaken by corporate entrepreneurs. After a significant drop in this rate, in 2003 many companies reorganised their approach towards CV activities
[49] Appendix 9.1 – a sample of the letter is provided

priori entering the fieldwork, but only after access to the company was gained[50]. This was in accordance to Sayer's suggestion on entering the fieldwork (Sayer, 1992, pp. 244-245) without forming *a priori* assumptions of whom to approach, but through observation to identify the causal groups surrounding and being involved in the phenomenon under investigation. Once I could identify more than one potential informant to participate in the study, I evaluated their suitability based on their role within the CV team and in relation to the CV team, on their hierarchical position within the corporation, and on their chronological involvement in the CV activities and duration of involvement. These criteria were employed with the intention to achieve informants' triangulation (Denzin, 1970). The outcome of this sampling process led to the creation of four cases of CV initiatives, each of which was hosted by a distinctive corporation. Each case comprised the organisational group involved directly in the focal CV initiative, its champion, and senior corporate managers involved at the initiation, and the day to day interaction of the CV initiative with other groups within the corporation.

4.5.2 Types of data

Aiming to achieve data triangulation, two types of data were collected: secondary and primary. The secondary data were related at two levels: micro (within the four participating companies in the study), and macro (regarding the CV industry in UK). Corporate reports, presentations and news releases were collected when available at the micro-level, while at the macro-level, articles of the business press and industry reports were gathered. The macro-level secondary data and the publicly available micro level data were collected prior to conducting the first interview with the key informant of each corporation. In this way, I became aware of the historical evolution of the CV activities of the companies under investigation, and I identified the names of individuals involved in these activities. The latter findings allowed me to target the respective individuals and arrange an interview with them. The primary data were qualitative, and gathered through semi-structured interviews. Each interview lasted at

[50] After conducting the first interview in each one of the companies, I was becoming familiar with the peculiarities of each CV unit and each corporation, and I would request the informant to introduce me to their CV colleagues or I would make contact with informants, as identified during the interviews.

least one hour with the maximum time spent being two and a half hours[51]. The primary data were tape recorded, and I made fieldwork notes to facilitate the transcription and analysis of the data.

4.5.3 Preparing for and conducting interviews

Conducting semi-structured interviews to acquire primary data was appropriate to meet the needs of the current study. The epistemological assumptions of critical realism required for a realist approach towards interviewing, as a technique and a process in collecting the data. King (2004; p. 12) argues that such an approach assumes that the interview accounts as produced by the participants *"contain a direct relationship to the participants' 'real' experiences in the world beyond the interview situation"*. This is quite distinctive from the constructivist approach towards interviewing where the accounts are seen as *"a text produced in the specific setting of the interview, to be analysed in terms of the discursive strategies employed and resources drawn upon by the research"* (King, 2004; p. 12).

The selection of semi-structured interviews to collect the primary data was taken on the basis that the current study attempts to understand the behaviour and perceptions of the informants involved in CV activities, without imposing *a priori* hypothesis to be tested (Fontana & Frey, 2000). The advantage of this type of interview in comparison to the heavily structured interview is the ability of the former to be sufficiently open and to be improvised in *"a careful and theorized way"* (Wengraf, 2001; p. 5). An interview guide was formed to gather the themes, concepts and topics to be covered, combined with a series of standardised open ended questions[52].

While developing the interview guide the aims were: (a) to form the interview questions directly from the research questions of the study; (b) to create a series of questions that were using the language and vocabulary of the audience that it was aimed at; (c) to allow story telling rather than reproduce biases and guidance; and (d) to maintain the interest of the informants. Table 4.5 outlines how each of these issues were handled.

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[51] The time length of each interview varied according to the time availability of each informant
[52] Appendix 9.2 – A copy of the interview guide is provided

Table 4.5: Interview guide development

Aims	Action
Relationship to research questions	- Following Rose-Wengraf's (Wengraf, 2001; p. 55) technique of progressively moving away from research questions to interview questions by asking questions as *"how"* and *"why"* by using a less theory based vocabulary
Language and vocabulary	- Pilot test of the interview guide with managers that have been involved in the British corporate venturing industry - Pilot test of the interview guide with academics carrying out research in corporate venturing
Time restrictions of managers	- The number and nature of questions asked could be asked in between an hour and a half
Storytelling	- Interview guide composed in the form of semi-structured questions - Clarifying questions and probes supporting each questions provided
Maintain interest	- The author was aware of CV background of each participating company - Each question was associated with the constructs presented in the conceptual frameworks (Figures 2.1 & 3.1) - Questions developed to be short and allow a flow of discussion

The conversation strategy used to conduct the interview aimed at setting boundaries to the discussion with the informants (as defined by the *a priori* themes and concepts from the conceptual framework of the study), but also to be flexible and enable storytelling by the informants. I was not aiming to impose the *a priori* research questions to the informants, but to be aware of their responses and adjust accordingly the sequence or theme of the questions. I was using a standardised interview format at the beginning of each interview defining CV, then I would allow a narrative to emerge on the way CV was experienced within the informant's company, adjusting the sequence of the themes and concepts of the *a priori* questions of the interview guide, and asking for clarification and elaboration on each theme or concept emerging from the informants' narratives. Probes and active listening were significantly applied during the interviews. After each reply from the informant I would provide the informant with my interpretation of the reply, as well as occasionally some propositions from the relevant literature, asking for validation or reflection.

The majority of the interviews (13 out of 18 interviews) were conducted face-to-face with the informants of the four participating companies. Five interviews had to be conducted over the telephone, as the informants preferred this interview style due to time schedule commitments and their geographic location. Even though telephone interviews may be impersonal and might be criticised for poor structure, they should not be considered of inferior quality in comparison to face-to-face interviews (Lindlof & Taylor, 2002). For the interviews conducted via the telephone, a brief interview guide covering the main themes and questions of the interview were provided to the informants prior to the interview (Rubin & Rubin, 2004). All interviews, both face-to-face and telephone, were recorded with a tape recorder after having acquired the consent of all informants. Fieldwork notes were also kept as the interview was developing to help the transcription of the interviews and facilitate the data analysis phase. Note taking was carried out in consideration of the need to actively listen to the informants' responses or comments.

I entered the field as a junior researcher, having participated in a CV practitioners' conference in London a few weeks prior to conducting the first interviews. I was aware that I did not have a well established research or consultancy identity in the field of CV and that possibly this could have caused issues of credibility for my enquiry. By participating in the practitioners' conference I tried to create a network of contacts in the field. Moreover, I was aware of the hierarchical seniority of the informants that I was approaching to participate in the fieldwork. Dealing with managerial elites (Pettigrew, 1992b) could create power relationships between the researcher and the informant that could affect the level and degree of access to information. Another issue influencing my positionality as a researcher was gender issues, as only four of the 18 informants were female. Consciousness of these issues was considered when conducting the interviews.

4.5.4 Data analysis

The reproductive inference of critical realism guided the conceptualisation of the data analysis process. Patton (2002) suggests analytical induction as the method that can be employed to facilitate such a methodological choice[53]. This method was highly considered in view of the retroductive inference suggested by the critical realism paradigm. Johnson and Duberley (2000; p. 155) describe the retroductive logic and process as the departure *"from a description of some given phenomenon to a description of a different type of thing – a mechanism or structure which either produces the given phenomenon or is a condition for it"*. In the context of the current

[53] Analytical induction begins deductively based on the propositions or hypothesis and aims to determine these are supported by a case of analysis. As cited in Patton (2002; p. 95) it *"aims to explain a phenomenon satisfactorily using a qualitative, case-based inquiry"*

study, the description of the CV activities of a corporation was used to generate a scheme to understand the CV structure. The relevant literature argues that *"retroduction"* has replaced (Ragin, 1994) or even considered synonymous with *"analytic induction"* (Downward et. al., 2002).

Dealing with qualitative data can be challenging (Patton, 2002), as the emphasis is on meanings that are conveyed to researchers through *"language and action. Language is not a matter of a subjective opinion"* (Dey, 1993; p. 10). Sayers (1984; pp. 22-23) argues that a basic context of knowledge is the one of *"communicative-interaction"* and that *"propositional knowledge is constructed and expressed in terms of the concepts available in the language and we seek intersubjective confirmation of the propositions through communicative interaction.... In no case can knowledge or language be treated as if they existed outside the social context"*. From a more practical perspective, qualitative data analysis lies in *"these related processes of describing phenomena, clarifying it, and seeing how our concepts interconnect"* (Dey, 1993; p. 30), *"in a nonmathematical process of interpretation, carried out for the purpose of discovering concepts and relationships in raw data and organising these into a theoretical explanatory scheme"* (Strauss & Corbin, 1998; p.11).

With regards to the actual methods and processes used to analyse qualitative data, Miles and Huberman (1994; p. 2) acknowledge that these are not well formulated and explicit, which reflects negatively on the confidence levels of the findings. However, they encourage researchers to share the *"explicit, systematic methods we use to draw conclusions and to test them carefully"*. Clarity regarding the analytical steps and codification of procedures is suggested to help address concerns regarding the quality of qualitative research (validity, reliability and replication) (Eisenhardt, 1989b; Weick, 1989). In alignment to this call, this section outlines the various techniques and phases involved in analysing the collected data.

Accepting the epistemological stance of critical realism and incorporating the retroductive reasoning method, it was critical to identify data analysis methods and techniques that were in alignment with this posture, and appropriate with the type of data collected. A review of various approaches followed when the analysis of the qualitative data was undertaken. The intention of this review was to identify the theoretical and practical processes followed when analysing qualitative data, the steps involved, and identify what each approach could provide to this study. I was influenced by Dey (1993), Miles and Huberman (1994), Strauss and Corbin (1998), Yin (1994) and Bowey and Easton (2003). Table 4.6 demonstrates the way that each author's approach was utilised and guided the data analysis process, but also demonstrated the overlap and co-occurrence of these activities.

Table 4.6: Data analysis techniques

Author	Proposed Techniques	Actions
Miles and Huberman (1994)	- Data reduction - Data Display - Conclusions drawing/verification - Utilisation of matrixes	- Data display and utilisation of matrixes - The identification of matrixes that could be incorporated in the findings and discussion sections of the current study suggested categories and themes that I could use in the free coding phase of coding, as well as on developing tree codes
Dey (1993)	- Annotating and memoing of data - Description of data - Classification of data - Connection of data	- Very detailed explanation on data management and data annotating process - Critical in carrying out the free coding of all transcribed interviews, allowing me to identify the differences of each code and generate categories and themes - Critical in connecting the data and identifying types of relationships that occur within and across the data
Strauss and Corbin (1998)	- Coding (micro and macro level) - Coding of a process - Non mathematical analysis of the data - Theory building grounded on the data	- Coding guidelines mainly at the macro level were very useful, as I had a series of *a priori* codes, but in the case of emerging themes, it was critical to utilise the micro level analysis as suggested
Yin (1994)	- Single and multiple case studies - Within the case and cross cases analysis - Thick description of the case and development of case reports	- Critical in focusing initially on the single case analysis, develop the case report and identify the context and uniqueness of each case - Critical in bringing the four cases together and incorporating and findings across the cases
Bowey and Easton (2003)	- Utilising an analytical framework to analyse the data - Interaction between framework-data-literature - Aim of critical realism to identify relationships (necessary and contingent if any) and the underlying mechanism	- The analytical framework, as proposed by critical realism, as well as the theoretical framework allowed me to supervise the process of data analysis, but at the same time reconsider the process of analysis and mix the different techniques in other ways i.e. move between micro and macro level coding, use as codes and themes, as occurring from the analytical framework

Data analysis involves activities that bring order, structure and interpretation to the collected data aiming to identify relationships and underlying themes (Marshall and Rossman, 2006). Even though the activities of describing, analysing and interpreting the data can be distinguished, they co-occur and are bundled together (Wolcott, 1990). The stages of the data analysis phase of the thesis are presented in the following pages. The stages are not necessarily ordered chronologically, but mostly conceptually. Repetition between stages was frequently used to increase the rigor of the analysis.

Initial stage: I transcribed each interview in a verbatim format, all interviews of the same case study at the same period. Following this, I listened to the interview tapes again, while reading the transcriptions allowing further familiarisation with the data. At that stage I incorporated the hand-notes that I had kept during the interview; drawings, themes, key words, names, ideas that had occurred during the interview and after the interview were associated with the actual data.

The usage of computer software to assist the data analysis phase of the study was seriously considered. The volume of the collected data, as well as the closeness of the researcher to the data may challenge the effectiveness of conducting qualitative research (Wolfe et al., 1993). These considerations encouraged the use of computer software to enhance the methodological rigor of the study. Qualitative data analysis software provides tools to increase the consistency and speed of the data analysis, as well as helping the researcher to represent and reflect on the data while analysing them (Wietzman, 2000). Consideration was also given to the limitations of qualitative data analysis software in de-contextualising the data. N-Vivo[54] software was used to start annotating and making memos.

Coding stage: This stage involved two main activities; one was at the intellectual level and the other at the practical. The intellectual activity of this stage involved:

(a) the utilisation of the coding processes of Strauss and Corbin (1998) and Dey (1993) aiming to identify, define and distinguish concepts, themes and categories;

[54] Considering the volume of transcribed data and number of interviews I had collected, as well as the analytic induction method of analysis used, I choose N-Vivo software to facilitate the data analysis phase of the current study (Wietzman, 2000). A careful approach in using the N-Vivo software was taken following Bazeley and Richards's (2000) guidelines.

(b) the incorporation of the theoretical framework of the ongoing process based on which the main research questions and interview questions were developed which featured the list of *a priori* concepts and themes as provided by the conceptual framework (see Figure 2.1);

(c) the incorporation of the analytical framework, as suggested by critical realism of identifying entities, conditions, necessary and contingent relationships (Bowey & Easton, 2003); and

(d) the interaction with literature in order to expand the *a priori* set of codes and generate new codes that emerged from the data and required the identification or expansion of the initial literature that was considered

At the practical level of this stage, initially *"free coding"* was used considering the conceptual framework, the analytical framework and the data. Identifying differences among the codes allowed the codes and concepts to be better refined. Besides the *a priori* constructs, emerging constructs were also identified. Out of the 74 codes used, 20 emerged. With regards to intra-coding reliability, 60-70% of the nodes appeared in all interviews analysed. The non-occurrence of all codes in all the interviews is explained considering the idiosyncratic character of the individual interviews and each of the CV initiatives of the four companies examined.

Interpretation stage: In completion of the previous stage, the codes were ordered and structured, identifying conceptual relationships between broad categories and subcategories. This step involved the utilisation of techniques as provided by Bowey and Easton (2003), Yin (1994), Dey (1993), Glaser (1978) and Miles and Huberman (1994) on linking and connecting the data. The aim of this step was to identify relationships between the entities and to understand their nature. Bowey and Easton's guidance was more useful at the intellectual level of this process, while Dey's and Miles and Huberman's were more useful at the practical aspects of interpreting the data. The underlying aim was to identify:

(a) the type of relationships that occurred between the corporation and the CV team/unit;

(b) how the involved individuals interacted with these initial relationships;

(c) which were the necessary and contingent relationships that appeared to define the CV unit-corporation relationships; and

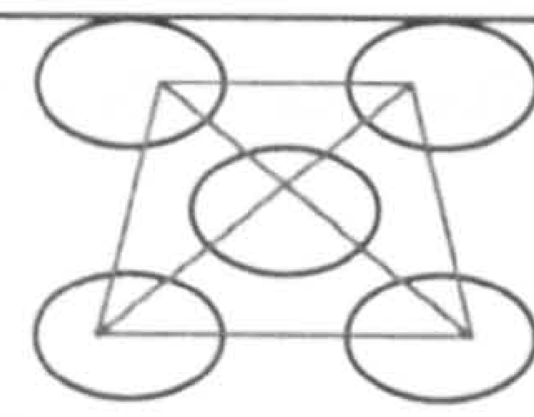
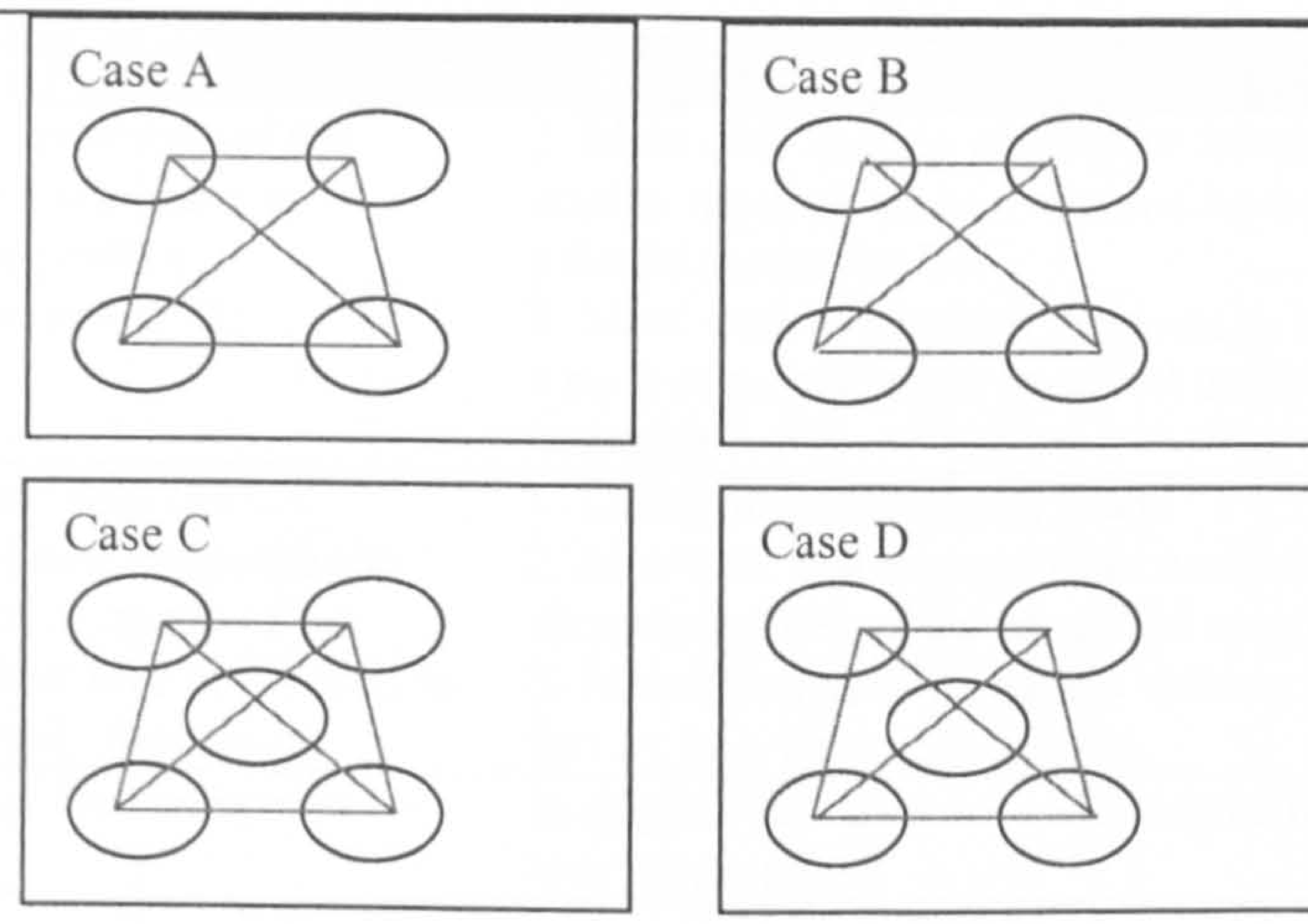
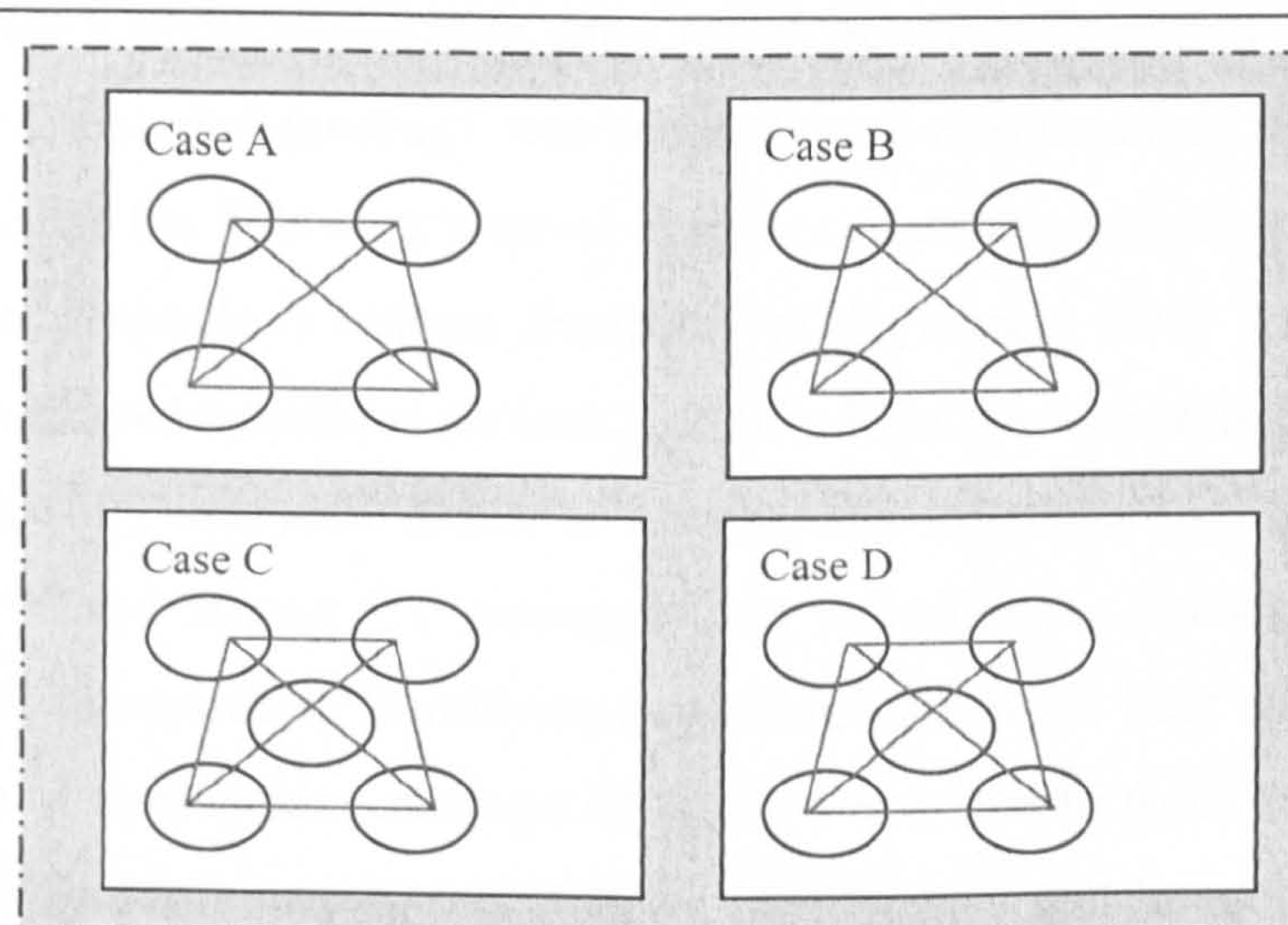
(d) whether organisational factors, seasonality, industry factors affect the nature of these relationships

Once a code tree for each one of the four initial interviews (one from each of the four corporations) was created, the tree codes were compared to identify differences and similarities among the relationships identified until that stage. The intra-tree coding reliability was higher with 80% of the relationships occurring across all four companies. Going back to the remaining interviews, I continued with the analysis of all remaining interviews in each case (i.e. all interviews from informants of Corporation A were coded and annotated). Table 4.7 provides an illustration of the stages and levels of the data analysis followed.

After the completion of the coding and annotation of each interview, I wrote an extensive memo for each informant interpreting their perceptions, answers and understanding of the CV activities within the organisation. The aim was to maintain the context and perceptions of each informant with regards to the same CV activity. Each memo was structured according to the main themes: initiation, implementation and outcomes of the CV activities.

In completion of all the informants' memos, I read them collectively to identify a holistic view of the CV activity by using the informants' triangulation method. Combined with the secondary data, I developed a report for each case. The last stage of the analysis involved the cross-case analysis of the data. Yin's (1994) approach towards case study analysis was beneficial, as it influenced the way the interpretation process was divided into two phases: (a) the within the case interpretation phase of the data taking into consideration the case context and uniqueness; and (b) the cross-case interpretation phase, comparing the cases and identifying similarities and differences. This latter phase comprised the final stage of the data analysis of this study.

Table 4.7: Data analysis and level of analysis[55]

Level of Analysis	Illustration
- Coding and interpretation of interviews of each informant within in each case - *A priori* and emerging constructs used	
- Triangulation of interview data within each case study - Identification of formal and substantial relationships of constructs per case	
- Writing up a case study with regards to the research questions incorporating archival data for the four corporations - Illustration of uniqueness of each case examining the same constructs	
- Comparison between the four cases - Identification of formal and substantial relationships and patents of *a priori* and emerging constructs	

Writing up the memos for each interview, as well as the four case reports was another process that helped me to make sense of the data and identify relationships and underlying themes. Writing practices such as free writing, keeping theoretical,

[55] : It symbolises each informant / Developed by the author

methodological and personal journal on the process of data analysis, as suggested by Richardson (2000), helped me to be reflective and to get closer to the data.

4.5.5 Logistical and ethical issues

The fieldwork took place in three phases over a period of 12 months. Table 4.8 provides a list of the activities that took place during each phase, as well as the rational behind each of them.

Table 4.8: Fieldwork phases

Phase	Purpose	Actions
Pilot	- Examine the feasibility of the study from both academic and managerial perspective - Pilot the interview guide	1. Meet with leading academics involved in similar research areas from leading business schools across the UK 2. Meet with two industry experts to identify a pool of corporations involved in CV activities
Case identification	- Familiarisation with the CV programmes of nine corporations - Evaluate each company of the sample and select four best suited to the cases the study focuses on	1. Collection of secondary data 2. Interview one manger from each of the nine companies of the identified sample 3. Identification of managers' names for further interviews, if required
Intensive fieldwork	Identification of four companies	In-depth interviews with informants from four corporations

The majority of the interviews were face-to-face, from which only two happened in the city where I am located. External funding[56] was secured upon conclusion of the fieldwork to partially subsidise the fieldwork's travel expenses. Devoting significant time to carrying out a pilot research to test the feasibility of the current study and research questions was considered as critical (Janesick, 2000). I had the opportunity to *"improvise"* and practice my interview skills, to identify key informants in the field, to identify *"jargon"* used among CV managers and to refine the research questions of the enquiry. With regards to identifying key informants in the field and considering the challenges of approaching managerial elites, I was able to form the hypothesis that managers who participate in practitioners' conferences will be more willing to share their experiences in CV with an academic researcher. This hypothesis was proven correct during the second and third phase of the fieldwork which followed. Each informant, of the last two phases, was given the option of maintaining anonymity, two of which exercised it, and were reassured their names

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[56] Carnegie Trust – Scotland, UK, awarded in November, 2003

would remain confidential. Each informant was asked for permission to use a tape recorder prior to each interview (either face-to-face or telephone).

4.5.6 Quality of the enquiry

The main criticism of a case study research strategy utilising qualitative and archival data appears to be about the credibility and quality of the enquiry. Issues of objectivity, reliability, validity and of utilisation need to be addressed as in every other research enquiry. Kirk and Miller (1986; p. 19) argue that *"loosely speaking 'reliability' is the extent to which a measurement procedure yields the same answer however and whenever it is carried out; 'validity is the extent to which it gives the correct answer. These concepts apply equally well to qualitative observations".*

The concern of validity in qualitative research is an issue of *"whether the researcher sees what he or she thinks he or she sees"* (Kirk & Miller, 1986; pp. 21&25), while *"theoretical validity, unfortunately, is difficult to be determined by methods other than qualitative research"*. The basis of their argument lies in the observation that hypothesis testing cannot guarantee unanticipated sources of invalidity. In defence to the validity of qualitative research, Kirk and Miller (1986) stress automatic validity that qualitative research enables through the involvement of the researcher in the field work. It is the *"built-in sensitivity"* of field work that provided qualitative research with validity that is not met in quantitative methods. Moreover, Kirk and Miller (1986; p. 41) perceive reliability to be dependant *"essentially on explicitly described observational procedures"*, suggesting that the rigorous usage of fieldwork notes can increase the levels of reliability in qualitative methods. Kirk and Miller's suggestions emerge from the discussion of objectivity and its components in the context of ethnography, but still provide creative and alternative to the traditional scientific research criteria of validity and reliability.

Patton (2002; pp. 552-553) argues that the credibility of qualitative inquiry depends on three main elements: (a) rigorous methods for conducting the fieldwork that will enable the emergence of high quality data and will be analysed with attention to issues of credibility, (b) the credibility of the researcher, which depends on the training, experience, track record, status and presentation of self, and (c) the philosophical belief in the value of qualitative inquiry, depending on the degree and type of appreciation regarding the naturalistic inquiry, qualitative methods, inductive analysis, purposeful sampling and holistic thinking. Yin (1994) and Miles and Huberman (1994) provide a more rigorous and comprehensive list of specific issues that could be addressed to enhance the quality of the case study qualitative enquiry. Table 4.9 presents the quality concerns of the current study and the actions taken in order to increase the credibility and quality of the research.

4.6 Conclusion

The chapter has presented the philosophical and methodological stance of the current study. Critical realism was identified as the appropriate paradigm to guide the research enquiry, aiming to unfold the causal powers and mechanism that constitute the CV phenomenon. The chapter argued towards a qualitative research methodology in studying the idiosyncratic and heterogeneous CV process. In alignment to this approach, a multi case-study research design was outlined to meet the research objectives of the study. Acknowledging the limitations of the proposed research design, the chapter outlines the methods and techniques used during the data collection and analysis phases of the study. Relevant literature from the fields of strategy, of corporate entrepreneurship and CV was used to support the appropriateness and validity of the methodological choices of the study.

Table 4.9: Research enquiry and quality issues[57]

Areas	Actions
Objectivity	
Do the conclusions depend on *"the subjects and conditions of the enquiry?"*	- Methods and procedures followed for data collection and analysis are explicitly presented and in detail - Conclusions have been explicitly supported with displayed data - Researcher's axiology and positionality acknowledged during the data collection and analysis process - An ontological and epistemological posture as emerging from the nature and peculiarities of the research enquiry was used to guide the enquiry, and not the researcher's methodological preferences - Rival conclusions were considered by using theoretical triangulation of the data - Primary and secondary data are available for reanalysis, if requested
Reliability	
Is the process of the study consistent, reasonable stable over time and across methods?	- *A priori* constructs emerged from the relevant literature of corporate entrepreneurship and strategy process, while emerging constructs were verified with existing literature in the organisational theory - Data was collected from various individuals and organisational settings - Study and case protocols were used, as well as case study databases
Validity	
Construct	
Have multiple sources of evidences been used?	- Data triangulation and informants triangulation was used within each case study - Multiple-case study research strategy was employed
Internal	
Do the findings make sense? Are they credible?	- Thick description of data per informant and for each individual case study - Negative and uncertain evidence was identified and treated
External	
Are the conclusions transferable to other contexts?	- Scope and purpose of the research enquiry defined by the ontological and epistemological assumption - Findings within each case study were replicated across the other cases - Theoretical sampling was employed to identify the four case companies

[57] Developed by the author, elaborating on Miles and Huberman's (1994; pp. 277-280) discussion on standards for the quality of conclusions in qualitative research

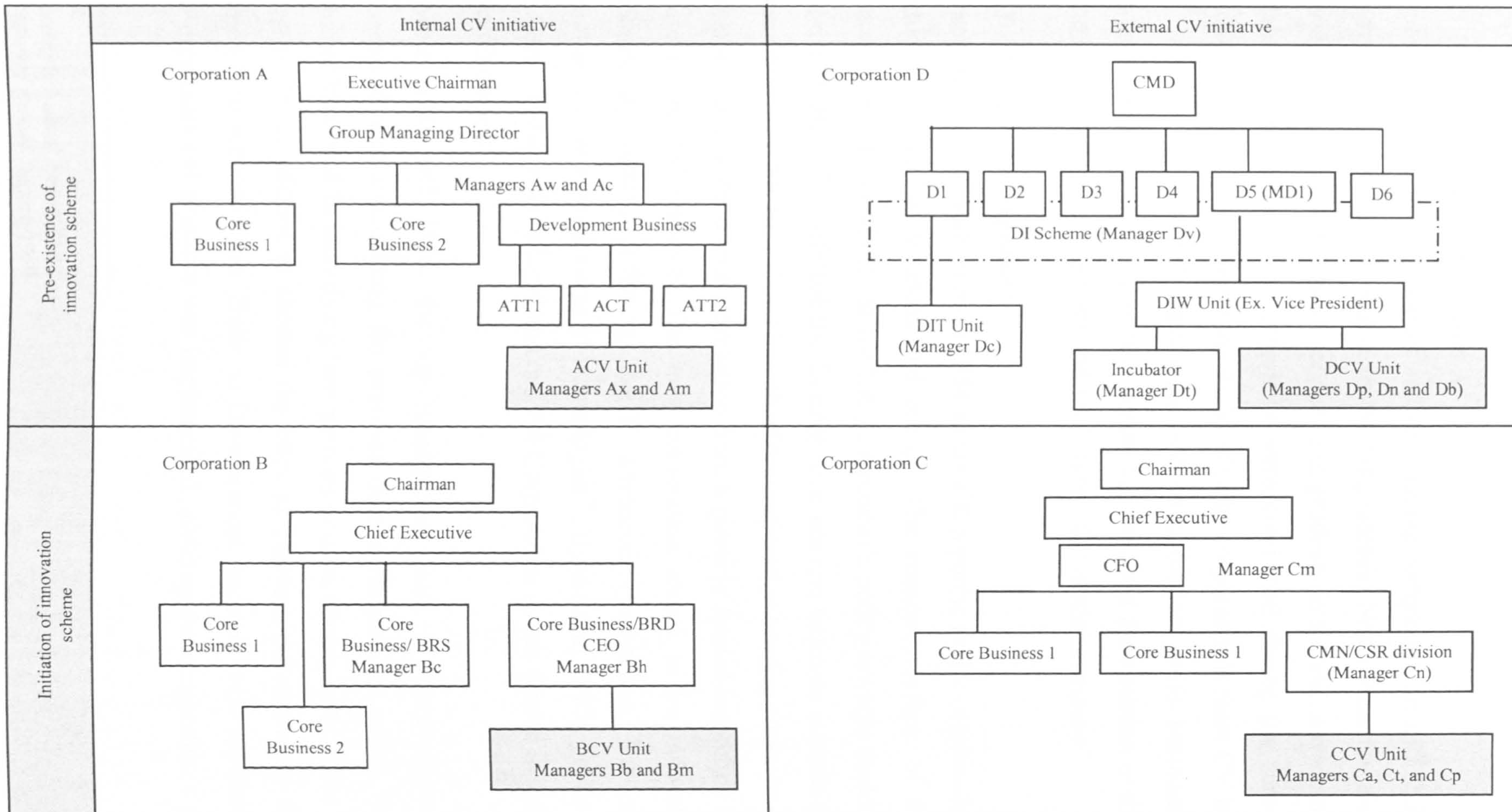
CHAPTER 5: DRAWING ON THE FINDINGS FROM THE CASE STUDIES

5.1 INTRODUCTION

Having explored the conceptual, theoretical and methodological stance of the study, this chapter presents its empirical findings in three areas: (a) how CV arises within an organisational context; (b) how CV activities are implemented and developed within an organisational context; and (c) how the involvement in CV activities impacts the organisational context. The chapter is structured to provide the case-studies of four corporations and their CV units. Each case presents: (a) background information about the corporation and the interviewees; and (b) a thematic presentation of the CV process in each one of them.

Considering the multiple respondents from each case, a content chart was developed to map the key interviewees per case, as well as their position in the organisations. Figure 5.1 displays this chart and positions the four cases with regards to the theoretical sampling criteria. The four CV units studied are highlighted in the grey boxes of the figure and are coded with the abbreviations: ACV, BCV, CCV and DCV, with the first letter identifying the corporation the CV unit belongs to. At each cell of the figure, the organisational structure of each organisation is presented, as well as the position of the key interviewees and stakeholders per case. These are coded with the word "Manager 'Initial of Corporation' 'a random letter'". The brand names of the four corporations, their divisions and units, and the identity of the interviewees have been kept confidential.

Figure 5.1: Content chart of case studies and key participants in CV activities (Summer 2003)



5.2 CASE STUDY OF CORPORATION A

5.2.1 Introduction to Corporation A

Corporation A is a leading science and engineering company with a £272.3 million turnover, employing 3,231 people in the UK, Europe, North America and Asia[58] providing consultancy, technical services and products in the rail, environment and portable power sectors. The interviews were conducted during the summer and autumn of 2003; six years after the ACV unit (the corporation's main CV initiative) was launched. ACV unit's operations and collaborations with business angels, venture capitalists and governmental bodies had attracted the attention of the media in the late 1990s, portraying Corporation A as an *"innovation company"*.

5.2.1.1 Company background

Corporation A was established in 1954 as the UK's public sector organisation in the production of nuclear weapons and energy. The economic reform of the UK's economy and an amendment to the UK government's policy towards nuclear power in the mid-late 1980s affected the funding structure and business orientation of the corporation. In 1989, the official launch of the corporation bearing a new brand name took place, indicating a swift revolution from a publicly funded institution involved in atomic related research. The new corporation aimed to be innovative and commercially-oriented, offering R&D, advanced engineering and specialist consultancy over a wider range of technologies[59]. By the mid 1990s, public funding had been substantially reduced and in 1996 Corporation A was floated in the London Stock Exchange.

Between 1986 and 1996, the top management team of Corporation A was preoccupied with overcoming the previous overdependence on public funds and customer base, and in identifying new markets and customers, both in the UK and overseas. In an attempt to shorten the lines of communication among them and sharpen their accountability, Business Development directors were appointed and a new organisational structure was implemented, dividing the corporation's activities

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[58] Corporate Annual Report, 2003
[59] Corporate Annual Report, 1989

into management business units. The underlining rationale was the introduction of a commercial and marketing, rather than production orientation, building on the corporation's innovative capabilities.

5.2.1.2 Setting the venturing scene

Historically, research and development had been a significant intellectual property (IP) asset for Corporation A leading to the creation of numerous new ventures, as independent business entities. In 1996, the corporation was under pressure to demonstrate a healthy financial position and to achieve a successful and sustainable transition from an administrative and bureaucratic mindset, to a more entrepreneurial one. The short-term and more importantly the long-term sustainable growth of the corporation were the prime concern and challenge for the newly appointed Chairman. Innovation and its commercialisation were at the core of the new strategic direction taken. Considering the changes in the external environment (deregulation of power sector, amendment of nuclear policy), the corporation needed to re-organise its capabilities and expertise in new markets and customers. The technological needs behind this market re-orientation were partially fulfilled by its in-house R&D capacity. However, the corporation needed to gain access to new business ideas residing outside its corporate boundaries. A CV business model for internalising external business ideas was proposed by the Chief Executive and in 1997/1998 the ACV unit was established. At the same time, an internal CV process was also initiated across all business divisions of the corporation.

The Managing Director (Manager Ax) of the ACV unit in 2003 was interviewed providing access to the unit's operations at the time of the fieldwork. Another two corporate managers, who hold the same post at the ACV unit since its establishment, were interviewed providing insight to the unit's evolution. One of them was involved at the unit's initiation discussions (Manager Ac). A fourth corporate manager (Manager Aw) was identified as a key informant contextualising the evolution of the ACV unit. Holding a key position in the corporate strategy centre of the corporation, he was responsible for the budgeting of the corporation's CV activities. Table 5.1 summarises the characteristics of the interviewees, both core and peripheral to the ACV unit.

Table 5.1: Interviewees' attributes: Corporation A

Attributes	Interviewee A	Interviewee B	Interviewee C	Interviewee D
Code name	Manager Ax	Manager Aw	Manager Ac	Manager Am
Gender	Female	Male	Male	Female
Association with ACV unit	Direct	Indirect	Direct	Direct
Core responsibility	Managing Director of ACV unit	- Corporate R&D budget of CV initiatives	Head of ACV unit	Project Manager of ACV unit
Time of involvement in CV activities	2001-time of interview	1996-2001	1996/1997-2001	1999-2001
Employment background	PhD graduate – first employment in Corporation A	Corporate manager – Chief Technologist	Corporate manager	Corporate manager

5.2.2 Corporate venturing in Corporation A

Following its flotation in 1996, Corporation A was faced with the opportunity to compete in the changing and dynamic energy and transportation sectors, moving away from governmental protectionism. A new Chairman was appointed and supported the new strategic and cultural intent proposed by the Chief Executive, who was also appointed in 1994. The aim was to transform the corporation into the *"innovative company"* adopting a growth strategy, while focusing its operations in growing sectors in which the corporation had expertise in. Between 1996 and 2001, the corporation went through three rounds of organisational restructuring to implement this strategy and deliver value for its shareholders. The *"strong technical base"* and *"presence in several growing markets"*[60] were highly significant in exploring three main paths to implement the corporation's growth strategy in 1997: (a) by producing new products, (b) by developing new businesses *"using the creative capacity of our employees and our strong technical base"* and (c) by undertaking selective acquisitions of companies offering *"good science and engineering and access to growing markets"*[61].

One element of the business development growth path was the launch of a CV initiative in 1997 and the establishment of the ACV unit to facilitate it. While Corporation A had a strong technical base in-house, the Chief Executive recognised that it needed to gain access to external *"new thinking and possible new commercial*

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[60] Corporate Annual Report, 1997-1998
[61] Corporate Annual Report, 1997-1998

partnerships"[62]. This was the ACV unit's indented role. Figure 5.2 provides a chronological outline of the critical events of the evolution of the ACV unit and of the corporation between 1996 and 2003. The figure is separated into two parts. In the upper part, the life cycle of the ACV unit is presented, with the dotted line demonstrating the intensity of its activities. The lower part outlines the critical events occurring within the corporation, with the dashed line illustrating the evolution of the corporation's interest in CV activities.

In 1996 the corporation was organised around 21 businesses, which by 1999 were reorganised and reduced to five. By 2002, there were two core businesses and a business development division. As the corporation became less complex and more focused, its interest in CV activities was amended. Until 2000, the ACV unit co-existed with an Internal CV initiative[63] (AVN initiative). Both CV initiatives were placed at the corporate strategy centre of the corporation and were implemented across the corporation. In 2000, the AVN initiative was absorbed by each one of the five businesses and in the following year the ACV unit was incorporated in a newly established corporate subsidiary responsible for intellectual property issues[64] (ACT unit). By 2003, the ACV unit had moved significantly away from the corporate centre of decision making with the intensity of its activities having dropped, but according to the interviewee's perceptions it maintained the support of the Executive Chairman.

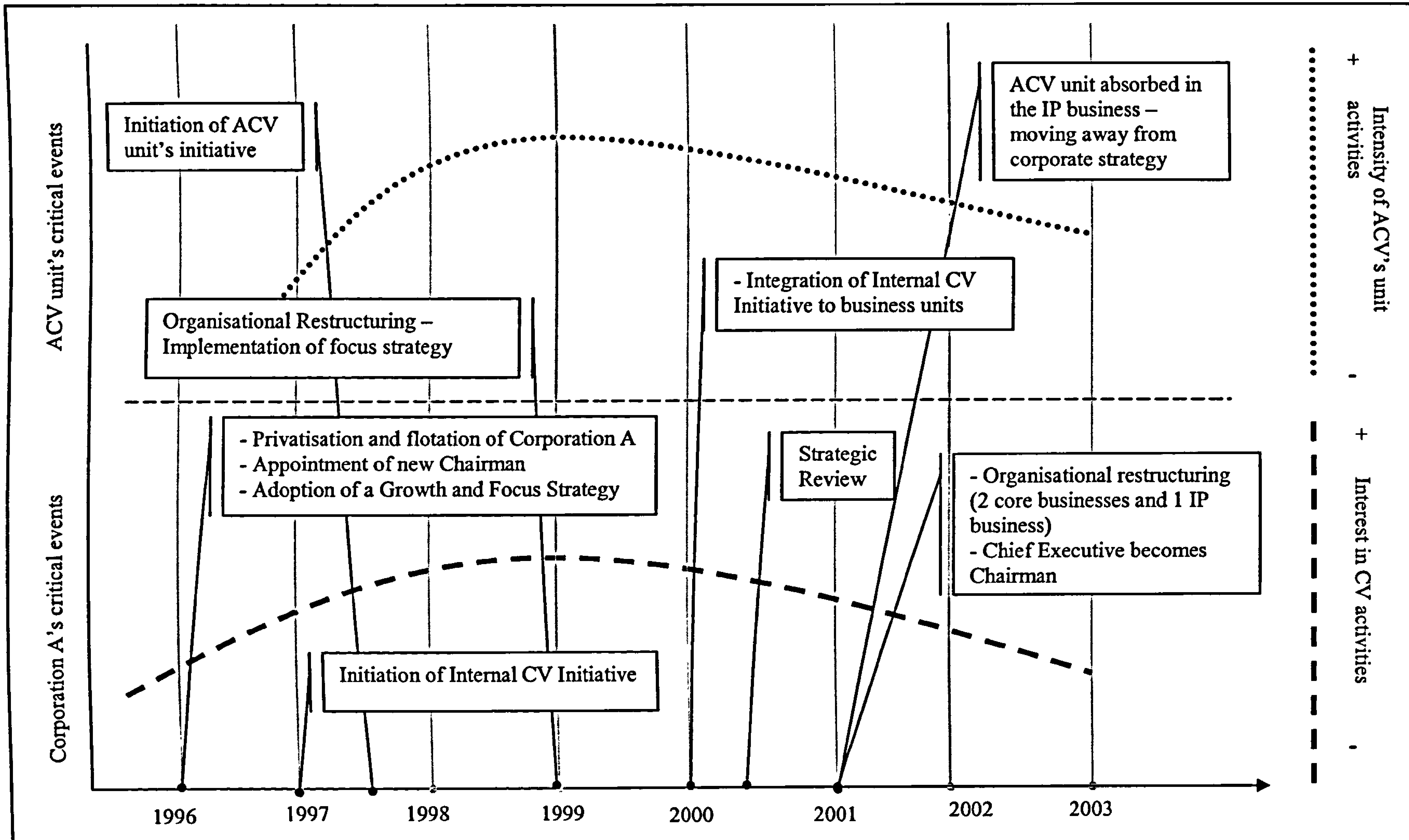
5.2.2.1 Formation of the ACV Unit

5.2.2.1.1 Approach towards CV and initiation process of ACV unit

The involvement of Corporation A in CV activities was part of a growth strategy path and of a transformation phase for the corporation. The role of the ACV unit as the intermediary between the corporation and externally developed business opportunities was quite different from the AVN initiative. The latter was focused on internally developed ideas. The differences between the two initiatives lied in the

[62] Corporate Annual Report, 1997-1998
[63] Mentioned with the abbreviation AVN initiative from now on in the case
[64] Mentioned with the abbreviation ACT unit from now on in the case

Figure 5.2: Chronology of critical events in Corporation A and in the ACV unit



nature and the anticipated outcome of the CV activities. Table 5.2 provides an outline of the definitions and perceptions towards CV, as used by the interviewees. The nature of the CV activities involved the establishment of a relationship between the corporation and the external inventor of business ideas, while their anticipated outcomes were strategic and mainly intangible.

Table 5.2: Definitions and perceptions towards CV in Corporation A

	Quotes
Manager Ax	- "An arrangement whereby a larger company become involved with a smaller company, both contribute resource which can be technical, management and financial and both share risks and rewards for mutual benefit"
Manager Aw	- "My own view, I think is quite a general one, and that (CV) is the relationship between two companies, at least two companies, where there is a larger, usually more established company, that puts resources in some shape and form it could be staff or it could be financial puts resources into a smaller company and then those parties share the risks and rewards" - "We don't discuss what we should do about corporate venturing – we have got a number of initiatives that could be classified as corporate venturing, but it is not explicit in that way, in that we think we need a corporate venturing activity"
Manager Ac	- "I see corporate venturing as an organisation working with others outside the organisation, to the mutual benefit of both parties in terms of business or product development"
Manager Am	- "For us it hasn't always been the creation of a separate business that would be recognised and that's a bit to do with related to the way that we are set up… our [ACV unit] was set up to look for ideas which originated outside the company and which we could develop with the inventor for our mutual benefit. So sometimes, it was something that would might be an add-on, something that could supplement or compliment an existing product within [Corporation A]" - "we never sort of set ourselves up as venture capitalists … we never excluded the possibility of a financial investment, it was just less likely than an investment of other kinds of resources and support"

The interviewees agreed that CV stood primarily for an innovation process rather than as an investment mechanism. It was used as a concept, as part of the corporation's innovation schemes, but not identified as a distinctive entity or activity. This also explains that fact that the ACV initiative was mainly referred as a *"scheme"*, as a process, rather than as an operational unit. The use of different wording by the interviewees can be explained by the disparity of timing and of association of their involvement in the CV activities. When manager Aw was asked about how CV is perceived within the corporation, he emphatically distinguished his own perception from that held by other managers.

Throughout the initiation process of the ACV initiative, the Chief Executive (and later the Executive Chairman) of Corporation A was the main individual who influenced the approach the corporation took towards CV activities and the formation of the ACV unit. Even though the corporation did not have prior experience and exposure to such activities, the Chief Executive was involved in a similar initiative in the previous company he was working for, before joining Corporation A. All interviewees identified his influence, commitment and support to the ACV initiative throughout its life cycle as a top-down process:

> *"The Chief Executive himself personally led the schemes (both CV initiatives)"... "The Chief Executive wanted to introduce [the ACV initiative] ... essentially from no experience, we took on board these initiatives. But the Chief Executive himself had experience, because he had run a scheme like [the ACV initiative] when he was with [previous employer] and they had run that throughout the 1980's" Manager Aw*

The time lag between the privatisation of Corporation A and the formal launch of the ACV initiative is less than a year. This can be explained based on the rationale for and positioning of the new initiative as one of the means in implementing the newly adopted growth strategy by the corporation in late 1996. The initiation process that led to the creation of the ACV unit is comprised by three main phases:

(a) ***the identification phase***: identification of the need to support the growth process and strategy of the corporation by internalising external business ideas;

(b) ***the promotional phase***: intra-organisational justification and legitimatisation of the proposed new routine; and

(c) ***the launching phase***: formalisation of the new routine by forming a team undertaking the task to carry it out

The transition from one phase to the next was dominated by the presence of the Chief Executive, and was relatively fast. This can be explained by the clear vision he had on the role and form the initiative should have, as well as from his hierarchical status in influencing the corporate board. It appears that his status and prior experience positively legitimised the involvement of the corporation in CV activities through the ACV initiative's business model. Table 5.3 summarises the main events, outcomes and actors involved in each one of the phases. Manager Ac was approached by the Chief Executive to set up the new initiative, as both had worked for the same company prior to joining Corporation A.

Table 5.3: ACV initiative: Initiation Process – Phases, events, outcomes and actors involved

	Identification Phase	Promotional Phase	Launching Phase
Events	September 1996: Adoption of Growth strategy Late 1996 – Early 1997: Assessment of corporation's growth and commercialisation processes by an external consulting firm	- Justification at the Board of the ACV initiative: Presentation of its business model, process and rationale Rationalisation of the ACV initiative as one of the means in implementing the corporate growth strategy - Manager Ac is identified as the corporate champion in setting up the ACV unit - Intra-organisational lobbying from Manager Ac and the Chief Executive	June 1997: ACV unit is launched
Outcomes	- Early 1997: Launching of a *"Growth Process"*, based on the assessment of the external consulting firm and of the AVN initiative (internal CV initiative) - Early 1997: Proposal for establishing the ACV unit/initiative	- Internal awareness of the ACV initiative gained - Identification of internal stakeholders that new initiative needed to satisfy	- Manager Ac appointed as a Head of the ACV unit - Media coverage of the ACV initiative
People involved	Chief Executive Corporate Board External consulting firm	Manager Ac Chief Executive Core Businesses Managing Directors Manager Aw	Manager Ac Chief Executive
Time length	10 months (no data available to indicate the duration of each phase)		

Manager Ac and the Chief Executive, had gain experience and exposure to CV activities from their previous employer:

> *"I worked at a company called [Company 1] in 1986, and the then Head of the company is now our current Chairman. And this was an idea he had at [Company 1], and I went to work at [Company 1] to run an almost identical scheme in 1986 that had just been created, and it was called [Project 1]. And I left in 1994, came to Corporation A], and one of my jobs was to recreate [Project 1] at [Corporation A]" Manager Ac*

Comparing the timing of the initiation of the two corporate CV initiatives (ACV and AVN initiatives), the data indicate that the AVN initiative was launched first, and the ACV initiative followed. This can be explained considering that the AVN initiative was targeted at introducing a new ventures development process for internal ideas, while the ACV initiative introduced a similar process but for external ideas. The emphasis was initially on organising the internally focused process, and then the externally focused one. While in the case of the ACV initiative the Chief Executive's prior CV experience contributed to its establishment, in the case of the AVN initiative the assessment of an external consulting firm was used to legitimise its rationale and launch.

In both the promotional and launching phases of the ACV unit's initiation process, the creation of awareness around the new initiative was critical. The role of the Chief Executive was crucial in both phases, with the ACV initiative establishing a social network within and outside the corporation. Manager Ac was also actively involved in the promotional phase through intra-organisational networking with the managing directors of the core businesses and the Chief Technologist (Manager Aw) by promoting the initiative and managing the perceptions (positive or negative) created around its launch. The organisation of the ACV unit was influenced by the perceptions around it. The use of public relations in the media during its launch, allowed the ACV unit to gain credibility and awareness in the community of entrepreneurs, small firms and universities the unit would have liked to target.

A significant element of the initiation process was the justification of the involvement in externally focused CV activities and for the business model of the ACV initiative. Table 5.4 summarises indicative quotes on the rationale, intentions and motives behind the establishment of the ACV unit and initiative. CV was perceived as an important part of the growth strategy. Manager Ac argued that the formal justification process was handled by the Chief Executive. As a facilitator of the new strategic direction the corporation was taking, he presented to the corporate Board the rationale of the new initiative. The scope and rationale of the new initiative was associated with the identification of a significant need for the corporation to be commercially oriented.

Table 5.4: Justification and validation of CV involvement by Corporation A

Constructs	Quotes
Rationale	- "the double digit growth was the imperative and one of the ways of achieving that was by this sort of activity (CV activities through the ACV unit) and trying to change the culture"… "Corporate venturing, or these activities that we are calling corporate venturing, were seen as an important part of the growth" Manager Aw - "we have recognised or very much the CEO of [Corporation A] has recognised that good products come from good ideas and no company has a monopoly to it, and that good ideas can originate anywhere and that a company can never have too many good ideas basically, so for us it is basically an input to our ideas and to the product development" Manager Ax
Motives	- "to make people more innovative and entrepreneurial. But again, the reason for doing that was we wanted to grow the company" Manager Aw - "the motivation, the reasoning was, in 1996, that basically … no company has a monopoly on good ideas, and we recognised, and I had experience in another organisation running something similar, that this could be a very good, successful way without too much investment in terms of resource, to get ideas coming in. A useful way of picking up new ideas that would probably go nowhere, without the support of a large organisation" Manager Ac - "we were privatised and before that there were no initiatives (such as the ACV initiative) really. I mean that was one of the reasons I think why the Chief Executive wanted to introduce [ACV initiative], to help change the culture. And again, that was a strategic reason because we had been very internally focused as part of the public sector" Manager Aw
Intention	- "growth is the ultimate objective. But to achieve that you need to do certain things and one is to perhaps change the culture. And so there was behind that, the more sort of resourceful aspect of it, that we wanted people to be more entrepreneurial and innovative" Manager Aw - "trying to change the mindset of the technical people, so they weren't just focused internally and were aware of external opportunities" Manager Aw - "to bring in new ideas that could result in business for [Corporation A]" Manager Ac

The proposed ACV initiative would have allowed the corporation to achieve two objectives: (a) *strategically*, to increase the possible avenues to growth, and (b) *culturally*, to support a more innovative and commercially oriented corporate culture. The two main benefits of the ACV initiative were: (a) its low base-cost, and (b) its ability to introduce new innovation routines and to enhance entrepreneurial behaviour among the corporate managers. The new initiative proposed the internalisation of external business ideas and the establishment of a social network of external parties providing these ideas. For Corporation A, this was a radically new approach to new product and venture development, as it traditionally relied on its in-house IP capacity and capabilities. As the corporation was re-organised from 1996 onwards, new markets and technologies may have not been covered by the existing in-house IP capacity. This was the core need the ACV initiative and unit would have covered.

While the rationale of initiating both the AVN and the ACV initiatives were similar, their intentions were different. For the AVN initiative the intention was to create a distinction between innovation routines within the core businesses, by separating the main stream organic product and services development from the creation of new ventures from internally developed ideas, while the ACV initiative aimed to create a distinction between in-house and externally resourced innovation.

5.2.2.1.2 The ACV unit and relationships with other venturing activities

With the top management team defining the strategic context of the corporation in 1996, the ACV unit was launched as one of the means of implementing it. Its formal launch was promoted within and outside the corporation as a tangible vision of this direction. In the 1998-1999 *Corporate Annual Report*, the components of the corporation's growth strategy was presented to the internal and external stakeholders. The ACV unit was positioned at the centre of the growth strategic context, intended to be implemented until 2001[65]. Around the ACV unit, another three distinctive growth paths were placed: (a) *organic growth*, capitalising on the existing core businesses, (b) growth through the *creation of new ventures* (the AVN initiative), and (c) growth through *acquisitions*. All four growth avenues were complementary to each other, with each one of them contributing in a different way to the strategic intent of the top management team. The two CV initiatives were introducing two novel paths to growth, while the acquisitions and organic growth paths were building on the existing experience of the corporation. The interviewees argued that the ACV initiative was well received at its initiation phase. Its role within and relevance to the corporation were progressively crystallised, as the new strategic context was also understood and absorbed across the corporation:

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[65] Corporate Annual Report, 1998-1999, p. 11

"I think that actually we've actually worked a lot harder on making sure that our strategy for each (core) business does cover both their short term and the long term requirements ... and I think that now people can identify a lot more where [the ACV unit] would fit in, whereas previously when people weren't aware of the strategy process and strategy wasn't so well defined for each business" Manager Am

Table 5.5 outlines the main attributes of the ACV unit's business model in 2003. The interviewees agreed that during the unit's life span its main attributes had remained the same with the only amendment being on the type of technologies the unit would have considered to internalise. This is explained by the progressive concentration of the corporation's operations from 21 business operations and markets, to five in 1999 and two by 2002. As a few of the markets were abandoned, the ACV unit needed to incorporate this change to its technology focus. Manager Aw argues that at the initial stages the ACV unit had a wider technological scope, in comparison to the later years of its existence.

Essential to the operation of the ACV unit was the introduction of a very structured, formal and detailed process to reach its objectives. As indicated at Table 5.5, this process involved two main activities: (a) ***identification***, of ideas with business potential and of internal demand for these ideas; and (b) ***evaluation***, of the potential of these ideas, and of their degree of relevance and fitness to the core businesses. External and internal stakeholders were involved in facilitating the operation of the ACV unit: (a) *externally*, individuals and social networks, and (b) *internally*, corporate managers who could champion the development and incubation of the externally identified ideas.

Critical to the success of the ACV unit's operation was the achievement of equilibrium between externally identified supply of innovative ideas and internally defined demand for them. The establishment of an internal and an external social network, supported by a high degree of awareness of the nature and role of the ACV unit, contributed positively to the unit's operations. Besides the technological relevance of the external idea to the technological focus of the core businesses, the market and return potential of an idea were also considered, completing the checklist of screening criteria an idea had to meet to be adopted by a core business. In the evaluating process of each idea, individuals from the core businesses were involved at all stages, with their involvement increasing as the idea moved from one stage to the next of the evaluation process.

Table 5.5: Characteristics of the ACV unit's business model

Characteristics	ACV unit's business model
Focus of activities	- Innovative business ideas, developed outside the corporate boundaries
Objective of ACV unit	- To identify, to evaluate and to internalise externally developed business ideas
Funding	- Corporate budget to cover the unit's operational cost - Corporate businesses' funds for seed and venture capital
Source(s) of ideas	- University links - Entrepreneurs and inventors - Regional networks of entrepreneurs and investors (i.e. business angels)
Investment sectors	- Corporation A's main sectors of operation (energy, environment, rail, engineering software, systems and products, biotechnology)
CV Process	Stage gated process - Identification of external ideas - Clarification of Intellectual Property (IP) issues - Screening process (Technological and Market potential) - Identification on internal venture champions - Adoption by a core business and its Growth Process
Idea identification	- Proactive: The ACV unit's team would identify the ideas and corporate managers would have introduced ideas to the ACV unit - Reactive: The publicity of the ACV initiative attracted entrepreneurs
IP clearance	- Clarifying the IP status of the patent behind each potential idea
Idea evaluation and screening	1. Evaluation of technological feasibility of a business idea 2. Evaluation of degree of relevance to any of the core corporate businesses 3. Evaluation of degree of relevance or overlapping between the new idea and other existing technological projects in any core corporate businesses 4. Evaluation of idea's market potential - Market basis (Corporation A's existing market or developing a new market) - Customer basis (segmentation) - Level of potential demand 5. Resource requirements for the development of the idea into a venture - Time requirements - Type of resources (financial, technical, legal) - Availability of resources by Corporation A 6. Performance potential (financial performance)
Identification of internal venture champions	Intra-organisational networking and identification of internal demand for the idea by an appropriate core business - Presentation of the idea by the ACV unit to the core businesses - Identification of individuals who could be champions for the idea
Adoption phase	1. Integration of the idea by the Growth Process into one of the core businesses: - Decision to develop a business plan (market potential, technological challenges, potential returns, required resources for development) - Decision to develop a full business case - Decision to develop a new product/service/venture - Decision to start trading 2. Selection of business model of the new venture, decided by the core business

As internal champions were identified and involved in the evaluation process of the ACV unit, the idea which was screened was becoming progressively incorporated in the Growth Process of one of the core businesses. The Growth Process, introduced by the AVN initiative, provided a structured and formal opportunity identification process to all core businesses. Initially, it was treated as a strand-alone process carried out by the AVN initiative's team. In 2001, the AVN initiative was absorbed by the core businesses completing the introduction of the Growth Process across the corporation, with the latter considered as part of the corporation's *"normal activities"*.

The final decision to internalise an idea proposed by the ACV unit was taken by the Board of each core business which was responsible for growing and incubating it. The ACV unit had no authority to enforce such decision, as the degree of its responsibility was limited to identifying and evaluating an idea. The core business was accredited with the financial cost of incubating an idea, while the ACV unit oversaw the process. There was an overlap between the two CV initiatives, with the AVN initiative introducing an entrepreneurial process within the corporation and the ACV unit introducing external opportunities to this process. Once an external idea had met the evaluation and screening stage, it was treated as an internal idea, competing for the same resources, time and commitment as an internal idea would have. By 2003, the Growth Process had been operating for six years and had achieved total integration across the corporation, while the ACV unit appears to have lost its relevance and utility within the corporation:

> *"I think that when [the ACV unit] was established and the [AVN initiative] was established, we had launched the corporate growth process ... and each business would feed in ideas into the corporate growth process. As time went on there was less (support towards the ACV unit), because people weren't seeing sort of positive things coming out of it, a lot of ideas were ... just losing momentum or just not being progressed because of problems of internal resourcing. Then it began to see less support from all the growth process and I think that's when I joined the team (1999-2000) and it was a very, much and uphill battle to maintain enthusiasm and I think it's almost inevitable that this happens" Manager Am*

5.2.2.2 Implementing the ACV initiative within Corporation A

Organising the ACV unit's team and resources, and relating it to the rest of the corporation appear to have been given detailed consideration since its initiation, as this would have facilitated its strategic and operational intent. The organisation of the ACV unit appears to remain unchanged during its life cycle, while its relationship with the rest of the corporation appears to have been amended, as the organisational structure was changing.

5.2.2.2.1 Organising the ACV unit

One of the benefits of introducing the ACV unit within Corporation A was its low base cost, as argued by Managers Aw and Ac. This could have been achieved by creating a small and flexible team of two or three managers to run the unit and its activities. However, in 2003, Manager Ax was the only individual working for the unit. The data indicate that the core team of the unit was supported by other individuals and teams from within the corporation, providing resource and services (i.e. administrative support) to it. Manager Ac, being responsible for creating the ACV unit became its Head between 1997 and 2000, while maintaining his previous corporate position (Head of Corporate Affairs). He argued that he was occupied only on a part time basis by the ACV unit. However, his role and involvement at the initiation phase of the unit influenced the criteria used in recruiting individuals to join it. Table 5.6 provides a summary of relevant quotes on the characteristics, role and responsibilities these individuals had.

There were objective and subjective criteria based on which Manager Ac was evaluating potential individuals to join the ACV team. Besides the objective criteria related to the candidates' educational background and technology knowledge, the emphasis was on subjective skills and characteristics these individuals needed to demonstrate. Interpersonal skills (communication and networking skills, proactiveness, creativity, problem solving mentality), and business expertise (managerial skills, commercial orientation and work experience within Corporation A) were highly considered. These criteria would ensure that the recruited individuals could fulfil their role in managing the processes of identifying and evaluating ideas, as well as co-ordinating demand and supply of ideas within the corporation. Managers Am and Ax highlighted the critical role the ACV team members bear in establishing and maintaining communication and networking channels with stakeholders from within and outside the corporation. Similar were the criteria used in identifying corporate individuals to be venture champions. The combination of technical soundness, of business and commercial orientation and experience,

Table 5.6: People involved in the ACV unit

Constructs	Quotes
Size of team	**1997**: - "it (the ACV unit) started off with one person and there was [Manager Ac]" Manager Am - "there was myself half time or less and 2.5 full time people" Manager Ac **1999**: - "Well we had two. Sometimes if we were in a transitionary period, you know when one person was going to move on and we got another person recruited, then there would be three, but usually you would have one person in as training role" Manager Am **2003**: -"It (the team) is myself. We used to be a bigger team, we used to be three people" Manager Ax
Roles and responsibilities	Core ACV team members: - "It is really to manage the process. It is important that … at [the ACV team], what they do is they are responsible for ***networking***, so that they keep contact with the sorts of ideas that we think are going to be the most fruitful. And so then ***receiving*** the ideas and making sure that we ***protect*** the confidentiality issues that might arise from that, and then for ***doing a very first evaluation***, but a very, very crude evaluation of the idea just to see whether it is ... So the role of the [ACV] team is only to do a very first, what you might call 'screening' of the idea" Manager Aw - "we would champion the idea and manage any activities which might require ***co-ordination*** of corporate input. So if there's any sort of input from the corporate specialist like the corporate legal specialist whatever, we would co-ordinate that side so there was an element of championing at the early stage but our job was really identifying the ideas and matching ideas to the business needs" Manager Am Venture champions: - "the champion was usually the person that ... made the evaluation, be the ***technical specialist*** and in fact there weren't enough of them that went further through the process for us …it might have been much more important to have somebody with sort of ***commercial expertise*** to develop the business case leading being the champion rather than the technical specialist" Manager Am
Characteristics of ACV team's members	- "they need to be able to communicate very well…they are basically the interface between technology and the business, in some aspects, so …yes it's a lot of communication, networking, proactiveness, absolutely" Manager Ax - "They had to network, create and maintain networks through which we could gather ideas and publicise [the ACV unit], so that we would then receive ideas and then manage those ideas within the company" … "building networks within the company, as well as external networking" Manager Am - "I think initially we were looking for people who did not necessarily want to be technical specialists in one field … because we stressed when we were recruiting, that you will be looking at a whole cross section of technologies … So you will not get a chance to exercise your mechanical engineering degree that much. On the other hand what we said, be aware that there may be an opportunity for you, if an idea comes along you actually perhaps might want to leave [the ACV unit] and become the manager of that idea" Manager Ac - "They need to be good communicators, and they need to understand markets and what customers are looking for. They also need to be technically based, so they can evaluate the potential of an idea, and they have to be creative I think is probably one of the most important things, so that they can find ways round obstacles and barriers, they can see opportunities that might be created by taking forward and idea … creative in two senses: one is in how an idea might be developed, but also how to get round any obstacles that there might be organisationally" Manager Aw
Team composition	- "I was at most, a 50% person. The other people would be the person who was ultimately responsible … the team leader who was a graduate, a No.2 who was a graduate, and then probably some admin support, that might be someone who was working part time" Manager Ac

	- "The first person who led (the ACV team) had been with [Company A] for 3 or 4 years. We then recruited a No. 2 who had worked in a different (business)… of [Corporation A]. We then recruited a No. 2 who we in fact brought down from one of the businesses, and she (Manager Am) was a Chemical Engineer and she had been with the organisation a couple of years. So we were bringing people in who had done a variety of jobs … I think [Manager Ax] was the only person to have come in direct from University. But she was different, in so far as she had a PhD" Manager Ac
Team dynamics	- "An individual [ACV] team member would have responsibility for the initial evaluation and then there would be a review of all the ideas that that person felt should go forward with the rest of the [ACV team], before we decided or what we propose the next step and the rest of the team would need to ratify that decision" Manager Am

creativity in overcoming obstacles and barriers and creativity were the main characteristics the ACV team considered in identifying these individuals.

The composition of the ACV team allowed immediate communication among its members. Besides its small size, there was a hierarchy within the team, with its Managing Director being directly involved with the ACV initiative's communication and networking activities, and the other two individuals dealing with the screening process. Each individual would have a specific operational role with regards to the identification and evaluation processes, but consensus needed to be reached by the whole team, before an idea was promoted. The data indicate the existence of an internal rotation process facilitating the team composition. Any newly recruited individual would have been trained for two years before being promoted to the position of the project manager or of the managing director of the ACV team. At the same time once an individual had fulfilled a two year period in the position in the ACV team he/she were moved back to their corporate role. This rotation system allowed for a training opportunity for these individuals, making themselves familiar with the ACV initiative and its venturing and commercialisation processes. Moreover, it allowed for the cultural intention of the ACV initiative to be facilitated, as the rotation of the ACV unit's members back to corporate positions within the core businesses would have allowed for a commercial mindset to emerge in these businesses.

Manager Ac argues that this opportunity was portrayed to be the main incentive in recruiting corporate individuals to join the ACV team and motivating them to work for it. Considering that Corporation A was recently privatised, there were no expectations for financial incentives to be attracted to these individuals. Table 5.7 provides a summary of indicative quotes. The data suggest that one of the most crucial personal incentives for the individual working in the ACV team was the involvement in a novel initiative which could differentiate them in terms of skills, knowledge and experience from other corporate managers, while they had the opportunity to use their intra-organisational social networks, especially with senior managers, to be promoted internally.

Table 5.7: Motivating the ACV team's members

Interviewee	Quotes
Manager Ac	- "The way we operate incentives, at that time, it was ... probably the best word I can use is *'ad-hoc'*. When people came, they had specific objectives, they had to do certain things in a certain timescale, and then they would get a salary increase their salary would be reviewed on the basis of that ... but we did not offer specific bonuses in that way" - "it was part of their development or training. We are not going to bring people in (the ACV unit) for two years and suck them dry and then kick them out"..."there wasn't a any bonus system set up for these individuals working for [the ACV unit]" - "it was stressed that this is 'not a cooler for life', or very unlikely to be. We saw this as part of their early development training, picking up new skills, and business skills I would stress, rather than technical skills, business skills that they could then apply elsewhere within the organisation. The other thing, of course, it put them, if you like, in the shop window, because they became very well known at very senior levels around the organisation. So they were on display so they had a chance to make a name for themselves and shine. And many of them were snapped up when they were looking for other opportunities"
Manager Am	- "There weren't any specific bonuses for working in [the ACV unit]... We often talked about the effect of financial incentives on engaging support within the businesses for developing ideas and whether people would be keener to help us to evaluate ideas and support ideas if there was an identifiable bonus. I think ... sort of the people I worked with within [the ACV unit] were looking for the opportunity to do something different and use their technical skills but also develop commercial skills, have an opportunity to develop commercial skills and to work across the company rather than in a specific business"

The same rationale appears to have influenced the way potential individuals from within the corporation could have become venture champions. The emphasis was not on the financial rewards, but on the opportunity given to these individuals to enhance their interpersonal and commercial skills. The main motivator for these individuals was the opportunity to differentiate themselves from the rest of their co-workers and reinforce their image and skills:

> *"There was nothing explicit introduced, but we have got a standard performance award scheme which is flexible enough to reward someone for bringing forward an idea that then looked like being successful. So it was a combination of using the standard reward performance scheme and the fact that the ... for the champion taking forward an idea, then the assumption was that if they made a success of developing the idea, they would become the Managing Director of the business that developed. So it was a personal incentive, I think to them, to commit to developing the idea" Manager Aw*

Another important element in organising the ACV unit was the management of resources involved in the ACV unit's business model, which were primarily intangible. These can be grouped as (a) *social capital*, in the form of the networking activities within and outside the corporation, (b) *human capital*, in the form of technical expertise and number of individuals involved in screening an idea, and (c) *consultation services*, in the form of legal, marketing, commercialisation and financial advice the ACV unit's team received in evaluating an idea. As Manager Ac argues *"the key thing to say is that we are not venture capitalists"*. Once an idea was adopted by a core corporate business and a venture champion was identified, the core business was becoming responsible for covering the resource (financial, technical etc.) requirements (type and amount) of it, as identified in its business plan, and the time frame within which the idea needed to perform. Each core business had its own resource allocation system in place (which might have also involved an external party to fund the idea), and there was no corporate fund or other corporate resources that could subsidise it.

With regards to the human capital involved, Manager Aw argued that corporate personnel were rotated within the corporation and allocated the responsibility to develop a business idea. This is in alignment with Corporation A's mandate (a) to utilise its internal human resources and (b) to facilitate the intended, internal cultural change regarding its employees' commercial mindset. Managers Aw and Ac argued that utilisation of corporate personnel as venture champion increased the collaboration and communication within the corporation, and raised awareness around the ACV initiative.

The resources involved in running the unit were primarily financial. A funding allocation system was set up to cover its operational cost, in accordance to the corporate financial and budgeting procedures. The funds were resourced from the corporate R&D budget until 2001:

> *"[The ACV unit] was always budgeted each year, and there was a little bit of money put in there to give job numbers to other people to carry out half or a day's work on it. So we could fund people. So there was ... I will call it "pump priming". But then if the idea was requiring perhaps more than a few hundred pounds, say a few thousand pounds, then the individual businesses would find the money to support it" Manager Ac*

Once the ACV unit became part of the ACT unit, each core business had to cover the operational cost for each enquiry to the ACV unit, as a consultation fee, while the ACT unit covered primarily its operational cost:

> *"Before we move [the ACV unit] into [the ACT unit] the funding of the [ACV unit] staff was corporate (from the Corporate R&D budget), but the development of the ventures needed to be funded by the businesses. Now that we have [the ACV unit] managed by [the ACT unit] the funding for the time*

of the [ACT unit] staff is charged back to the businesses, so there is no corporate funding at all of that scheme any more" Manager Aw

Evaluating the allocation of financial resources to the ACV unit, Manager Ax recognised that the dependency of the unit initially on the corporate R&D budget and later on the *"experiential"* budget of each core corporate budget was restricting its activities and scope. Even though the unit had access to a rich pool of ideas, it had to process only these relevant to the core businesses, possibly missing out some opportunities and restricting the unit's venturing and entrepreneurial potential:

> *"On one side you want the CV very closely linked with the businesses, but on the other side it would be nice if you had some additional funding available for opportunities to be investigated because if it comes out of a very structured allocated budget, it has to be either very cheap or very really high return opportunity for people to be prepared to invest lots into it. If you had some external funding in a way, or it could be just dedicated funding for new opportunities then it would be nicer because there wouldn't be so many constraints if we invest in the now we cant invest in that, so I think that would be beneficial for investigating more ideas" Manager Ax*

5.2.2.2.2 Relationships with the rest of the corporation

Examining the structural context within which the ACV was introduced, it can be argued that the close association between the two CV initiatives and the corporate strategic direction required for both of them to be placed close to the top management team. Corporation A's organisational structure evolved significantly between 1996 and 2001, focusing the corporation's operations from a very broad number of businesses and markets to two mains sectors. As the organisational structure was evolving and the corporate strategic context defined and crystallised, the operational role of the ACV unit was also clarified.

During its initiation phase, the unit was placed under the same structure as the AVN initiative, reporting directly to the Chief Executive. Both CV initiatives required the protection by and leadership of him to be implemented and adopted by the rest of the corporation. Managers Am and Ac recognised that the commitment, support and persistence of the Chief Executive were a catalyst to the ACV unit's survival. This level of support and commitment was explicitly demonstrated by positioning the new unit within the corporate strategy centre, as argued by Manager Am.

Table 5.8 outlines indicative quotes with regard to the ACV unit's structural context. Its establishment as a distinctive unit allowed the unit to distinguish its innovation

Table 5.8: Organisational Structure of the ACV unit

Constructs	Quotes
Model of organisational structure	**1997**: - "Initially when the initiative was set up, it was actually within a structure which was called [AVN initiative] and they had financial and other resources available to just investigate new ideas, opportunities. Later that was actually closed down and [the ACV unit] was moved to the corporate centre, still sort of keeping its role to attract new ideas outside the company, and then with the formation of [the ACT unit], it was moved into [the ACT unit]" Manager Ax - "when I was part of [the ACV team] it was actually a part of the what we call the corporate centre so it was led corporately on behalf of the group" Manager Am **2001**: - "[ACT unit] in currently a wholly owned subsidiary of [Corporation A] so its one of the 5 businesses within the [Corporation A]'s group" Manager Ax
Model evaluation and changes	**1997-2000**: - "where [the ACV unit] was located was really a sort of political decision really rather than a strategic decision"… " think that having it as a corporate initiative was actually quite important … for two reasons: first of all from a sort of public relations and marketing of [Corporation A] in general but it did actually, we were actually able to hold it up as an example of something we did for the benefit of the group. It was also important for it to be central so that we could co-ordinate and encourage co-operation between businesses if there was an idea that struggled more than one business" Manager Am - "So that (the ACV initiative) remains as a corporate activity, but essentially in each of the businesses, there is someone who has responsibility for liaising with the [ACV] team in the corporate centre" Manager Aw **2001**: - "we set up [the ACT unit] which was a business set up to exploit [Corporation A]'s Research Property base and it was decided that [the ACV unit] should become part of it … my own opinion is that it changed from that point. It then became that the [ACT] business needed to justify [the ACV unit] and although [the Executive Chairman] maintained his support it's gone off … I don't know whether I feel that that's really been the right way to go and I think that at that point you did get this sort of dislocation or discontinuity where the businesses began (to think) 'well I don't know whether we really need [the ACV unit] to search out ideas'" Manager Am
Relationships and communication with other units	- "I went to talk to many key people in [Corporation A] to say this was something we were looking to do, and to get their reaction and hopefully get their buy in, and this is what was achieved"… "one of the secrets of its success is to work very closely with the businesses" … "very quickly we developed a pool of people we knew we could go to, who would give us half and hour of their time" Manager Ac - "Occasionally we have people meet [Corporation A]'s employees, so we get a referral through the employees, but on occasions we also have people within [Corporation A] saying can we take this forward because it doesn't really fit within our business but we feel there might be an effect within the other businesses of [Corporation A]" Manager Ax - "Within [the ACT unit], because it is a small organisation, I usually go directly to the department managers, or the technologists, because it's a closer working relationship" Manager Ax
Reporting	- "it (the ACV unit) had its own Manager in charge of it, reporting to the Chief Executive and still has that is still the case after 5 years" Manager Aw

processes and serve its operational role, as the main point of contact between external sources of ideas and the corporation. However, this distinctiveness was not translated and perceived as positional autonomy. Its activities were closely overseen by the Chief Executives and the unit had strong relationships with the rest of the corporation. Even when in 2001 the ACV unit was allocated to the newly created "Development Business" division [underneath a unit responsible for the IP management of the corporation (the ACT unit)] it maintaining its operational autonomy.

The Managing Director of the ACV unit was responsible for reporting to the Chief Executive and the Board on the activities and progress of the unit's activities. The reporting procedures followed were both formal and informal: meeting the corporate reporting standards and responding to the Chief Executive's active interest in the unit. Between 1997 and 2001, the Managing Director would report directly to the Chief Executive. After 2001, Manager Ax was also reporting to the Managing Director of the ACT unit, as required after the organisational restructuring. The reporting involved providing information on the number of ideas processed through the ACV unit's business model, as well as on the networking activities of the unit. These were the two areas the unit was evaluated on, and promoted at the Annual Corporate Reports.

The data indicate that based on its operational role, the ACV unit had four groups of stakeholders with whom it required to develop and maintain close relationships, as it depended on them: (a) the top management team of the corporation, (b) the external parties, from which it could resource potential business ideas, (c) the managing directors of the core corporate businesses, and (d) the venture champions. The level and type of dependency on each varied. While the last three stakeholders were critical in the success of the ACV unit's activities, the dependency on the top management team was the most significant as it was the sole source of the unit's funding and political support retaining its existence within the corporation. This relationship was closely managed by the Managing Director who would report regularly to the Chief Executive. The other three relationships were managed by all members of the ACV team. Using their networking and interpersonal skills, they were creating channels of communication with key corporate individuals such as

Manager Aw, would attend conferences and business angels networking events, would keep informed the Managing Directors of the core businesses of the latest ideas promoted through their screening process. Manager Ac argues that working *"very closely with the businesses"* allowed the ACV unit to eliminate the occurrence of the Non-Invented-Here syndrome, by minimizing the time lag of an idea entering the ACV unit's process and a core business being informed about it.

The intra-organisational relationships between the ACV unit and the rest of the corporation were also supported by the *"enthusiasm"* and positive response the unit received during its initiation. Manager Ac's *"lobbying"* activities in 1997 helped in introducing the initiative's role even to *"one or two cynics"*. Manager Am explains that she could understand the scepticism a few might have shared about the ACV unit related to the timing of its initiation and its role. The strategic intent of the ACV unit was defined and realised by the rest of the corporation as the unit evolved. It was expected, according to her, for corporate individuals not to see the relevance of the new initiative immediately. Moreover, the initial position of the ACV unit close to the corporate centre, created negative emotions among a few corporate individuals, who according to Manager Am perceived this as an act of favouritism towards the ACV unit's team. After 2001, with the AVN initiative integrated in each core business, the decision to place the ACV unit in a subsidiary affected negatively the level of the unit's relevance to the core businesses.

The change in the structural context of the ACV unit is explained by the progressive incorporation of the initiative as an operational activity. According to Manager Ac, as the corporation was moving from a highly hierarchical structure with a strong corporate centre to a more business based structure with a small corporate centre, the ACV unit required to adapt to this change. Moreover, the pressure the corporation was facing at that time regarding its financial performance and the profits warnings the corporation had issued in 2000 and 2001 contributed to the decision to position the ACV unit in a subsidiary:

> *"[ACV unit] had always been associated with exploitation of IP whether within the company or from outside the company and it always looked logical that the [ACV unit] should be there and you also have to factor in the fact that at that time the financial performance of [Corporation A] wasn't great and we had at least one profits warning and possibly two by that time*

and there was pressure to cut costs within the centre and there was that pressure to take out any groups ... which (were) perceived as not needing to be within the centre and put them out into an operational businesses ... there was an element of that [the ACV Unit] had come so far and maybe it was ready to develop into a sort of operational activity and whether that was right or wrong I don't know, I think it was difficult and probably not a well informed decision" Manager Am

Another element which associated closely the ACV unit with the rest of the corporation was the cultural context which it was representing. As one of the avenues used by the top management to create a cultural change within the corporation, the ACV unit was projecting a commercial, innovative and extrovert outlook, within and outside the corporation. The previous status of Corporation A as a public service organisation had created a civil service mindset within the corporation, but a very proud labour force for its contribution to the public and for its scientific and engineering excellence. Its privatisation in 1996 changed radically the customer base of the corporation and its business status, forcing the corporation to become financial performance oriented. Table 5.9 provides a summary of indicative quotes of the cultural context within which the ACV unit was introduced and how it contributed in changing it.

Table 5.9: Level of cultural integration of the ACV initiative

Constructs	Quotes
Corporate culture aspects	- "I think also within [Corporation A] we are quite restrained in the way because it is an ex-government of innovation so you cannot be too entrepreneurial within this company because then you cannot get anything approved" Manager Ax
Degree of cultural integration of ACV unit's culture	- "I think within [the ACT unit], there has been quite a rapid change (of culture), I think with the rest of [Corporation A]. I think there is a change but it is a much slower change"... "I think people are encouraged to become more entrepreneurial, especially within [the ACT unit]" Manager Ax - "it was a different culture we were coming from. I think it was a difficult process all these things take a year or two really to diffuse through the organisation. But I would say it has been very successful, but it needs to be part of a more general change management programme within the company you can't just introduce something like this as an isolated activity" Manager Aw - "I think different businesses embraced it [corporate venturing] with different degrees of enthusiasm" ... "I think, at first it was new and therefore 'what's this all about?' and I think now it is more or less accepted, you know, it is part of the company" ... "no company has a monopoly on good ideas. I think people have embraced that and I think now accept it. I think they are open minded, and as it has become part of the culture, if you like, then ideas from outside are probably better accepted than they may have been say 6 years ago" Manager Ac

The data indicate that both CV initiatives contributed in changing the organisation culture by introducing a more innovative and entrepreneurial mindset within the core businesses among its technical employees. The new cultural traits were about being extrovert as a corporation, open to external ideas, more innovative and entrepreneurial. However, they were not the sole drivers of it, as the top management team had launched in 1996 a much more holistic and general management programme of organisational change, involving a new strategy, a new organisational structure and a new organisational culture. Manager Aw argues that the change of the corporation's cultural context was not immediate, but it required at least two year to *"diffuse"* and in 2003 was still taking place. The AVN initiative, as tailored in the internally sourced innovation, appears to have been more powerful in having a direct impact in the cultural change across the corporation. All interviewees agreed that it is quite difficult to identify the direct impact of the ACV unit's activities, due to its small size and its non-direct link with the core businesses' growth process.

Both CV initiatives were reflecting the traits of the new culture. Specifically the ACV unit was a clear demonstration of the extrovert character the corporation was developing towards innovation. The data indicate that this was of particular interest to the top management, as the ACV initiative was one of the main vehicles in creating a positive, entrepreneurial image for the corporation outside the organisational boundaries.

In attempting to introduce the new culture there were many obstacles. Managers Aw and Am argued that there was scepticism about introducing a more commercially oriented culture was a difficult process. However, the strong leadership by and commitment of the Chief Executive in co-ordinating the organisational change as part of a holistic, strategic plan made it successful. This co-ordination was of a long-term nature for the new strategy, the new cultural traits and initiatives to be realised and accepted by the employees. As Managers Ax and Ac argued after six years, units such as the ACT unit could demonstrate a more entrepreneurial profile than other units within the corporation, while innovation had become a core element of the corporation's activities and mindset.

5.2.2.3 Outcomes

The initiation of the ACV unit and the involvement in CV activities had a number of outcomes for the unit itself and the corporation. These can be considered under the following headings:

5.2.2.3.1 Performance: Financial and strategic

The data indicate that there were primarily strategic returns for the corporation from the operation of the ACV unit. All interviewees agreed that considering the fact that the unit was not operating with the intention to meet any financial performance criteria and toward financial returns, its financial performance was difficult to be evaluated or even considered. The unit's evaluation was carried out on the basis of the number of ideas processed and linked to a core business. Moreover, as Manager Ax argued the fact that the ACV unit was not accredited a portion of the new venture's financial performance was causing even further problems in realising its costs and returns. Table 5.10 outlines a summary of indicative quotes of the ACV unit's operations outcomes.

All interviewees argued that the ACV initiative had been a success for its purpose. They avoided providing specific figures with regard to the financial performance of the ventures created, which can be explained from the fact that quite a few of them had not yet realised their market value. The time lag between the *"adoption"* of an idea by a core business and its development and launch as a product or independent venture varied from a few months to a few years. Referring to the case of an idea which was launched as a venture in Canada, Manager Aw projected its financial performance to contribute by 20% to the core business's turnover. However, he was not in position to argue that this could have been translated to a 20% return on investment for the core business.

Emphasising on the strategic performance of the ACV unit, all interviewees argued that reinforcement of the corporation's market shares, presence in new markets (industrial and geographic), expansion of the corporation's business portfolio and the income generated from the ventures, and the change in the organisational culture were the main outcomes of the involvement in CV activities. As identified from the *Corporate Annual Reports*, between 1998 and 2002, there were references to the number of ideas evaluated and processed by the ACV unit, as indictors of the unit's turnover. Progressively the number of ideas received and evaluated by the ACV unit had significantly increased, reaching 2100 enquiries in 2003, which led to the creation of 67 businesses cases. This data were used proactively in the media coverage the unit was receiving, as well as with the marketing media it was using.

Table 5.10: Performance of ACV initiative for the unit and Corporation A

	Quotes	
Performance	Area	
Level	Strategic	Financial
ACV unit	- 1999: "[the ACV unit] has received 400 inquiries, and 15 ideas are being taken forward for further development"[66] - 2000: "[the ACV] scheme has now received over 1,200 ideas from external inventors"… "(in year 2000), the [ACV] scheme attracted over 100 enquires from outside the Group, with some 100 going forward for more detailed consideration"[67] - 2003: "Since its launch, over 2100 approaches have been made to the [ACV] scheme and over 1,600 ideas selected for further consideration, with around 67 going forward for more detailed evaluation. As a result a number of commercial partnerships have been established, to the benefit of the idea owner and to [Corporation A]"[68]	- "There were no real financial performance objectives met …or I suppose, there were no targets set. But if we look back, how much has it (the ACV unit) cost over the 6 years? What have we had out of it? How much has it cost us to develop ideas? If we hadn't had it, would we have saved that money or not? And I think the answer is 'no'. So I think it has certainly not been a failure, but I couldn't stand up and say it has been a fantastic success because we have done this, and this and this and this. But as I said earlier, I think success is measured a number of ways one is in tangible ways and one is in intangible ways" Manager Ac
Corporation A	-"What we can say is that we have grown certain business areas through this activity and we have grown them in areas that we have wanted to grow" Manager Aw - "We can say strategically it has been a success, and then intangibly the fact that we have developed a much more innovative culture through these sorts of activities, again is a success. But we haven't got that measure of performance that a venture capitalist would be able to put against it. So it is largely intangible … and strategic" Manger Aw - "I think if a company thinks very carefully, I think intangible measures are ones that should be taken into account, because reputation is worth a lot of money" Manager Ac	- "Financial returns are minimal at this stage" Manager Ax - "we have not run it as a venture fund, for example, the way that companies like Lucent did, then we are not running it like a venture capitalist. So we aren't measuring the financial performance of our investment in it. So we can't say whether it is giving a certain rate of return. That is not possible"… "The company that we now have in Canada (outcome from the ACV initiative) is one that we have in a strategic area, both geographically and in terms of the business that it does. And it is now probably about… about 20% of the turnover of the business unit, of that division, comes from that Canadian activity. So it is a significant financial contribution that is making" Manager Aw

[66] Corporate Annual Report, 1999, Director's Report, p. 16

[67] Corporate Annual Report, 2000, Chief Executive's statement, p. 7 and p. 22

[68] Promotional material on the ACV initiative, as provided by Manager Ax during the interview – in 2005, at the website of the ACV initiative it was mentioned that "since June 1997…we have taken 550 ideas forward and developed detailed plans for 70 potential spin-outs"

5.2.2.3.2 Learning outcomes

The involvement in CV activities through the ACV initiative appears to have generated learning for both the individuals involved in the initiative, as well as for the corporation. The knowledge gained was around the venturing and entrepreneurial processes the initiative introduced, as well as around the implementation of CV activities within Corporation A. Table 5.11 summarises indicative quotes of the learning occurred.

Within the ACV team, each individual argues that he/she gained significant exposure and experience in running the day-to-day activities of the unit, as well as in the constraints and peculiarities in developing social networks internally and externally to the corporation. Sourcing new ideas appears to have been one of main capabilities the ACV team had developed. The personal development of the unit's team members in CV activities of this type was according to Manager Ac beneficial for the corporation, as they were becoming the *"ambassadors"* of the CV initiative and of the new organisational culture. However, the low number of corporate individuals involved in the ACV team created only a controlled and small momentum in disseminating their knowledge to the rest of the corporation.

This is part of the critical view Manager Am takes towards the learning the corporation has gained from the involvement in CV activities through the ACV unit. She argues that even though some individuals gained significant knowledge and experience through it, this knowledge was not formally disseminated within the corporation. The data indicate that the ACV unit's experience in CV activities was not formally considered in the latest strategic review the corporation carried out, as it was carried out by external consultants and the individuals with the CV experience were not involved, missing out the opportunity of incorporating their knowledge in the corporation's strategic planning.

The areas where the corporation has gained significant knowledge are according to all interviewees related to: (a) conducting CV activities, and (b) dealing with externally sourced ideas. Manager Aw argues that one of the most important lessons that has been learn is that there is no one single business model to carry out CV activities. The selection of the actual business model needs to meet the fit between

Table 5.11: Learning and the ACV initiative

Constructs	Quotes	
	Within the ACV unit	Across the corporation
About the ACV initiative' processes	- "I think we've learned sort of like inside the team, we've learned where to source the best ideas and initially it was a free for all you know anybody with any idea that remotely fits with [Corporation A] and we spent a lot of time going through completely irrelevant ideas and dealing with people, individual inventors that are really quite difficult to deal with and time consuming and we would have been much better focusing on specific investment networks and academic institutions and small to medium enterprises for ideas" Manager Am	- "I think the businesses are learning how to make best use of it (the ACV initiative), how they can benefit from it" Manager Ax - "I think probably learnt much more about needing to work together but needing [the ACV unit] to work more closely with the businesses to decide what ideas are needed and also it didn't come from our experience with [the ACV unit] but we've just learnt over the years that we need to be much better at planning and planning about where new ideas fit into our strategy. There's been quite a lot of learning around the growth process to and how we need to make that work for our organisation" Manager Am
About CV	-" I think well I'm certainly learning a lot" Manager Ax - "I think that has been good training, but there has only been a few of them (team members of the ACV unit). But I think they have acted as ambassadors" Manager Ac	- "we've learned that actually new ideas are actually quite a high risk and our strategy must be focused on developing our existing business and things that we know much more than focus on developing new ideas and I think yes that that's a sort of corporate learning that's happened or that sort of element" Manager Am - "There hasn't really been a formal dissemination of learning and in fact there's not really been a formal review of learning. We tend to use consultants for strategic review every few years and certainly I don't think that [the ACV unit]'s activity featured as part of the strategic review last time which was probably a couple of years ago … well as it had featured in previous strategic reviews. I think it is that the learning is used but it just hasn't been disseminated and I think it's actually you know as I was saying the learning about planning and strategy hasn't been through our [ACV unit] experience, but putting those experiences together has been the way that its disseminated, that's the way that it's been utilised but there have been opportunities to bring the learning together" Manager Am - "we have got a lot of experience now I think, and it is helping us develop the business" … "we have learnt from the whole process is that there is no single model that is right, you know, each idea you have to look at and develop the appropriate business model for it, depending on what the idea is "Manager Aw

the idea and its requirements to be developed. Manager Aw argues that one of the conditions to actually create value for the corporation and commercialise successfully the idea was the flexibility with regards to selecting and adopting an appropriate model. Dealing with externally sourced ideas made the corporation aware of the need to work closely with the ACV unit and consider its operation as significant. According to Manager Am, the exposure to this type of CV activities made the corporation more aware of the risk involved and of its differences to developing internally sourced ideas.

5.2.2.3.3 Impact on venturing activities

The positive strategic contribution of the ACV unit to the corporation had created a positive perception towards such a conceptualisation of the CV activities. Table 5.12 summarises indicative quotes on the perceptions of the interviewees on the impact of the ACV unit on the CV behaviour of the corporation.

Table 5.12: Impact of ACV unit's on CV activities within the corporation

	Quotes
Manager Ax	- "I think we have got a successful process of actually managing ideas coming in and then being kind of distributed to the relevant businesses, the whole process of non-confidentiality, confidentiality, arranging meetings, things like that. I think that's a very good process. I think we are getting there, actually working [the ACV unit] into the business strategies of the different businesses so I think you can call that a success. Certainly on the technology monitoring side, we identify a lot of technologies, idea which were otherwise not on the radar of the businesses. Failures of [the ACV unit] are probably that it is not autonomous, it hasn't got sort of the authority to approve investments, take things further and it didn't always have the full support from all the businesses"
Manager Am	- "I think that there would probably be potentially more awareness but whether there would actually be any more effect I don't know but there might just be, because it had a higher profile it might, you know people might sort of feel you know what the route for corporate venturing is. I think there's probably more recognition that of what corporate venturing is and how it's done really and what constitutes corporate venturing and as I say there is an element already of corporate venturing activity within the businesses"
Manager Aw	- "it is just part of trying to find different ways of growing the company"
Manager Ac	- "so far as it is still going and it is continuing… it has now become the norm"

Managers Aw and Ac argued that by 2003 the ACV unit was fully integrated into the corporation and its business model and processes were not necessarily referred within the corporation as a "*corporate venturing activities*", but rather as part of the mainstream corporate activities. According to Manager Am the positive experience from the ACV unit had increased the level of awareness and familiarisation around

CV activities and their requirements within the corporation, especially at the first years of the unit's existence.

Manager Ax, as the current Managing Director of the ACV unit argued, that the unit has evolved successfully, having developed significant networking competences. However, she could identify that the way the CV activities have been approached have restricted its venturing potential and to become a strong business entity within the corporation. The lack of autonomy in carrying out investments and growing potential ventures is perceived by Manager Ax as a failure of the way the ACV initiative was approached and organised. Manager Am also shared a similar criticism. Their reaction may be explained on the basis that both managers would have liked to have more operational autonomy.

5.2.2.3.4 Impact on corporation

With the inability of the ACV unit to contribute financially to the corporation's *"bottom line"*, its main impact is restricted to its contribution in changing the image of the corporation to its internal and external stakeholders, and in changing the organisational culture and innovation processes. The use of a logo using the word *"innovation"* to describe the ACV unit was an illustration of the turn the corporation was taking after 1996 and the main trait of the new organisational culture. All interviewees recognised that Corporation A was building an innovative reputation in the investment community and among entrepreneurs, and among its employees. According to Manager Ac, this was not simply a communication trick, but progressively the corporation had gained significant experience and expertise in dealing with externally sourced innovation, reinforcing its flexibility and creativity in its innovation processes:

> *"I think in terms of allowing us to access ideas from a wider pool, if you like not just our own ideas that has been important. The impact has been, in terms of allowing us to then develop new areas of activity and give us a more formal way of evaluating ideas a more controlled, measured process for deciding whether ideas are important to follow or not" Manager Aw*

Otherwise, Manager Am argues that the impact of the ACV unit on the corporation could have been characterised as insignificant, on the basis of its small size and its treatment from the core businesses as an ad hoc activity:

"My own opinion would be that ... if you took [the ACV unit] out now, if you closed it down now, it probably wouldn't make a huge difference to the level of corporate venturing activity" Manager Am

Examining whether the ACV unit had an impact on the corporation's strategic context, all interviewees argued that this was not the case due to the approach taken towards the CV initiatives to operate as facilitators of the corporate strategy, rather than its challengers:

"the corporate venturing activity, i.e. [the ACV unit], has changed, or had to change to reflect the future business needs of the company. So as we have acquired new businesses and expanded businesses, we have taken that change in profile on board, conversely, as we have divested businesses, we are no longer interested in ideas in a certain area. So what it has influenced obviously is the search, and therefore the answer to that question 'does it fit with [Corporation A']? So basically the corporate strategy or the business development strategy has impacted on [the ACV unit], rather than the other way round" Manager Ac

5.2.3 Case summary

Corporation A's Executive Chairman was the driving force of the corporation's involvement in CV activities. As part of a more broad organisational restructuring process, the ACV unit was initiated to internalise external business opportunities and to facilitate a cultural change among corporate managers. As a new initiative, the unit's role was diffused during its initial years, while its services were exploited at an *ad hoc* basis. Even though the unit had achieved high levels of relatedness to the rest of the corporation, it did not manage to financially contribute to the organisation besides its positive contribution to business development. As the corporation evolved and its strategic intent crystallised, the ACV initiative found its operational and strategic fit to the corporation. The initiative's survivability is credited to the political support it enjoyed from the Executive Chairman

5.3 CASE STUDY OF CORPORATION B

5.3.1 Introduction to Corporation B

Corporation B is a leading telecommunications company with a £18,727 millions group turnover employing 104,700 people around the world with 96,300 based in UK[69]. The interviews were conducted in summer 2003, three and a half years after the BCV unit (Corporation B's first CV unit) was created. The relatively brief involvement of the corporation in CV activities attracted the attention of the VC market and the media. In early 2003, following an organisational restructuring and a change in the corporation's approach towards CV activities, the BCV unit spun out but continued to maintain an active relationship with the corporation.

5.3.1.1 Company background

Corporation B, being privatised in 1984, serves both individual customers and corporate clients, mainly in the UK as well as internationally. With its business operations dependant on communication technologies, the corporation had been committed to R&D to ensure a technological edge in providing its customers and clients with advanced communication services. This was reflected with the establishment of an industrial park employing almost 5,000 scientists, creating an important portfolio of over 15,000 patents and managing a R&D budget of £268 million in 1999. In the late 1990s, the emergence of the Internet and data communication technologies, combined with the progressive deregulation of the domestic and international markets created a very concentrated and competitive environment for the corporation, putting pressure on its performance. Corporation B was fast to react to the opportunities these changes were creating, by incorporating the application of the Internet in its operations and by entering the European and American market through partnerships. The strategic objective of Corporation B was twofold: to become a leading player in the global telecommunications sector and to capitalise on the advances of technology.

[69] Corporate Annual Report, 2003

5.3.1.2 Setting the venturing scene

While the corporation was gaining access in international markets creating a global brand name, internally the pressure was still significant on the technology side. Shareholders were critical of the corporation's inability to capitalise on intellectual property (IP), especially when it became public knowledge that the corporation had missed out the opportunity to commercialise patents which could have made a significant contribution to the corporation's net value. The corporation did not consider its IP of high-tech patents as a source of value, but more as a technology provider to its core businesses.

An internal audit in 1997 revealed the significant number and level of technical sophistication of patents within R&D division (BRD division) of the corporation and the absence of value creation from them. The CEO of the BRD division and the Chief Executive noticed that these patents carried their own value which could be realised through their commercialisation. This could have been achieved via two paths: patent licensing or incubation. While the corporation had some experience with the first option, the incubation of internally identified technology ventures was a new area to be explored. The business model of internal CV was chosen by the CEO of the BRD division to be the most appropriate to explore the incubation of new technology ventures and in 1997 the first CV activity was attempted. In 1998 the BCV unit was established to formally carry out CV activities. After 2002, other core businesses of the corporation initiated their own CV initiatives.

The founder and the Head of Business Development of the BCV unit were interviewed providing direct insight into the unit's operations. Another two corporate managers involved with the CV activities within the corporation were also identified as key interviewees contextualising the activities of the BCV unit. The first manager was working in the commercialisation of new technologies unit of the BRD division and later on with the BCV unit. The second corporate manager was involved in the CV activities of the BRS division[70]. Table 5.13 summarises the characteristics of the interviewees, both core and peripheral to the BCV unit.

[70] This was one of the three core divisions of Corporation B

Table 5.13: Interviewees' attributes: Corporation B

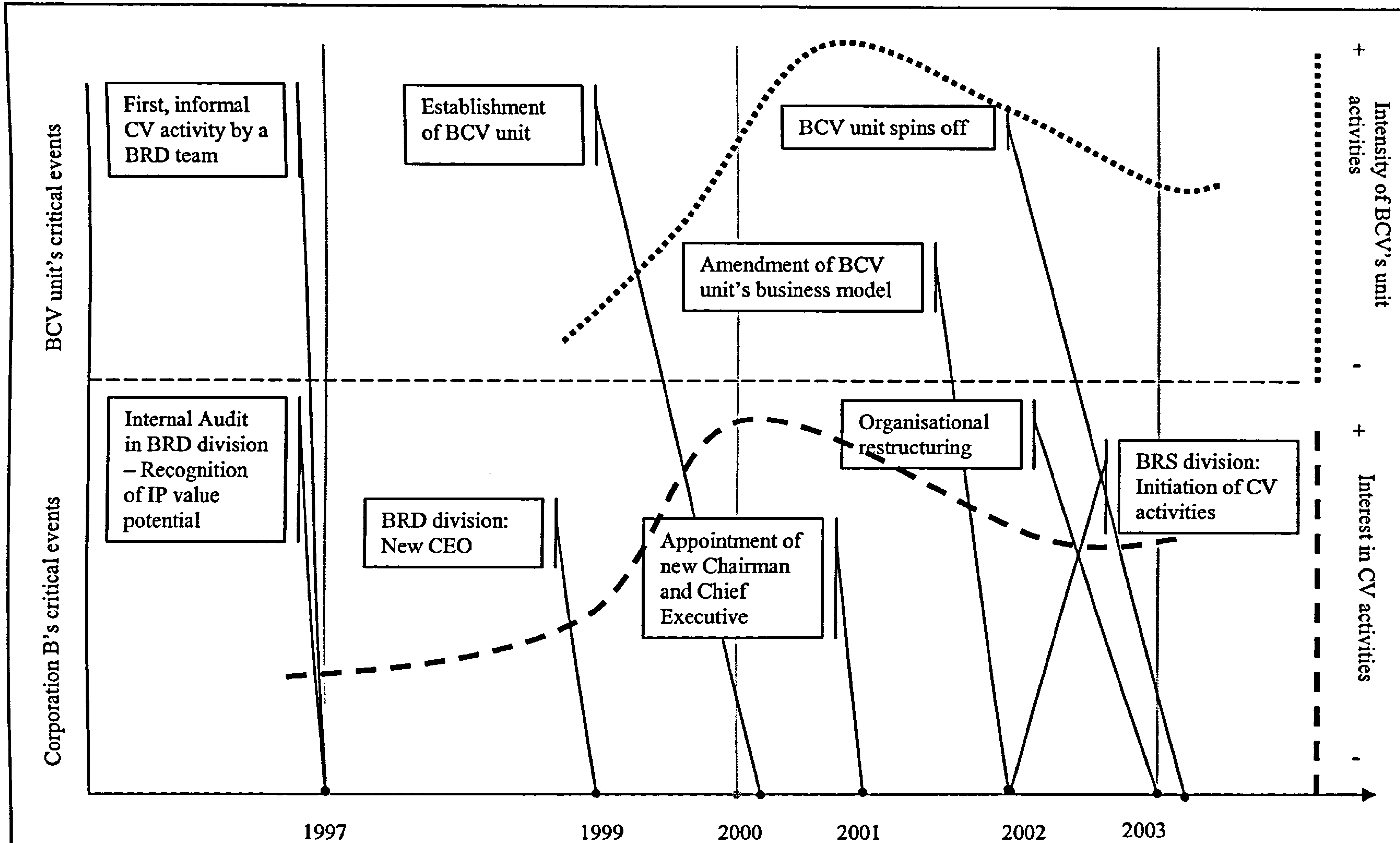
Attributes	Interviewee A	Interviewee B	Interviewee C	Interviewee D
Code name	Manager Bb	Manager Bm	Manager Bh	Manager Bc
Gender	Male	Male	Male	Male
Association with BCV unit	Founder and champion of BCV unit	Head of Business Development of BCV unit	His team merged with BCV team after 2000	Consulted the BCV team in setting up the CV team of BRS division
Core responsibility	Establish and manage BCV unit	Develop new business within the BCV unit	Deal with external investors	Venture Support and Acquisitions
Time of involvement in CV activities	1999- time of interview	2000- time of interview	1997- time of interview	2002-time of interview
Employment background	Joined Corporation B in 1967	Started his career in Corporation B as scientist, left the corporation to develop his own ventures and re-joined in 2000	Joined Corporation B in 1985 as a scientist and then in commercialisation of technology	Corporate manager

5.3.2 Corporate venturing in Corporation B

The progressive interest of the top management of Corporation B in the *"hidden value"*(Manager Bb) of the *"natural resource"* of IP within the BRD division after 1997 initiated a series of changes within the corporation influencing the involvement in CV activities. Figure 5.3 provides a chronological representation of the BCV unit's and the corporation's critical events between 1997 and 2003. The figure is separated into two parts. In the upper part, the life cycle of the BCV unit is presented, with the dotted line demonstrating the intensity of its activities. The lower part outlines the critical events occurring within the corporation, with the dashed line illustrating the evolution of the corporation's interest in CV activities.

Following an internal audit of the IP of the BRD division of the corporation in 1997 its newly appointed CEO in 1999 was keen on achieving two objectives: (a) transforming the division from a cost centre to a division contributing to the *"bottom line"* of the corporation, and (b) creating a commercial outlook for its industrial park and its people. The commercialisation of the division's patents was the vehicle to achieve both objectives, and one of the means employed was the establishment of the BCV unit within the division in late 1999, appointing Manager Bb as its champion. Even though some CV activities were carried out informally in 1997 from a commercialisation team of the BRD division, the establishment of a distinctive CV

Figure 5.3: Chronology of critical events in Corporation B and in the BCV unit



unit incubating internally developed business ideas formalised the interest the corporation was taking in CV activities.

The macroeconomic decline in 2001 and 2002 negatively affected the performance of the BCV unit's activities. Manager Bb responded to the crisis with an alteration to the BCV unit's business model in 2002, while launching the first ventures in the market. In 2003, following a major organisational restructuring, the corporation decided to re-focus the activities of the BRD division in working "*with the [Corporation B's two core] businesses to help them deliver new and innovative applications, products and services to their customers*"[71]. The new strategy for the BRD division negatively affected the degree and type of involvement in CV activities through its incubating BCV unit:

> *"[BRD] has gone through a period of evolution over the past 4 years ... in that it was wholly focused on [Corporation B] and research and venturing was a small part, to something about 2 years ago when venturing was very important, to the position now where it is less important that we are more focused as an organisation on delivering products and services to the rest of the business" Manager Bh*

The change of interest towards the BCV unit's activities was expressed with a significant decline seed funding of its operations, forcing Manager Bb to look for funds outside the corporation. In April 2003, the BCV unit spun out to form an independent CV company with an external partner, in which Corporation B maintained a minority stake. A new relationship emerged between the BCV unit and the corporation, with the first having "*exclusive rights to create new start-ups businesses with [the BRD division]*" by purchasing "*the majority of the existing portfolio of technology ventures developed by the [BCV unit]*"[72].

5.3.2.1 Formation of the BCV Unit

5.3.2.1.1 Approach towards CV and Initiation process of the BCV Unit

In 1999, the CEO of the BRD division had a clear vision on dealing with the division's IP. Besides aiming at generating value out of it, it was important for him to establish a commercialisation process and mentality within the division. Considering

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[71] Corporate Press Release in January, 2003

[72] Corporate Annual Report, 2003

possible paths to extract value out of the patent portfolio of the corporation, the CEO of the BRD division approached Manager Bb in December 1999 to lead the establishment of a CV team. Corporation B did not have a significant experience in CV activities, apart from some attempts in 1997 from a commercialisation team within the division. Manager Bb, between December 1999 and April 2000 when the BCV unit was launched, contacted and spent time with key scientists in the labs of the division's industrial park, trying to understand their expertise and the business potential of the intellectual property that was being created. The feedback from the meetings of these four months was that:

> *"we had lots of ideas, but what staggered me was these were people with PhD's, they seemed to be very confident about their subjects, but if you asked them to talk about their own idea, they got embarrassed, which was interesting" Manager Bb*

It was this kind of feedback that critically influenced the approach that Manager Bb took towards CV. However, there were some constraints to realising and extracting this *"hidden value"*. The inability of the scientists to identify the commercial opportunity behind each research project, combined with the lack of a commercial mindset, had to be managed effectively by the proposed CV unit. The approach taken towards CV appears to be associated with the focus of their activities, as indicated by the definitions and perceptions used by the interviewees towards CV (Table 5.14).

Table 5.14: Definitions and perceptions towards CV in Corporation B

Interviewee	Quotes
Manager Bb	- "So that was the premise if you like of saying the hidden value, the trick though of course was to take those technologies, find a market for them, find a route to market, find a mechanism to get into market, we decided the best way to do that was to create businesses around them, and hence our model was about creating hi-tech businesses"
Manager Bm	- " the idea was to basically realise value from patents and [the BCV unit] was just another vehicle for realising value" - " you need to build a method for extracting value yourself, rather than just wait for somebody to stumble across it, and that these oil rigs that I was talking about, and corporate venturing in all the different ways you can imagine it, is the oil rig"
Manager Bh	- "Our definition is ... normally we make a non-financial investment, usually intellectual property, but surrounding that there are people who invest in us, time and energy as well as trying to gear our channels and supply routes"

Even though the definitions used by the three managers are not identical, they described CV as the mechanism that extracts value from the internally developed IP. The focus of the CV activity was the patents characterised as the *"natural resource"* of value existing within the corporation. The data also indicate that the way CV was perceived within the BRD was part of a commercialisation and innovation process. The intended outcome of this process was the creation of new ventures using external funding and launching them in the market. The CV activities were not associated with the concept of a financial investment, but rather with the method of creating new ventures.

However, the approach towards the CV activities of the division was amended in early 2003, as demonstrated by the spin out of the BCV unit. Even though the corporation and the BRD division were still enjoying the positive aspects of the involvement in CV activities (i.e. commercialisation of technology), it was decided that the capital requirements of an internal approach towards CV was not the appropriate one for the corporation. Following this review, the top management team adopted an external approach to CV activities, spinning out the BCV unit, but maintaining a 23% minority stake in the new entity created. The BCV unit's management team identified an external partner, a venture capital firm, to co-invest in the business entity, leading to an amendment of the relationship between the CV unit and the corporation.

The time lag between the initial discussions between the CEO of the division and Manager Bb about the involvement of the corporation in CV activities and the formal establishment of the BCV unit was relatively short. This can be explained by the urgency, as well as the clear vision the CEO of the division had with regards to the involvement in CV activities. The initiation process of the BCV unit appears to be comprised from three main phases:

(a) ***the discovery phase***: identification of internal opportunity and identification of appropriate CV model to be adopted;

(b) ***the justification phase***: validation of the need to establish a CV unit at the corporate board; and

(c) ***the launch phase***: formalisation of the unit within the division and assignment of objectives and processes to the unit

There are similarities between the sequence and notion of these phases and the ones followed in preparing and executing a business plan. Table 5.15 summarises the

Table 5.15: BCV initiative: Initiation Process – Phases, events, outcomes and actors involved

	Discovery Phase	Justification Phase	Launching Phase
Events	**1999**: New CEO appointed for BRD division – strategic priority the commercialisation of division's IP **Dec 1999**: Manager Bb approached by the CEO of BRD to lead the discovery of the *"hidden value"* in the industrial park **Dec 1999 – Early 2000**: Manager Bb starts talking with scientists in the labs and observes their behaviour towards the commercial aspect of their research projects	**Early 2000**: Manager Bb introduces the idea of the BCV unit at the BRD Board and to the Chief Executive of Corporation B The justification phase lasted only for 4 months The rationale the new unit was to serves was: - to create value for the division to finance the existing research activities - to create a more commercial outlook for the research people of the division - to create commercialisation processes for the division	**April 2000**: The BCV unit is launched serving two roles: - setting up an incubation process for the division - enhance awareness of the BCV unit, its operations and incubation process within the corporation
Outcomes	Managers Bb's feedback to the CEO of BRD was: - there is value in the volume and quality of patents - the scientists are frustrated that their work is not valued - there are no processes in place to commercialise existing or future patents The decision to create a CV unit is taken	The creation of the BCV unit is approved by the Board Manager Bb becomes the leader and the founder of the CV unit which is called BCV	BCV unit starts operating The first scientists started approaching the BCV team
People involved	CEO of BRD division Manager Bb	Manager Bb CEO of BRD division Chief Executive	Manager Bb BCV team members
Time length	3-6 months	4 months	2-3 month

main events and outcomes of each phase, as well as the people involved. The support from the top management team is indicated by the participation of the CEO of the BRD division at the discovery phase, as well as his authorisation of the initiation of the BCV unit's proposed business model in the justification process. The Chief Executive was aware of the initiation of the BCV unit and, as argued by Manager Bb, *"it was certainly blessed by [the Chief Executive] and [the CEO of BRD division], who were senior guys"*. Throughout the initiation process, Manager Bb was the main individual who shaped and championed the approach taken towards CV, as well as its business model. Managers Bh, Bm and Bc identify him as the leading figure of the CV initiative, referring to his decision as the catalyst in the way the business model and the incubation processes of the BCV unit were proposed and implemented. This is further supported by the way Manager Bb self identifies his involvement in all events of the life span of the BCV unit throughout the interview.

The timing of the initiation and the formation of the BCV unit can be explained considering the situation created within and outside the corporation in the late 1990s. There appears to be a mixture of both internal and external factors that contextualise the involvement of the corporation in CV activities. Internally, the scientists were frustrated due to the lack of commercialisation processes and rewards of their technological output. Externally, the emergence of a euphoric *"entrepreneurial environment"* in the sector and in other technology-intensive companies, rewarding innovation and technological expertise, was appealing to the frustrated scientists of Corporation B.

Table 5.16 summarises relevant quotes the interviewees provided in respect to motives and rationale behind the involvement of the BRD division in CV activities. The data indicate that the involvement in CV activities was considered among other IP commercialisation options between 1997 and 1999. However, in 1999, the involvement in CV activities was selected on the rationale that: (a) the option to license patents was not appropriate to deal with the volume of the patents produced in the labs (*Manager Bm*), (b) the introduction of CV as a method to commercialise patents and create new ventures was a more *"positive way"* to exploit value than patenting the ideas coming out of the labs (*Manager Bm*), and (c) the creation of new ventures through the BCV business model was anticipated to create new customers and markets for the corporation (*Manager Bb*).

Table 5.16: Justification and validation of CV involvement by Corporation B

Constructs	Quotes
Rationale	- "Because the CEO [of BRD] decided … he believed there was hidden value, and we could trade more money from that which would help to pay for the original research, and the second one was he thought it would be absolutely great to introduce a much more commercial feel to the lab, which before that felt a little bit like a university, rather than a commercial" Manager Bb
Motives	- "we were creating an awful lot of patents, 15,000 I should say …only a very small proportion of those patents and the actual technology we worked on, never went into a product" Manager Bb - "because when you have 14000 patents and a strong culture of ….there was no chance that these would all be …would get commercialised" Manager Bm - "There was a great frustration with the scientists in not seeing a way that their technology could be exploited. Also a great frustration that they… weren't being rewarded for their innovation" Manager Bh - "there was an opportunity here that there was relative pressure from the top and from the bottom to do it" Manager Bm
Intention	- "In fact the biggest piece of that ….was to make [Corporation B] an intelligent purchaser, the buyers [who by] understanding the technologies that were coming along, (because) that would make the next supplier and therefore create new products" Manager Bb - "So [BCV] was born effectively to change the culture and break the mould…[to] break through some of the bureaucracy that surrounded [the industrial park]" Manager Bh - "we wanted intellectual property, we wanted patents, we wanted something that gave the business a sustainable, well sustainable is wrong, but an advantage that which would have to be built on" Manger Bm

All managers agree that the involvement of the corporation in CV activities was not done for *"the sake of doing corporate venturing"*, but CV was appropriate for the division's objectives, and for the particular market they were operating in. The core motives behind the involvement in CV activities are strategic and economic (the creation of value), cultural (the change of scientists mindset and management of their frustration) and operational (the elimination of bureaucracy within the industrial park). The intention of being involved into CV activities complemented these motives by aiming to create a competitive advantage for the corporation on the basis of its IP, and by creating a more commercial organisational culture within the division. Choosing CV over other IP commercialisation options was perceived as beneficial for the corporation due to its capacity to release commercialisation processes and cost efficiencies. The data also indicate that the justification process, as well as the overall initiation process, was relatively formal. Manager Bb carried out an internal audit to identify the appropriate approach towards CV and the appropriate CV business model. He presented and justified the viability and feasibility of the new business initiative at the Board, prior to its launch.

5.3.2.1.2 The BCV unit and relationships with other venturing activities

The strategic context of initiating the involvement in CV activities and forming the BCV unit is closely associated with the strategic direction the BRD division took in 1997. Manager Bh argues that the involvement in CV activities was viewed as an implementation tool of the division's strategy:

> *"we have this strategy, and then whether it is corporate venturing, whether it is licensing, whether it is exploitation in-house, are all used as tools ... we do not do corporate venturing for the sake of doing corporate venturing. It is because it is appropriate for that particular technology, in that particular market, at that particular time. So strategy will always come first, and this is a logistical way of implementing that strategy" Manager Bh*

Carrying out CV activities through the BCV unit's business model was one of the options the BRD division was experimenting with. The BCV unit's business model, as proposed by Manager Bb, aimed at the identification of IP patents within the labs of the industrial park and at their incubation into autonomous ventures. These objectives would have been facilitated by establishing novel for the corporation incubation processes. Corporate managers were involved in the process by becoming venture managers, driving their growth and exit to the market. Table 5.17 outlines the main attributes of the entrepreneurial process introduced by the BCV unit.

One of the main characteristics of the BCV unit's business model is the absence of strategic attachment between the created ventures and the corporation:

> *"There was no rule that I had to, if this business suddenly became great, lock it back into [Corporation B]. We very much took a view that the businesses had to float on the market place, and would only survive if they could survive in the market" Manager Bb*

Even though the incubation and commercialisation processes used by the BCV unit had a strategic significance for the division and the corporation, the new ventures created were developed with the intention to stand as autonomous business entities outside the corporation. The corporation was responsible for incubating the venture and after its commercial launch maintained only a minority stake to the new entity. The investment focus and the objectives of the BCV unit remained the same throughout its life cycle, determining the entrepreneurial/incubation process the unit

Table 5.17: Characteristics of the BCV unit's business model (in 2002)

Characteristics	BCV business model
Focus of investment	- Intellectual property that had or had not yet been patented - Early stage technology with applications in orthogonally related sectors
Objective(s)	- To incubate and to develop internally developed business opportunities
Funding	- Corporate funding to identify and to incubate patents - External funding (VC) to accelerate and spin out the business
Source(s) of ideas	- Existing corporate patent portfolio and business ideas from the research personnel of the BRD labs - Market opportunities
Investment sectors	- Information and communication sector
CV process	Comprises of 6 stages: 1. Informal Idea 2. Idea development 3. Business Proposal development 4. Business Development and Build 5. Business launch 6. Business transition
Idea identification	- Personal, informal contacts with BRD division's scientists - Links with Universities and other strategic partners
Process of idea evaluation and development	1. Business idea identification and development involving the researcher 2. Assignment of mentor from the BCV team to develop the idea into a business opportunity 3. Prototype description and IPR application 4. Identification and description of market and competitors 5. Valuation of investment and identification of potential sales (£10K - £50K)
Business proposal	1. Business Development plan created (IPR review, market analysis) 2. Presentation of proposal at external advisory board 3. Presentation at BCV advisory board to agree on budget 4. Assessment of incubation stage (timescales, costs and resources) 5. Incubation stage starts
Business development and build	1. Market Testing phase – Budget: £10K - £50K - Market analysis (market, value proposition, pricing and revenues, customers, suppliers, channels) - Business proposal update
	1. Concept Proof – Budget: £30K - £80K - Testing of marketing strategy and assumptions - Development of Product development plan 2. Draft Business Plan 3. Feedback from customers, suppliers, investors, channels 4. Detailed financial model 5. Identification of Business champion and management team
	1. Initialisation of product development – Budget: £80K - £300K 2. Development of investment case
Business launch	2001 - Spin out: external fund has been identified 2002 - Acceleration: the market is temporally closed, external investors cannot see the value yet, the value can be grown at relatively low investment

was using to identify, screen and develop business opportunities from the existing pool of IP patents within the division, as well as developed technologies which were not patented yet. The ventures that the unit was developing were targeted to operate in the same sector as Corporation B and in already developed markets with existing customers and competitors. The BCV team were not willing to invest in non-developed markets, as this would have increased the risk and the uncertainty of their investment.

The entrepreneurial/incubation process followed by the BCV team was very well documented, quite formal and detailed, and in alignment with the objectives of the involvement in CV activities. Each one of its stages and phases is characterised by a series of milestones which each venture had to meet to eventually be launched. The volume of the investment and number of people involved increase as the business idea meets each milestone and is promoted to the next stage of the incubation process. The data indicate that there were four categories of criteria defining these milestones: (a) the market potential, (b) the value generation potential, (c) the IP advantage, and (d) the time requirement of the business idea.

The market potential criterion was mainly focused on exploring the strategic expansion of the market geography and product portfolio the corporation would have gained by investing in an idea and the significance of the brand association between the new venture and the corporation. The value potential criterion explored the sales and revenue potential in comparison to the anticipated development cost of the business idea, anticipating the future value of the venture to reach £50 million in 3 to 7 years. The IP criterion explored the technological advantage of the business idea, the scientists, and the management team of the venture. The time criterion explored the time requirements for developing and exiting the venture. With the BCV unit investing in early stage technologies, the last criterion was critical for two reasons: (a) only a third of the new technologies developed had a commercial potential, and (b) the timescales for an idea to be developed to an end-product was lengthy. The priority among these four categories of criteria was amended as the idea moved from one stage to the other, with the commitment and the volume of investment increasing, as the risk involved in each business idea was decreasing.

The main change in the incubation process occurred in 2002 and was related with the launch strategy of the created ventures. Following the macroeconomic slow down of technology related investments in 2001, the emerging scepticism among VC companies on early stage technology investments, and internally the increasing lack of seed capital to fund the incubating ventures, Manager Bb introduced an accelerating business model. Its rationale was to spin up incubating ventures which still required funding and management within the corporation. Senior managers were allocated to grow and drive five ventures to revenue. Manager Bm identified this amendment as an element of the BCV unit's entrepreneurial behaviour, responding to environmental changes and the requirement of its venture portfolio.

While the BCV unit's entrepreneurial/incubation process was taking shape and was formalised, the unit and the team of individuals working for it started to become an entity of its own within the corporation. A social identification process started to occur with the BCV unit developing a unique identity and brand name, its own capabilities, processes and procedures. Part of these processes was the introduction of cultural forms, practices and processes which aimed to symbolise and facilitate a *"entrepreneurial attitude"* on the behalf of the unit, as argued by Managers Bh and Bb. The adoption of a physical environment that enhanced creativity, the adoption of an informal and casual method to brainstorm, the personal involvement and encouragement of the scientist at the initial stages of the incubation process to identify business opportunities, the allocation of time in maximising the potential of each idea, the adoption of an interactive communication between the scientist and the BCV team in order to identify the business potential of an idea are a few of the practices used. All these practices acted as the stimulus to facilitate a change of attitude towards commercialisation and to make the scientists proactive and able to identify opportunities.

Moreover, the development of these processes facilitated the attachment of the BCV unit's employees to the team, reinforcing their distinctiveness from the rest of the division. The BCV unit's employees started to become aware of the unit's capabilities with regard to the effectiveness of the incubation process and the efficient internal networking practices they had developed. Manager Bb argues that one distinctive characteristic of his team was the emotional capacity existing among its members, expressed as passion towards innovation and commitment to the team's tasks and objectives. The brand name of the BCV unit became synonymous with the novel processes they were introducing.

While this was what was happening within the BCV unit, the interviewees appear to be aware of the perception created about the unit within and outside the corporate boundaries. Manager Bh argues that the introduction of the BCV initiative received both enthusiasm and scepticism within the BRD division. Managers Bb and Bm were also aware of this. The scientists initially hesitated in approaching the BCV team and introduce their ideas, as it was still a non-familiar process for them and they had to do in their spare time. However, after a few months of familiarisation and after some cases of business ideas were processed, the scientists welcomed the new initiative.

The strong group identity attached to the BCV unit does not appear to have negatively affected its relationship to other divisional teams exploring other technology commercialisation paths. Prior to the establishment of the BCV unit, there were three informal teams within the division dealing with commercialisation and venturing processes, allowing experimentation and exploration to occur. One team was interested in licensing already developed patents and Manager Bh was working initially for it. This team merged with the BCV team, being responsible for dealing with the investors. A second team was formed in 1998 and was interested in carrying out CV activities by investing in external start up companies. The activities of the team were stopped in 1999. A third team was based in Silicon Valley and was interested in identifying trends in technologies and in the markets. The leader of the latter team became in 2001 the director of the venturing activities in the BRD division.

These three teams are portrayed as informal and experimental pre-successors of the BCV unit. While there was not a formal collaboration between these teams and the BCV unit, the individuals working for them collaborated informally[73], as synergies were emerging regarding the identification of capabilities and business opportunities. This level of collaboration can be explained considering the operational overlap among the three teams. In 2002, when the BRS division started to become involved in CV activities, Manager Bc argues there was no similar collaboration or exchange of expertise between the BCV unit and the new CV initiative. This is explained by

[73] For example, Manager Bb knew and had collaborated with the leader of the second team prior to setting up the BCV unit's incubation process.

the different purpose and approach that was adopted by BRS division towards CV. Manager Bb was sitting at the advisory board but there was only an indirect relationship between the CV activities of the two divisions.

5.3.2.2 Implementing the BCV initiative within Corporation B

The way the BCV unit was organised, in terms of the resources and the people involved, was chosen in order to facilitate its role, while its relationship with the rest of the corporation was a reflection of the change the BRD division's CEO wanted to create within the division.

5.3.2.2.1 Organising the BCV unit

The distinctive character of the BCV unit, as described in the previous section, was further supported by the way its team of individuals was composed and operated. As part of the initiation process of the involvement in CV activities, Manager Bb identified individuals from within and outside the corporation to join the small team he formed. Two sub-groups of individuals worked for the BCV unit: (a) *a core group*, supervising and executing the incubation process; and (b) *a peripheral group*, participating in some of the stages of the incubation process. Managers Bb and Bm were members of the core team, while Manager Bh and various scientists from the BRD division were members of the peripheral team. Across these two groups, three more teams were formed in accordance to the needs of the BCV unit's incubation process (discovery, incubation and funding teams). A technology manager was responsible for the discovery team, with key participants being the scientists and Manager Bb. Manager Bm was the leader of the incubation team, in which the identified venture champions to lead the ventures had a key role. Manager Bh was a key participant in the funding team, with Manager Bb being the leader. Table 5.18 provides indicative quotes with regard to these teams of individuals, as well as on their characteristics and responsibilities.

Table 5.18: People involved in the BCV unit

Constructs	Quotes
Size of team	- "[Corporation B] has 10000 people and we were (BCV team) 20" Manager Bb - "4 people on the leadership team (of the BCV unit)" Manager Bm
Roles and responsibilities	BCV unit's champion -"So I had to do two jobs, so I was a board member of [BRD division], but [BCV] team itself was solely looking at venturing" Manager Bb - "[Manager Bb] negotiated that budget with [the CEO of BRD division]" Manager Bh
	Core BCV team members -"Very much business development marketing, very much technology validation, and support of the projects, we had admin staff and support staff as well which helped, so we had effectively technology, marketing, business development, operations and transactions" Manager Bb
Characteristics of people involved	Scientists - "these were people with PhD's, they seemed to be very confident about their subjects, but if you asked them to talk about their own idea, they got embarrassed" Manager Bb
	Venture Champions -"They had to be champions, they had to have passion, they had to find any way they could of overcoming an obstacle. This to me was the key" Manager Bb
	Core BCV team members -"Very strong skills in marketing or technology, those were our two key skills, or good skills in transactions, and also very much key really was that these people wanted to be here" Manager Bb -"it wasn't a place for people doing a 9-5, you really had to be excited in what you were doing, and that was key. This to me was the key, otherwise you know, everyone could be creating businesses every day" Manager Bb -"If all the 300 scientists (of BRD Division) walked in here today, I could probably tell you all their names and what they were working on. So I have got a deep knowledge of the research base and so has [the Chief Technology Officer of the BCV unit], for that matter" Manager Bh -"You need people who can both work in a formal environment and explain processes and systematically evaluate things, and at the same time also be prepared to re-innovate" Manager Bm
Team composition	Internal to the corporation individuals - "[the Chief Technology Officer of BCV Unit] had spent years in the labs, he'd lesson in several start-ups" Manager Bb
	External to the corporation individuals -"the advisory board, it was mainly non-[Corporation B] and was erudite people who had run businesses, created start-ups" Manager Bb
Team dynamics	- "So I work very closely with [the CTO of BCV]. That works very well, because [he] and I have known each other for the past 18 years we joined the company in the same year, we worked in the same group… we are very good friends… we have got a common understanding about technology, so we are in and out of each others offices… he is trying to tell me about the markets and I am trying to tell him about the technologies and that dialogue goes on" Manager Bh

The core BCV team was composed by Manager Bb. His vision of the BCV initiative influenced the criteria for recruiting his team members. He set up a formal recruiting process which remained the same throughout the life cycle of the unit, indicating an element of efficiency. Knowledge-related and behavioural criteria were considered in recruiting individuals from within and outside the corporation. Due to the focus of the BCV unit on early stage technologies, a sound technological and commercialisation background and related skills were emphasised in selecting the members of the unit's core team. The majority of the core team's members were recruited from within the corporation, taking advantage of the interpersonal networking and relationships these individuals had with scientists and corporate managers who potentially could have become venture champions. Behavioural characteristics (commitment to the team and the unit's objectives, emotional capacity, entrepreneurial outlook) appear to be equally important for Manager Bb. He identified the emotions of passion and obsession as critical contributors to the entrepreneurial process, boosting the levels of creativity and personal drive among the individuals. Manager Bm highlighted the positive impact of such emotions to the operations and performance of the BCV team.

The individuals recruited from outside the corporation were mainly involved in the later stages of the incubation process, providing advisory services to the unit. Manager Bb intended to recruit individuals who could introduce a more commercial outlook to the team. The recruitment criteria for this group of individuals were slightly amended, with their VC background and ability to work efficiently within a corporation being more significant. Moreover, the Chief Technology Officer and Manager Bm had worked for the corporation before being involved in venturing activities. In 2000 and 2001 Manager Bb invited them to return to the corporation and join his team. Their prior work experience within the corporation made them familiar with the corporate procedures and technological needs, contributing positively to the team dynamics of the BCV unit.

The clear vision and the strong leadership by Manager Bb led to the creation of a working environment within the unit which allowed cooperation and high levels of trust to emerge. The data indicate that the three teams (discovery, incubating and funding) worked effectively together specialising in their domain, but still allowing a collaborative and professional spirit to guide their activities towards a commonly shared purpose. Besides its small size, there was a distinct hierarchy with Manager Bb identified by all interviewees as the champion and leader of the CV initiative. His role was dual: (a) supervising the incubation process of individual ventures and the progress of the venture portfolio of the unit, and (b) being the main point of contact between the BCV unit and the top management team of the division and the corporation.

His passion for the idea behind the BCV unit and its anticipated outcome was his main driver and motivator in initially being involved and later championing the CV initiative of Corporation B. Manager Bb argues that this emotional capacity should have been the main motivator and incentive for the individuals working for the team and participating in the incubation process. Table 5.19 provides a summary of relevant quotes elaborating on this theme. Besides the emotional drivers, both tangible (equity and stakes on the new ventures created) and intangible (learning and commercialisation skills from participating in the BCV team) incentives have motivated individuals to work for and with the BCV unit. The data indicate that there were two groups of individuals that could have been *"incentivised"*: (a) the venture champions, who mainly were corporate managers and had to leave their corporate position to champion one of the unit's ventures, and (b) the core team of the unit.

Table 5.19: Motivating the BCV team's members

	Quotes
Manager Bb	- "one of the problems I did have which was difficult to do in the corporate, was to get rid of the financial incentive. So it was the reverse of that, these people did this with no financial incentive, so that was interesting as well" - "I would have said that by and large the people in [BCV unit] were not motivated financially or got a share of what they created" -"I have one or two people who wanted to join and asked for pay rises and whenever anybody asked me for any expenditure on [BCV unit], I turned them away. It just told me they were coming for the wrong reasons"
Manager Bh	- "Well we are on the same terms and conditions as the rest of [Corporation B] employees... in a sense that is de-motivating. [Corporation B] has never found very effective way of doing that. I have always taken the view you are either a [Corporation B] employee, or you aren't a [Corporation B] employee" - "It is easy to incentivise the people who leave for the new businesses, and they are going to take all the risk. Whether we need incentivising internally, it is a debate that has raged up and down"
Manager Bm	- "most people were (motivated) because of their entrepreneurial ideas and their belief in their ideas, they were well motivated in that respect, but we also wanted to reward them, and also venture capitalists like to see management teams, or in fact companies owning it, so they worry about the financial performance of the companies. We never sorted out how the people inside the incubator, i.e. the management team would be rewarded"

The provision of tangible (mainly financial) incentives to the venture champions was justified, according to Manager Bm, on the basis of the risk these corporate managers were undertaking by leaving the security of their corporate role. On the other hand, these corporate managers were becoming senior members of the new ventures' management teams. In order to attract external investors such as VCs, it was considered essential for them to own equity stakes of their ventures. It was a practice that VCs were in favour off when they decided to invest in such ventures.

For the individuals working in the core team of the BCV unit, intangible incentives motivated their participation in the team, rather than financial. As part of the working ethos emerging within the BCV unit, Manager Bb's recruitment policy and process was eliminating individuals who would have been motivated by financial rewards. He was aware that implementing such a policy was in contrast to what VC companies or other CV units of other corporations were following, making its application challenging. For him, it was essential that intangible rewards were the main incentives in joining and in working for the BCV unit. Such motives led to the development of a working ethos of devotion to the work due to genuine enthusiasm. Manager Bm, comparing the VC managers working along with the BCV team to the individuals of the BCV unit, argues that the latter could effectively work without being financially motivated, something that the VC managers found difficult to understand. However, Manager Bh acknowledges that the non-existence of a differentiated remuneration system to reward differently venturing and non-venturing manager could have been de-motivating factor for the former. He argues that while there was a debate within the corporation, his perception was that there needs to be equality among corporate employees with regards to how they are rewarded.

With regards to the resources involved in the BCV unit, the data indicate that both financial and social capital were significant in affecting its evolution and performance. Besides the existence of human and social capital within the BCV team (dealing with VCs and identifying venture champions), the unit was dependent on the corporation and external parties for the financial resources required for its operations. The financial requirements of the unit involved two types of capital: (a) *seed capital*, funds required to incubate a venture, and (b) *venture capital*, funds required to launch the venture in the market place. The BCV unit was dependent on Corporation B for the first form of capital.

To cover the unit's operational cost, a funding allocation system was established and its operational budget was decided and allocated by the CEO of the BRD division after negotiations with Manager Bb on an annual basis. The personal relationship between the CEO of the BRD division and Manager Bb and the level of trust between them appear to be critical for the budget negotiations. Manager Bb argues that between late 1999 and early 2000 there was no budget allocated to him, but the unit's operational budget was decided on the basis of the identified value creation opportunity within the BRD division. The seed funds were allocated again by the CEO of the division, based on the financial requirements of each venture the unit had decided to incubate. The seed capital was covering the discovery and incubation stages of the BCV unit's process and according to Manager Bh, the BCV unit spent around £5 million each year for the last two years of its operations. Manager Bm argues that this provided the unit with significant flexibility, securing it with access to funds without facing time delays and corporate financial reporting procedures in the authorisation of the seed capital. Moreover, the allocated funds were not provided with the requirement to deliver financial returns in a specific timeline.

However, Manager Bh identifies this as a weakness of the unit's funding allocation system indicating lack of financial discipline, with the BCV unit enjoying some financial reporting privileges. Manager Bh was aware of other units becoming knowledgeable of these funding privileges, increasing the competition within the division for access to the same resources. However, the operational budget was revised on the basis of the unit's performance. In 2001, when Corporation B started to run into financial difficulties reporting significant loses, the CEO of the BRD division became reluctant on providing seed capital to the BCV unit, leading to the initiation of the unit's accelerator model and progressively to the spin out of the unit in 2003. The decline in the VC market was also contributing to the negative financial climate created and the need for identifying an external partner to bring along expertise and seed capital.

With regard to the venture capital requirements of the unit, VCs and external partners were approached to fund the launch of ventures in the market place. Manager Bm argues that the external investors holded 25% of the new venture created. Chaired by Manager Bh, the negotiations with the external investors were carried out by the funding team. Manager Bh argues that this was due to the experience and expertise the team had from its prior involvement in licensing technology, considering that *"in* *any organisation, it always makes sense to have the people who make the purchases separate from the people who pay the accounts".*

The progressive scarcity of financial resources appears to have affected positively the emergence of an entrepreneurial and creative attitude (according to Managers Bb and Bm) and of financial discipline (according to Manager Bh) within the BCV team. Creativity, adaptability and entrepreneurial spirit were demonstrated by the amendment of the BCV unit's business model through the introduction of the accelerator stage in the incubation process. Manager Bb also identified an external partner to form a partnership with the core BCV team, following the exit of the unit from the corporation. Financial discipline was also demonstrated by increasing the financial performance milestones a venture had to meet prior to its launch:

> *"Well the two changes were the accelerator, we reduced the amount of seed capital, and ...we increased their (ventures) requirement to pay for their business out of revenues, and we were very concerned, we thought that the market would grow and because we were starving the businesses of capital, they wouldn't grow, as it turned out in 2001 and 2002 the whole market slowed and actually all we did was rebuild companies with a culture for winning new business, growing, getting more customers, so as a result we ended up building more valuable companies, but we didn't know that at the time" Manager Bm*

The social capital involved in the BCV unit's business model was mainly related to expertise and consulting advice the unit received from the corporation (i.e. marketing and IPR related legal advice). Manager Bb was though critical of the efficiency of the internally acquired social capital: *"Not always great, because they were slow moving and worked in different ways to our time scale, but it was better than not having anything".* Due to this, he recruited individuals from outside Corporation B to join the BCV unit.

5.3.2.2.2 Relationships with the rest of the corporation

The BCV unit was implemented within the organisational context of the BRD division. However, the distinctive role of the BCV unit required to develop its own distinctive organisational context. In the late 1990s, Corporation B was organised around its two core businesses reflecting its market segments, with a third leg being responsible for the creation (R&D and Technology Office) of new technologies. The BRD division was the outcome of an organisational restructuring in late 1990s, merging the R&D department and the technology office of the corporation under the same organisational umbrella. In 1999, the need to efficiently organise the commercialisation activities within the BRD division led to the reorganisation of small (by ceasing or merging them) experimental and informal teams dealing with licensing and venturing activities.

The BCV unit was established as an autonomous unit working on the behalf of the BRD division (Table 5.20). The requirements and the novel character of its business model and commercialisation process justified the level of operational (i.e. investment decision making process) and financial autonomy the BCV unit was enjoying. Its autonomy was demonstrated by the distinctive brand name, the physical location and working environment, as well as the distinctive operational processes introduced by the unit. Otherwise, the essential parts of its operations depended on the establishment and maintenance of good relationships with other units and corporate managers and scientists within the division. The BCV unit was directly linked and associated with them, maintaining an active channel of communication among all involved parties in the incubation process.

Table 5.20: Organisational Structure of the BCV unit

Constructs	Quotes
Model of organisational structure	- "We were totally independent in the sense that I worked directly to the CEO" Manager Bb - "(the BCV unit was) Autonomers in a separate building with a very separate culture, with very strong branding" Manager Bm - "people almost referred to [BCV unit] as being something separate from [BRD division], where I would say it was always part of it" Manager Bh
Model evaluation	- "It clearly had benefits because I was dealing right at the top, without that I don't think you could do it" Manager Bb - "Yes, it was definitely to our benefit, I think that if …you can't run a entrepreneurial culture in the same office as an engineering culture or a finance culture or a …you can't do it, it's different culture" Manager Bm
Relationships and communication with other units	- "people were keen to talk to us… outside [the BRD division] we talked to other lines of business as well to ask them if they would be customers or whether they would be non executive directors" Manager Bm - "but the only link (with the top management of the corporation) really was through me, because I sat on the [BRD division's] Board" Manager Bb - "they (the other divisions) come to talk to us about technology, whereas perhaps in the past they would go outside and talk to everybody else but us about technology… there has to be that dialogue" Manager Bh
Reporting	- "(I was reporting to) The CEO of [BRD division], and I sat on the [BRD division] board" Manager Bb - "when we wanted to go with a new idea, we took it to the venturing board … but before it went to the venturing board, we had our own advisory board and the advisory board was made up of venture capitalists and people from outside of the labs" Manager Bm

The data indicate that at its initial stages of existence there were three main groups of stakeholders that the BCV unit needed to maintain relationships with: (a) scientists, within the BRD division, (b) the BRD division's Board, and (c) corporate managers from the two core businesses. The first group influenced the input of the unit's operations and performance, both in terms of volume and quality of patents and venture champions. The second group defined the formal and legal relationship between the corporation and the unit. The third group of stakeholders had the potential to act as suppliers (of business opportunities) or customers (investing in any of the unit's incubating ventures) to the unit. The data indicate that the BCV unit was primarily dependent on the first two groups, with the third one having only a supportive role to its operations.

The relationships between the BCV unit and individuals within the research labs and the licensing activities of the divisions were critical and are identified by Manager Bm to have been harmonious and collaborative. They were mainly interpersonal relationships and the core team of the BCV units was responsible for maintaining and reinforcing them, utilising their internal networking skills. The relationship between the unit and the corporation was managed by Manager Bb and the divisional Board. Manager Bb was a senior corporate manager within the BRD division, and due to his role as champion and founder of the BCV unit was responsible for reporting on his team's venturing portfolio and performance to the Board and the CEO of the BRD division. The rest of the BCV team reported to Manager Bb and its advisory board.

The organisational restructuring of Corporation B in 2002 did not affect the structural context of the BCV unit, as the BRD division was not affected. The new organisational structure that emerged organised the corporation into four main divisions (one of them being the BRS division), respecting its market segmentation but also acknowledging its international activities. The BRD division remained as the fourth division. With the BRS division involved in CV activities in 2002, the BCV unit started to develop relationships with the new CV unit. As Manager Bh argues, by 2003, the corporation had managed to achieve a better communication and cooperation among its venturing initiatives and better articulation of market opportunities. However, Manager Bc argues that each CV initiative had its own identity and was not influenced by or dependent on the BCV unit's venturing expertise.

Manager Bh argues that the autonomy of the BCV unit was justified considering the focus of its activities being early stage technology, while other divisions followed other business models and approaches towards their CV initiatives. Evaluating the structural context of the BCV unit in retrospect, Managers Bm and Bb argue that this was essential for the operation of the unit, providing closeness with the top management of the division and space for an *"entrepreneurial culture"* to flourish. The closeness with the top management team of the division allowed direct communication and access to finances for the division enabling them to have the support of the top management team in their operations. On the other hand, the unit's operational autonomy allowed the emergence of procedures, processes and of a mindset within it which were very different from the administrative mindset that existed in the division and the corporation. Table 5.21 provides indicative quotes regarding the cultural contexts of the division and of the BCV team.

The previous status of Corporation B as a public sector company had influenced the emergence of a collaborative working environment, ensuring consensus among its employees making them planning and process oriented, as argued by Manager Bm. Innovation was highly considered within the corporation and in the BRD division, due to the competitive industry in which Corporation B operated, as well as the technology dependency of its services. However, the culture crafted within the BRD division in the late 1990s was described by the interviewees as bureaucratic and lengthy regarding its procedures. Managers Bb and Bh were aware of the frustration among the division's scientists, as they perceived their work and intellectual contribution to the division was not appreciated. The top management team intended to cause a cultural change within the division enhancing the innovation, commercialisation and potentially entrepreneurial behaviour of its managers and scientists. The lack of procedures and systems within the division to turn the innovative culture to a more commercial and entrepreneurial one, and to use constructively the scientists frustration was intended to be met through the establishment of the BCV unit.

Table 5.21: Culture within the BCV unit and the BRD division

	Within the BCV Unit	Within the BRD division and Corporation B
	Quotes	
Cultural aspects	- "so what we had to do was to create a culture there, where bringing forward ideas was good, there was no bad ideas, and it wasn't a formal thing, you didn't have to ask your line manager" Manager Bb - "Commercially focused, excitement about coming to work, ability to believe in yourself, ability to create new ideas on a daily basis. Introduce things like passion to the work place and a belief that the people around you can work as a team" Manager Bb - "Commercial and passionate and fast moving and risk taking, doesn't mean kamikaze where you loose money. It's about really being able to do things and still watch your bottom line and make sure you live the next day, otherwise you get killed" Manager Bb	- "(entrepreneurial culture) That's what I meant by commercially focused. Some of these things aren't very well understood by people in corporate" Manager Bb - "[Corporation B] people tend to be really quite decent people, you know they provide a national service"…"people are constantly talking about new, what are we going to do with this, how are we going to grow that, how do we improve this" Manager Bm
Degree of cultural integration of BCV culture	- "So coming into [BCV unit] which was one of the most entrepreneurial environments I've ever been in" Manager Bm - "there was some common beliefs in technology and people (in the division) but there was a much…there was a more speculative culture in…now speculative is the wrong word, there was a more …well it sounds obvious to say it, but there was a more entrepreneurial culture inside [BCV unit]" Manager Bm	- "We tend to view both technical and business capabilities together, whereas in the past it just had to be just purely technical or purely business. We now tend to look for the more rounded person, and if we characterise that as entrepreneurial, well that is one description, yes" … "since the [BCV unit] activity started, then it has filtered out in the rest of the divisions. But all the divisions now are venturing in their own different ways, and for their own purposes" Manager Bh - "but if you said, if you now take it away is the rest of [Corporation B] all working like that, the answer is obviously not, so there is probably still a job to do of taking some of the learning of [BCV unit] and taking it back into the corporate" Manager Bb

In order for the BCV unit to contribute to this cultural change, a set of new cultural traits needed to be demonstrated by its team members. The BCV unit brought forward emotions (passion, confidence, and excitement), attitudes (proactiveness, autonomy, risk taking, creative thinking, fast moving, informality, opportunity and business drive) and values (teamwork, approachability, survivability drive) that appear to be closely related to entrepreneurial culture. The unit's culture was radically different from the core corporate one and the existing corporate practices, even though innovation was embedded in both cultures. Introducing the unit's culture within the division's pre-existing culture inevitably caused some conflicts regarding the nature of the procedures and the timeframes that each one of them was representing:

> *"it's one of the most challenging things you can ever do, because my job was to create a change - at the same time I wasn't going to be bashing the corporate, the hand that feeds me, but equally I wasn't going to allow the corporate process to kill new and creative ideas, stop these from moving quickly" Manager Bb*

The initial resistance to the new cultural traits introduced by the unit can be further explained by considering the competition over resources between the BCV unit and other units of the BRD division. The unit's access to financial resources was perceived as elitist treatment by the rest of the division and as violation of its existing organisational hierarchy. The use of corporate managers as venture champions to lead the unit's incubating ventures was perceived as a threat to other unit's human resources and capabilities. The non-venturing managers expressed these emotions as scepticism, hesitation to participate in the practices of the BCV unit and resentment towards the BCV unit:

> *"They were very much concerned that they were going to lose talent, their best people into corporate ventures" Manager Bh*

Manager Bb, being aware of these emotions, adopted an informal and interpersonal communication style when approaching non-venturing managers. Besides the initial scepticism, BCV unit was progressively accepted and integrated within the division, while a more positive perception was created around the unit.

Within the BCV team, Manager Bb embraced cultural forms such as informal meetings in a relaxed physical environment to enhance informal engaging among his team and scientists. Such a team culture reinforced creativity and an experimental attitude moving away from the process oriented corporate culture. These micro level processes associated the BCV team with entrepreneurial behaviour. Its brand name was used to symbolise their incubation process. The core team of the unit became the main actors of the new culture, reinforcing even further the unit's social identification process and its distinctiveness as a separate and more entrepreneurial entity within the BRD division. Manager Bm who joined the team in late 2000 described the working environment in the unit as significantly *"entrepreneurial"*, when compared to the rest of the corporation and other companies.

5.3.2.3 Outcomes

The involvement of Corporation B in CV activities had a number of outcomes for the BCV unit, the BRD division and the corporation, as listed at the sections that follow.

5.3.2.3.1 Performance: Financial and Strategic

The data indicate that there are two types of performances (financial and strategic) at three levels of analysis (for the BCV unit, the BRD division and for the corporation overall) from the involvement in CV activities (Table 5.22). All interviewees were able to comment on the performance of the BCV unit, in respect to their organisational role. Managers Bb, Bm and Bh provided an evaluation of the unit's performance and how it contributed to the BRD division, while Managers Bh and Bc were able to evaluate its contribution of the corporation's performance. The performance of the CV involvement of the corporation is illustrated in both tangible and intangible terms.

The financial performance of the BCV unit in terms of the number of new ventures created and in terms of the value generated was perceived to be a success. Besides the value from the venture portfolio created, the BCV unit itself as a business model contained its own financial value which was realised during its spin out. Measuring the exact financial value generated from the unit's venture portfolio is considered by the interviewees as a difficult and premature task, because of difficulties in calculating the costs and the economic value created. While each venture had a specific amount of seed capital allocated to its development budget, the operational cost of the BCV unit was not distributed to each one of the ventures making difficult the calculation of the final cost of each venture. The nature of the technologies (early

Table 5.22: Performance of BCV initiative for the unit and Corporation B

	Quotes	
Performance	Area	
Level	Strategic	Financial
BCV unit	- "we created 9 companies" Manager Bb - "we have several of the [Corporation B] products that were developed internally and are now developed by my company. I think we are getting better products, quicker, faster. You could argue that it's been a great efficiency for [Corporation B], the culture piece is indescribable, how you measure that I don't know, but it's certainly there. So I would have said one on culture change and one of significant increased efficiency by the businesses delivering back to [Corporation B]" Manager Bb	- "Financially, because we did what we did and the deal with [the venture capital company – external partner] was very good, I think we can prove that we didn't lose any money, we actually made money and [Corporation B] has a 23% stake in the fun and I'm confident that I'm going to give them a return on that as well. I actually think you could say it was financially successful really. It will be a bigger success story down stream" … "if you put my companies together they might all have a market capital of £60/80m million. You could argue that we created that value in 3 years, with an input of cash significantly less than that, but if you ask me again in 3 years time, it might be £500m" Manager Bb
BRD division	- "The strategic one is hard (to explain) we spun out about 9 different companies out of [the BCV unit]. The strategic relevance of those companies have yet to bear fruit. However, one case in particular, ….we are being able to do business, from our main part of the business, because they exist out there, so we are making sales on their back on that. So the strategic part is beginning to bear fruit, but the strategic part is a very much a longer term, long haul" Manager Bh - "There is no doubt about it that it creates very positive PR, very positive PR, it also creates a commercial path through the jungle in the same way that the business normally created a technological path through the jungle" Manager Bm	- "In terms of finance, then we were able to dispose of 4 businesses last year when we spun out [the BCV unit] itself, earning £40m. It has contributed something in total like just under £100m to the bottom line. But it is very difficult to say what our costs are we … So it has achieved reasonably well financially" Manager Bh
Corporation B	- "It (BCV unit) had very mixed success, mainly because … you should know that if you have got good technology, you might not be able to turn it into a customer proposition, what people will pay money for" Manager Bc - "…even if [BCV] had never been a commercial success,… it was a success in terms of changing the way that people think about exploiting research" Manager Bh	

stage technologies) the unit was investing resources in and the time lag between the investment and the realisation of their returns made it difficult to calculate the economic value that each venture was achieving. The majority of the ventures created out of the BCV unit's incubation process had not managed to realise their market value in 2003, as some of them had just been launched in the market. Moreover, while the cost of the incubation process was assigned to the BCV unit, the economic value of the new ventures was not necessarily accredited to the unit. Manager Bh argues that the overall financial contribution of the BCV unit's operations was around £100 million to the BRD division. The closer each informant is to the core BCV team, the more positive the financial performance of the BCV unit is perceived to be. This can be explained by the access core BCV managers had to the financial data related to the performance of the unit. However, it cannot be neglected that there were doubts outside the division about the unit's economic contribution to the corporation (Manager Bc).

The strategic performance of the BCV unit was measured on the basis of the number of ventures created and exited from the incubation (a total of nine ventures), and from the spin out of the unit in 2003. The ventures generated new sales from the creation of new products for the corporation. Contributing to the strategic success of the BCV unit was the survivability rates of these ventures having increased their market capital value. This was perceived by Managers Bb and Bm as highly significant for the performance of the unit. In terms of the intangible strategic performance of the unit and contribution to the division and the corporation, there were three main areas in which the BCV business model had performed successfully: (a) the delivery of the anticipated cultural change with regards to commercialisation process, (b) the development and adoption of commercialisation processes within the division, and (c) the creation of a positive, innovative image for Corporation B, internally and externally. Managers Bb, Bm and Bh strongly argue that the intangible strategic and the financial performances of the BCV unit was significant for the corporation, the *"corporate psyche"* and the corporate employees, but still remained difficult to be quantified. However, the experiences corporate managers had gained by being involved in and interacting with the BCV team was an intangible asset for the division and the corporation, enhancing entrepreneurial behaviour.

Manager Bb argues that the BCV unit managed to fulfil the expectations formed during its initiation with regards to introducing a commercial and entrepreneurial outlook within the BRD division. He recognised though that the value generation expectations were not met. Following the decline in the macroeconomic environment between 2001 and 2002, the value generation expectations of the BCV unit needed to adjust. He took pride in the way he handled the market crisis and still managed to develop profitable ventures that survived in the market. Manager Bh does not identify any gaps between the initial expectations and the delivered performance of the unit, but he argues that through the life cycle of the unit, they became more realistic about the actual value of the new businesses they were delivering. Other factors identified to have constrained the performance of the BCV unit were the lengthy time requirements to incubate early stage technology (Manager Bh) and the commercial uncertainty new technologies hold in meeting customers' needs (Manager Bc).

5.3.2.3.2 Learning outcomes

The involvement of the corporation in CV activities for at least three years enabled individuals and groups of employees to gain knowledge in commercialisation processes, the BCV unit's business model and CV in general. The data indicate that this learning was not limited only within the BCV unit but it was integrated in the division and across the corporation in other divisions such as the BRS. Table 5.23 summarises indicative quotes regarding individual and collective learning that occurred in relation to the BCV initiative. The interviewees distinguish between the individually gained knowledge and what the corporation had learnt. It was easier for them to identify what they have personally learnt than identify what the corporation has learnt. This might indicate that collective learning has not been formalised within the division or the corporation.

The data indicate that within the BCV unit the learning that has occurred at the individual level is mainly related to the constraints, the requirements and peculiarities of the BCV initiative, as well as of the commercialisation process and entrepreneurial activities within a large corporation. Manager Bm argues that identifying the learning was difficult and occasionally remains invisible among the

Table 5.23: Learning and the BCV initiative

Constructs	Quotes		
	Within the BCV unit	Within the BRD division	Across the corporation
About the commercialisation process	- "(we learnt that) there is a whole series of new relationships… with the financial community…that in key individuals head, there has been an experience and learning in an invisible way in everything they do… there is a business model or a series of business models, that have been shared inside the business about how this could be done" Manager Bm	- "The lesson is learnt how you analyse business cases, look at returns and investment. It has made a positive impact across the business" Manager Bh	No data available
About the BCV initiative	- "the [BCV unit's] activity has the lessons learnt and the experience really has made people think about their general activities in a different light, even if corporate venturing isn't the way for a particular technology" Manager Bh	- "you have got people with experience, you've got people with knowledge, you've got people with credibility, you've got a load of people with training they would not have otherwise had" Manager Bm	-"And that is the learning we made from [BCV unit] …we would never create a technology venture … without customer proposition, business model, revenue targets and sales and marketing" …"we will shut them (ventures) down quicker if they are losing money…a lot of [BCV unit's] ventures were left to carry on while they were haemorrhaging money… there are two big learnings there" Manager Bc
About CV	- "what we learnt was you can create processes and models, the hardest thing in the world to create is passion and belief in people, but when you actually can create that state then what happens inside your business is staggering" Manager Bb	- "Well I mean it certainly is a long term activity it is something that you can't make quick, easy money out of. That you have to make an investment in this area and then wait a long time and nurture that investment" Manager Bh	- "But they (BRS division) have learnt from our successes and failures, and have done venturing in their own way" Manager Bh

individuals, but it was expressed thought the experiences that these individuals gained. With regards to what the division has learnt through the BCV unit's business model experience, the interviewees could identify mainly collective learning to have occurred. However, Manager Bm identifies the existence of a group of individuals, who had interacted with the BCV unit (scientists and corporate managers) and who gained significant knowledge, to have the potential to utilise it when rejoining their corporate positions. The learning that has occurred within the BRD division appears to be mainly on the commercialisation process and the overall knowledge about the conditional factors that influence the success (or failure) of CV activities within the BRD division.

With regards to the learning occurring for the corporation, Manager Bb and Bh argue that the knowledge obtained from running the BCV unit's business model and being involved in CV activities must have been utilised by the corporation and they perceive the emergence of other CV activities in other divisions to be associated with that knowledge. Manager Bb mentions that he was consulted by the venturing team in BRS division and he *"sits on the bench"* of this team, even though the needs and the rationale of the BRS division's CV activities were different from the ones of the BCV unit. However, Manager Bc, who is member of the BRS CV team, referred only to the learning his team obtained out of the failures of the BCV team. Through criticism, Manager Bc's learning points were focused on the BCV unit's business model. He appears to neglect the peculiarities of the BCV unit's business model considering the nature of its activities, something that Manager Bh appeared to grasp throughout his interview.

5.3.2.3.3 Impact on venturing activities

The exit of the BCV unit in 2003 and the parallel co-existence with another venturing team in another division between 2002 and 2003 was not coincidental. These events indicate that the involvement of the BRD division in CV activities might have an impact on perceptions towards CV, within the division and across the corporation. Table 5.24 summarises indicative quotes of the three main interviewees with regards to the impact that the BCV initiative had on the attitude of BRD division and other divisions towards CV. All three managers identified that the experience gained from the BCV initiative created positive perceptions within the division towards CV and in at least another division.

The change in the perceptions towards CV appears to be focused on three aspects of it: (a) the utility of CV's rationale as a business model to create new businesses, (b) the benefits CV has delivered for the division, and (c) the synergy between CV and other commercialisation activities. CV fitted better in the business practices of the corporation in 2002, in comparison to 1999, while the corporation was willing to maintain an interest in CV due to the *"expertise involved"*. CV appears to be a more familiar practice for the BRD division, in comparison to the past, even though as Manager Bb argues, it might not be necessarily identified as *"corporate venturing"* within the corporation.

Table 5.24: Impact of BCV initiative on CV activities within the corporation

	Quotes
Manager Bb	- "I think it (venturing) rippled because about a year and a half after we created [BCV unit], [BRS division] created a venturing unit and that was not based on technology it was based on the market but you could see the thinking, they recognised that having internal units which looked like businesses rather than divisions, would move faster, be more creative, so they started to apply that logic for new business" - "what we are doing now is instead of growing those things in out for an inherent value, we are trying to catch that model internally to say this is a great way of getting new products to market faster"
Manager Bm	- "I think maybe two lines of business, have their own new ideas scheme and they came to [BCV unit] to get some of the ideas for what they ...how they were going to do it. So it's been taking into the main stream business"
Manager Bh	- "This (venturing) is business as normal it is part of things we do" - "Now ... the corporate venturing has very much fostered a partnership type of role that things that are spun out, they are seen as route to market. I think in the first case, they were very much concerned that they were going to lose talent, their best people into corporate ventures, whereas now it is seen as being part of the general family and we all work in partnership together" - " because of the expertise involved (in CV activities) and not so much the risks, but really the need for [Corporation B] to focus on its main business, yet keep its hand in with the corporate venturing"

Managers Bb and Bh identified the *"thinking"* and the *"expertise involved"* in CV as critical features positioning it as an important practice for Corporation B to continue to be involved in. However, both of them agreed that in 2003 the approach towards CV has changed in comparison to the past, moving towards a more external approach by the BRD division, while a more internalised approach was adopted for other divisions such as the BRS. All three interviewees argued that maintenance of interest in CV activities was an illustration of emerging features of intrapreneurship across the corporation.

5.3.2.3.4 Impact on corporation

Identifying the overall impact CV, as illustrated by the BCV initiative, had on the corporation appears to be a difficult task for the interviewees to do. They agreed that the impact of CV on the corporation was in analogy to the size of the BCV unit in comparison to the rest of the corporation. They identified that the most significant impact had been for the BRD division, while the rest of the corporation was less affected. Managers Bm, Bh and Bb agreed that there was a very positive effect of the CV activities on the image of the corporation within and outside its boundaries. Within the corporation, the image of the BCV unit as a creative and entrepreneurial unit projected a distinctive and positive image of renewal, innovation and creativity that was appealing to many employees, and especially the ones of the BRD division who could be more entrepreneurial. Managers Bb and Bm argue that the projection of such an image, at a time when the corporation had a much more negative image, was like a "bright light" for these employees. Outside the corporation, the activities of the BCV unit enabled Corporation B to create an innovative and entrepreneurial image within the VC market among the Universities and its clients. Manager Bh argues that the demonstrated ability of the corporation to combine technological excellence with business opportunities through the activities of the BCV unit reinforced the corporation's competitive edge. The corporation was gaining a lot of *"free publicity"*, positioning itself as a company which can offer to its clients access to innovative technical solutions. Manager Bh recalls:

> *"Corporate venturing activity in [BCV unit] has been part of the showcase for showing how innovative [Corporation B] is, and that if a customer comes to us with a problem, we can always find a solution. So it very much helps us in our image, I mean we aren't the lowest cost carrier, but we are there for the long run and we are not going to let you down" Manager Bh*

BCV unit also impacted the organisational culture. Managers Bb, Bm and Bh recognise that the new culture as represented and demonstrated by the BCV unit was integrated to the rest of the division through the years. In 2003, the culture in the BRD division was evaluated by the interviewees to be more entrepreneurial, creative, and innovative, with a commercial outlook. The scientists of the division were keen not only in providing technical solutions and leading edge technology, but also in creating marketable products and services. This change of mindset and its incorporation on the day-to-day activities of the division is characterised by the interviewees as significant (Table 5.25).

Table 5.25: Impact of BCV unit on organisational culture

	Quotes
Manager Bb	- "...instead of scientists and developers being locked internally, in their heads, to the [Corporation B] process of budgets and costs for doing something, what we started to do was question the real market value, and they started to definitely consider and think more about "would customers really buy this"? So we therefore got really much more an external focus to the thinking in the early stages of development and that was critical"
Manager Bm	- "these things (CV activities) always have an impact on the psyche, the corporate psyche and I am sure that it will have created a more entrepreneurial mind set, and [Corporation B] now even has, or [BRD division] in particular has a word for it, they could even use it as a verb, we could '[BCV]' this idea"
Manager Bh	- "[BCV unit] was a success in terms of changing the way that people think about exploiting research"

The BCV unit facilitated a cultural change within the corporation. Venturing and commercialisation became more familiar and *"business as usual"* concepts and activities within the corporation, and the BCV unit had facilitated the processes and the attitude for this to occur. Manager Bb strongly argued that the BCV unit was not a cultural programme, and that CV can be *"tackled up to an organisational change, it is not a training programme"*. The change in the organisational culture, as argued by Manger Bh, was also supported by the strategic re-direction of the corporation in 2001.

All managers agreed that the change of the organisational culture which occurred within the division cannot solely be accredited to the BCV unit, as they recognise the complexity of a cultural change and the difficulty to be quantified. Managers Bh and Bm argue that external conditions (in the industry) also contributed to the cultural change within the division. Manager Bb moved further to talk extensively about the generation of positive emotions within the BRD division considering the exploitation of technology and how these emotions have facilitated and demonstrated the change of mindset within it. He argued that the catalyst of any degree of cultural change within the corporation is due to the emotional processes that he was introducing in the BCV team and the encouragement of passion among the scientists.

However, Manager Bb argues that even though the BCV initiative and team had the potential to cause further cultural change within the division and in the corporation, they did not manage to do so. This was due to the organisational structure chosen to set up and run the BCV unit and the use of the BCV unit as a CV unit and not as a cultural programme by Manager Bb:

> *"So there have been dramatic changes, and there needs to be more. The great thing about something like [BCV] is I don't believe that you can tack on to an organisation culture change, it's not a training programme, you go off and have 3 weeks, and then you come back and you're all different, you can only get culture change through working daily in the organisation. So if you like one of the failings at [BCV], was it was plucked out of the organisation, it did relate change, but if you said, if you now take it away is the rest of [Corporation B] all working like that, the answer is obviously not, so there is probably still a job to do of taking some of the learning of [BCV] and taking it back into the corporate. Now I never took on that challenge, so you have to be realistic about these things"*

All three managers argue that the aim and the size of the BCV unit did not allow for a change in the strategy context of the corporation. On the contrary, the strategy was decided and the BCV unit executed it. The BCV unit strategic intent was to enable the corporation to reconfigure its resources and capabilities within the BRD division by creating new products and markets, and generating value. This is indicative from the trajectory of the impact the BCV unit in the corporation, which was moderated by its size and the integration of its activities (Table 5.26).

Table 5.26: BCV initiative and strategy making in Corporation B

	Quotes
Manager Bb	- "Strategically there was no key direction from [Corporation B] because we always grew these companies for value, not for doing something for [Corporation B]. The whole idea was that we would put an investment in and get a return. So having said that, because if the model that I have used which says that we going to use the corporate as a springboard for the companies, then of course we will have been deflected to deliver early [Corporation B] business so you could argue that will have been an interlink. But that was done more for real reasons of attracting revenue and cash not for any strategic direction"
Manager Bm	- "I think it depends on the company and the size of the corporate venturing. I can see in some companies that it could be a whole new business direction"… " I think the strategy came to corporate venture and the corporate venturing was the execution of it, I don't think that corporate venturing invented the strategy, so I think its that way round"
Manager Bh	- "the current strategic imperatives are the number customers, cost reduction, customer satisfaction they all make a contribution into that space and that is how we have managed to justify it to the business. We are making a contribution. Again, it is very difficult to quantify that contribution at this stage"… "I think it is so small that it doesn't really have that impact on the overall strategy"

The size of the BCV unit was relatively small in comparison to the rest of the corporation and it could have not allowed CV to generate such a vast impact on the corporation. The corporation appears to be the predominant entity in the relationship between the two (corporation and CV unit). Manager Bh argues that CV is acting as a contributor to the existing strategy and corporate values. Moreover, the ventures created by the BCV unit were tailored to create value for the corporation and to have their own strategic intent, not linked to the corporation's strategic context.

5.3.3 Case summary

The commercialisation of IP patents was the main motive behind the initiation of Corporation B's involvement in CV activities. Driven by the CEO of the BRD division and Manager Bb, the BCV initiative was anticipated to develop commercialisation process which could extract value from the corporation's IP capacity and contribute to the corporation's financial performance. An incubator was set up to facilitate the CV activities of the BCV initiative, enjoying the support of middle-level and senior corporate managers. However, the macro-economic slow down in 2001 amended the risk preferences and strategic priorities of the corporation leading to termination of its involvement in CV activities through the BCV unit's business model and the spin out of the BCV unit to become a VC company.

5.4 CASE STUDY OF CORPORATION C

5.4.1 Introduction and characteristics of Corporation C

Corporation C is a leading company in the information and news services industry with an operation profit of £126 millions, employing approximately 15,000 people in 86 countries[74]. The interviews were conducted in summer 2003; seven years after the corporation's first CV investment took place. In July 2001, the CCV unit spun out to become an independent VC company, but continued to maintain an active relationship with the corporation.

5.4.1.1 Company background

With its headquarters in London, Corporation C has a range of business-to-business customers and a high volume of individual users of its services globally. Its business operations were dependant on information technologies. Historically, Corporation C had been keen in following developments in *"disruptive technologies"*, as they presented potential threats to its operations as well as opportunities to be explored. The development and application of internet technologies in the mid and late 1990s challenged the corporation's network of information services, threatening its survivability. This led to a period of restructuring and re-organisation for the corporation trying to incorporate the application of the internet into its operations. In late 1999 an executive director was given strategic responsibilities *"at Board level for accelerating plans of the [Corporation C]'s existing services to exploit internet technology and networks"*[75] as authorised by the Chief Executive. In early 2000, the new corporate *"strategy for the internet age"*[76] was announced, placing internet at the core of the corporation's interest.

5.4.1.2 Setting the venturing scene

By the mid 1990s, small, internet based start-up companies specialising in networks software were seen to have the potential to be the new leaders in the information and news industry. Silicon Valley was crowded with start up companies, such as

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[74] Corporate Annual Report, 2003
[75] Corporate press release: 6, July 1999
[76] Corporate Press Release: 22, March 2000

Netscape, which could operate at low operational cost and overtake traditional large companies, such as Corporation C. The network technology used by Corporation C was similar to the one of internet, and in the scenario that the internet was becoming commercially successful the threat was direct and significant. However, the corporation did not have access to internet related software and technologies.

This gap in technological know-how was noticed in the early 1990s by Manager Ca of Corporation C, who started being interesting in internet related technologies. He believed that Corporation C needed to start invested in these technologies in order to gain access to, and secure a first mover's competitive advantage in the new technological era. Silicon Valley was the cluster of such technologies, and in 1994 Manager Ca moved there to carry out CV investments on the behalf of the corporation.

The founder of the venturing team and two of his partners in the CCV unit were interviewed. Another two corporate managers were identified as key interviewees contextualising the evolution and activities of the CCV unit. One of the two corporate managers was involved in deciding on the governance structure of the unit. The second corporate manager managed the business development activities of the corporation. Table 5.27 summarises the attributes of the core and peripheral managers to the CCV unit.

Table 5.27: Interviewees' attributes: Corporation C

Attributes	Interviewee A	Interviewee B	Interviewee C	Interviewee D	Interviewee E
Code name	Manager Ca	Manager Ct	Manager Cp	Manager Cm	Manager Cn
Gender	Male	Male	Male	Female	Male
Association with CCV unit	Direct - Champion of the CCV unit	Direct - Partner and CFO of the CCV unit	Direct- Partner of the CCV Unit	Direct - Corporate Lawyer	Indirect - Business Development Team
Core responsibility	Managing Partner of the CCV unit	Manage CCV unit's portfolio	Manage CCV unit's investment process	Governance structure of CCV unit	M&A and Venturing activities
Time of involvement in CCV unit	1994-time of interview	1999-time of interview	2000-time of interview	1997-time of interview	2000-time of interview
Employment background	Joined Corporation C in 1984	Joined Corporation C in 1996	Private equity firm - joined CCV team in late 1999	Private law firm - joined Corporation C in 1997	Joined Corporation C in 2000

5.4.2 Corporate Venturing in Corporation C

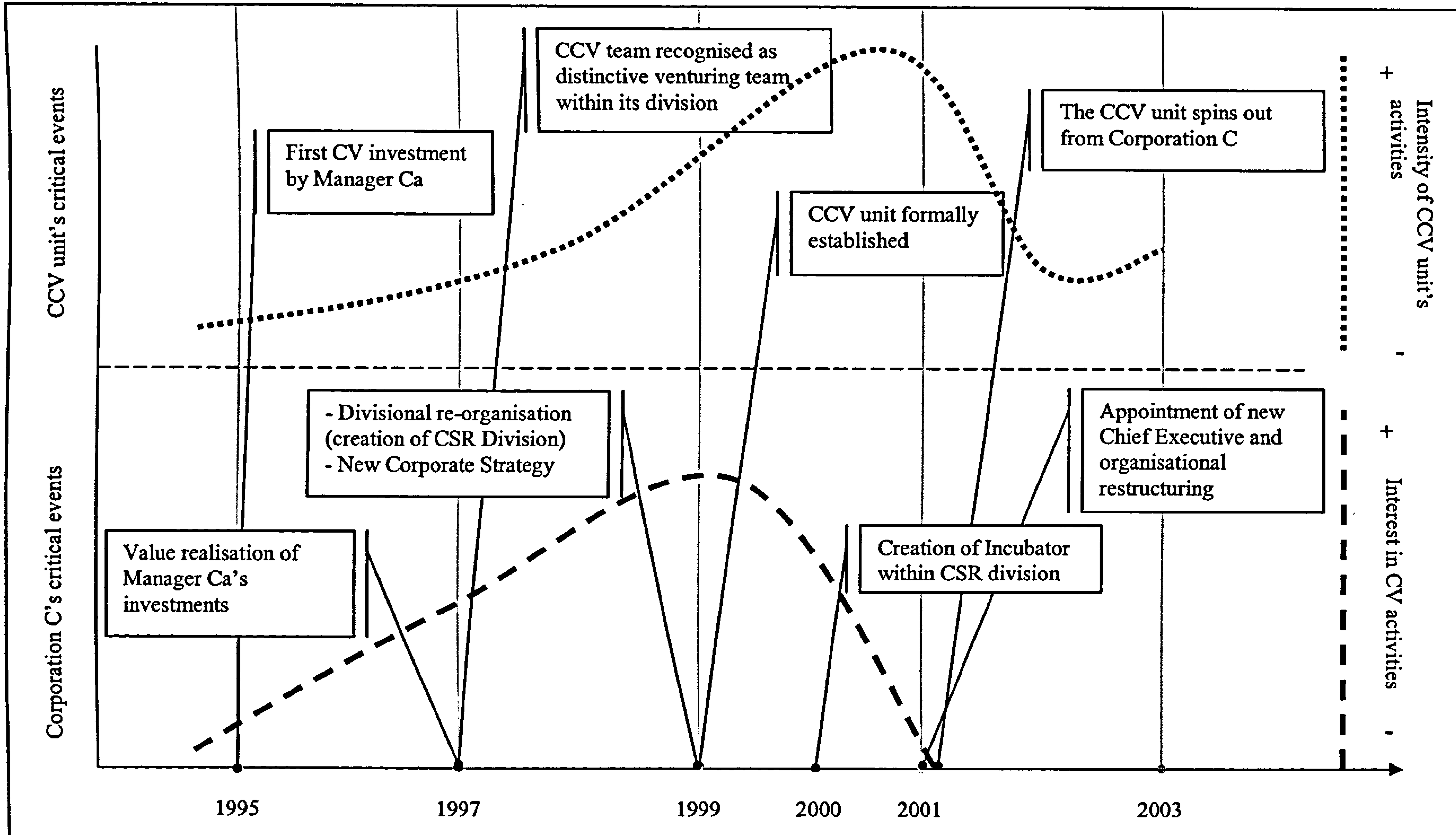
Access to disruptive technologies was central to Corporation C's operations. The emergence of information technologies in the 1990s was perceived by the corporation as another opportunity to gain technological knowledge and to be part of the anticipated technological breakthrough, preserving the corporation's technological edge:

> *"we have always been interested in disruptive technologies, and partly to see if we can be on the crest of the wave of the next big breakthrough, and partly to make sure that we are not overtaken by somebody else on the way adopting technologies that we just don't realise are ones that we should be involved in" Manager Cm*

Silicon Valley in California was the geographic cluster of such technologies, where VCs and corporate venture capitalists invested in potentially revolutionary business opportunities. The need to invest and gain access to information related technologies was spotted early on in 1992 by Manager Ca who, with a sales background, had developed technical expertise in network related technologies. Figure 5.4 provides a chronological representation of the critical events in the evolution of the CCV unit and of the corporation between 1994 and 2003. At the upper part of the figure, the life cycle of the CCV unit is presented, with the dotted line demonstrating the intensity of its activities. The lower part o the figure is dedicated to the critical events occurring within the corporation, with the dashed line illustrating the corporate interest in CV.

In 1994 Manager Ca moved to California and in 1995 he carried out the first CV investment in an internet start-up through a minority equity investment. In 1996, the start-up was floated and Corporation C achieved significant financial gains making the headlines both in the USA and back in London. What started informally in 1994 as the CV activities of one manager became more formal in 1997 when a small venturing team and later on the CCV unit was set up in London. The macroeconomic conditions of the late 1990s benefited the performance of the CCV unit's portfolio and the market value of its quoted investments reached the £438 million at the end of 1999. The CCV unit occupied a page in 1999's annual report, communicating the innovative and successful activities of this part of the corporation.

Figure 5.4: Chronology of critical events in Corporation C and in the CCV unit



As Corporation C was becoming progressively aware of the venturing activities of Manager Ca, it started to develop a strategic interest in internet technologies. This was demonstrated in 1999, when following an organisational restructuring, a new business division called CSR responsible for *"investing in new initiatives in the internet and e-commerce areas" "intended to achieve further penetration in markets outside [the existing sector]"*[77] was created. At the end of the first quarter of 2000, the CFO was appointed CEO of the new division. According to the Corporation's Chairman *"[CSR] has a key role to play in the realisation of our goal to accelerate our use of web technologies to open new markets"*[78]. The CCV unit was placed within the CSR division.

However, in 2001 the market value of the CCV unit declined significantly, resulting in a net loss of £145 million. The top management team of Corporation C considered an IPO for the CCV unit by involving external investors. Following an amendment in the corporate financial strategy in 2001, the CCV unit was spun out, as *"it had reached a stage where its size and investment capacity exceeded [Corporation C's] strategic needs"*[79]. The CCV unit became an independent management company seeking third-party investors, but continued to maintain the management of Corporation C's investment portfolio created between 1995 and 2001.

5.4.2.1 Formation of the CCV unit

5.4.2.1.1 Approach towards CV and initiation process of the CCV unit

The formal creation of the CCV team took place in 1997, even though the first CV investment was made in late 1994. In between, Corporation C continued to be active in CV investments through the activities of Manager Ca, who in 1994 persuaded his boss, the CFO of Corporation C, to create a fund to invest in start up companies through minority equity investments. During this period, Manager Ca was the only individual in the corporation actively identifying external companies and investing in them. In 1997, Manager Ca, after a successful investment period in the USA, returned to the UK to set up a small CV team. Once the top management team of

[77] Corporate press release: 6, July 1999
[78] Annual Report, 2001
[79] Annual Report, 2001

Corporation C realised the financial success of this small team between 1997 and 1999, it decided to formalise its structure and activities by setting up the CCV unit in 1999.

The approach taken towards CV appears to be characterised by: (a) the target of the investment, and (b) the anticipated return on the investment. The investment target was the technological know-how of external start-up companies, while the anticipated return involved the creation of new ventures and their financial performance. This is evident from the definitions and perceptions towards CV, as outlined in Table 5.28.

Table 5.28: Definitions and perceptions towards CV in Corporation C

Interviewee	Quotes
Manager Ca	- "What I do is ... the minority investment to protect an existing franchise. So it wasn't designed particularly to develop new franchises. It wasn't designed particularly really to spin anything out… it had just a very narrow focus"… "the only thing that makes it slightly broader, is that at the time our franchise was changing, and so although we didn't intend to, we in fact generated some new franchises"…. "we just focused on one piece of it deliberately"
Manager Ct	- "I actually sort of see that as venturing…. that is looking at new business opportunities and new business models in an area that you understand, and investing in that"
Manager Cp	- "They (corporate managers) didn't see it as a marketing thing… I don't think they saw it very much as a strategic thing, they just saw it as a successfully financial thing"
Manager Cm	-"I see corporate venturing as being much more what [the CCV unit] were doing when they were taking small stakes that were very speculative that would bring the little company closer to [Corporation C]…. It would be structured very much as a financial deal and basically the companies are looking for equity to finance their businesses primarily, and we were a source of capital for them" -"We had a fairly fragmented attitude towards it (CV)… within [Corporation C]. So a lot of it comes down to personalities, to be honest, and degrees of belief (in CV)"

The four managers agreed that CV was a financial mechanism for Corporation C to have access to technological opportunities that resided outside the corporation by financing them and creating new ventures out of them. The variation in the wording used at the quotes can be explained by the different positions, and different level of involvement in and exposure to the CV activities each of the managers had. Manager Ct recognised that he adopted a broader perception towards CV in comparison to Manager Ca, as he had been involved in other similar activities prior to joining the CCV team. Moreover, the way CV has been implemented within the corporation influenced the perceptions created about CV, as in the case of Manager Cm.

Throughout the initiation phase, Manager Ca was the main individual who shaped the approach towards and level of formal involvement of the corporation in CV activities, and the formation of the CCV unit. All interviewees identified his role and influence, and he presents himself as the driving force behind the involvement of the corporation in CV activities:

> *"when I got involved, I put the discipline in place that first, it (CCV unit) must be financially viable, and only then you look for the strategic benefit" ... "it was my thing; it was my project, my idea, my responsibility and my opportunity" Manager Ca*

The time lag between the first CV investment of the corporation and the formal establishment of the CCV unit can be explained by the uncertainty surrounding the anticipated outcomes (financial, technological and strategic) of the technologies the CV activities were targeted at. The initiation process of the CCV unit appears to be comprised by three main phases:

(a) ***the experimental phase***: identification of the need to invest in external business opportunities and experimentation in identifying the appropriate CV model;

(b) ***the realisation phase***: internal recognition and appreciation of the CV involvement by the corporation; and

(c) ***the formation process***: formalisation of the CV involvement by establishing a CV unit within a corporate division

The sequence of these phases indicates a transition from an informal and personified approach towards CV to a more formal. It also appears to coincide with the increasing interest of the top management of Corporation C in the strategic and business implications of internet technologies. Table 5.29 summarises the main events and outcomes of each phase of the formation of the CCV unit, as well as the people involved.

The top management team of Corporation C were aware of Manager Ca's activities in all three phases, while their involvement increased during the realisation and formation phases. Manager Cm argues that the perception within the corporation was that the involvement in the CV activities was *"sort of a corporate policy"*, with the Chief Executive and the CFO being supportive towards Manager Ca's activities.

Table 5.29: CCV initiative: Initiation Process – Phases, events, outcomes and actors involved

	Experimentation Phase	Realisation Phase	Formation Phase
Events	- **1992**: Manager Ca gets interested in networks technologies - **1994**: Corporation C is carrying out an investment in California and Manager Ca persuades his boss to move to Silicon Valley - **1995**: First minority equity investment on a internet directory (DELTA)	- **1997**: Manager Ca returns to UK and sets up a CV team comprised by a technical person and a journalist - CV team continues to carry out CV investments in Silicon Valley and in Europe - **1998**: Corporation C recognises the accumulative skills and learning by investing in internet start ups, it is anticipated that they need to continue on carrying out CV activities but in Europe	- **Beginning of 1999**: Establishment of the CCV unit as part of a corporate division - CCV unit continues the financial CV model and CV approach that had developed through the years - The geographic focus of the CCV turns to Europe and Asia as the valuations in Silicon Valley have increased significantly
Outcomes	- **1996:** DELTA IPO: $848 m market capitalisation in the first week - More CV investments followed by Manager Ca - Corporation C gains geographic presence in Silicon Valley - Manager Ca develops a network of contacts in Silicon Valley	- **1998**: "there will be a series of solid opportunities to invest in new start ups in 1999… we call it [CCV]. The idea is that it will be self-financing and make regular contributions to our results as it has done in 1998" [80]	- Acceleration of activities of the CCV unit - Recruitment of personnel resulting in an increase of its size
People involved	Manager Ca CFO of Corporation C	Manager Ca and his CV team CFO of Corporation C Board of Corporation C	Manager Ca and his CV team CFO of Corporation C
Time length	4 years	1 and a half years	2-3 months

[80] Corporate Annual Report, 1998

The formal establishment of the CCV unit was not perceived as a turning point in the involvement of the corporation in CV activities, but as a continuation of Manager Ca's activities, with the only difference being the need for him to report more formally at the Board. The experimental phase lasted the longest, while the transition from the realisation to the formation phase was quicker and chronologically difficult to distinguish. This difference can be explained considering that by 1999 the corporation had decided to formalise its strategic interest in internet technologies, and consequently any activity related to them was closer to the core strategy.

Through this transition from an informal to a more formal approach towards CV, a positive perception towards CV and the CCV team emerged within the corporation. Manager Cp, who joined the CCV team in 1999, argues that at that time the corporation had a positive image of the CCV team with regards to its financial performance considering it a *"goldmine"*, a *"money machine"*. The intent of the CV involvement was amended through the years, as the CCV team was becoming more experienced and the macroeconomic climate was reinforcing its financial performance. What started as an individual act of small minority investments to understand new technologies became a financial vehicle to contribute to the corporation's bottom line. The focus shifted from the technological to the financial contribution of the CCV team to the corporation. This is also supported by the arguments used to justify the initial involvement and maintenance of interest in CV activities (Table 5.30).

The motives behind the involvement in CV activities were associated with external factors and the anticipated impact of technological changes on Corporation C's technology strategy. Responding to the fear and uncertainly caused by these technological changes was the initial justification for the involvement in CV activities, as the latter will allow the corporation to capture external innovation and new business models. The involvement in CV activities proposed the formation of commercial relationships between the corporation and external firms by matching the financial requirements of the latter for the technological benefit of the corporation. Manager Ca argues that such involvement was appropriate for the corporation to *"monitor"* and to *"understand"* the technological threat. However, as Manager Cm argues, the CV initiative was intentionally challenging the existing technology strategy of the corporation. The latter was focused on developing technologies in-house, while Manager Ca was acquiring technology externally, on the behalf of the corporation.

Table 5.30: Justification and validation of CV involvement by Corporation C

Construct	Quotes
Rationale	-"the reason we started corporate venturing with [Manager Ca] in particular, was in response to what was happening in Silicon Valley.... a large component of [Corporation C]'s business is around technology, and we need to keep at the leading edge of technology developments, in particular areas of technology areas not all of it, but in particular areas to do with communication information" Manager Cm -"So it was a reaction to a threat, and this was how we structured the response" ..."I was interested because we had been trying to work with small companies, because we recognise that in small companies there were often good ideas that weren't yet available from IBM or Microsoft" Manager Ca - " It was the technology strategy (that) took us into corporate venturing" Manager Cm
Motives	-"we were scared, we were frightened of the implications of Netscape, when it became a public company that you could buy software that would cost you very little and you could become like [Corporation C]" Manager Ca -"So what I was doing was to try to avoid the worst outcome of that threat...It was things we had not had a need for. We were trying to be ahead of the need" Manager Ca
Intentions	-"The original plan was about acquiring technology....It was not financial at all. As it turned out, because of the dot com boom, it turned out to be hugely successful financially, but that was without doubt, not the original intention" Manager Cm -"We were trying to understand the innovation that would drive them next" Manager Ca -"[Manager Ca] was there to provoke debate within the technology groups by going out and finding these potentially completely different technologies that would break up what we were doing" Manager Cm

While the initial intentions of the involvement of the corporation in CV activities were purely technology related, the data indicate that after 1999 the intentions of the corporation towards the CCV unit were amended, as the outcomes of the CV involvement were realised. The CCV unit was perceived and behaved as an autonomous VC unit within the corporation and the involvement in CV activities became synonymous with financial gains through investments in start-up companies. Managers Ct and Cp argue that the demonstration of significant financial gains by the CCV unit sustaining the interest of the corporation in CV activities.

The data also indicate that there was not a formal justification process taking place to validate the involvement of the corporation in CV activities. The direct communication between Manager Ca and the CFO of the Corporation C was sufficient for the latter to authorise the CV involvement. Manager Ca explains that his proposal to justify his activities in Silicon Valley comprised three main arguments. The first two arguments were related to the survivability and future of the corporation, while the third one was mainly related to the way CV activities required to be carried by the corporation:

> *"There were three benefits: the first one was not to be excluded ... the second one which kind of goes along with that, is having information, so strategy of [Corporation C] could be developed with a 4 or 5 year view with what technology was enabling, and the third one was that this was something which was specialised and needed to be led as a separate activity rather than a piece of lots of activities" Manager Ca*

The justification of the involvement in CV activities indicates the scope and the form of the CV involvement, with direct implications on the way to implement and carry out these activities. The involvement in CV activities was promoted on the basis of its role in providing vital technological insight to the top management team in forming the corporate strategy, while being autonomous activities and independent from the rest of the corporation.

5.4.2.1.2 The CCV unit and relationship to other venturing activities

The strategic context of the formation of the CCV unit is related to the technology strategy of the corporation. Manager Ca argues that the intent of the CCV team was ahead of the existing corporate strategy and one of the team's roles was to challenge it. The new technologies and new business models in which the CCV unit had invested were anticipated to rejuvenate the corporate technology strategy. The character of the CCV unit's investments and the involvement of the corporation in CV activities were experimental. However, Manager Cm argues that while the corporation was experimenting with the CCV initiative, there was another technology related strategic option considered by the Board. This other option suggested the association of the corporation with another large corporation, which would provide access to new technologies for Corporation C. This option was competing directly with the CCV initiative's rationale. She argues that the existence of such a dichotomy within the technology group regarding the technology strategy of the corporation might have caused the progressive amendment of the intentions and business model of the CCV unit, and its ultimate spin out in 2001. Table 5.31 outlines the attributes of the CCV unit's business model in 1995 and their amendment during its life-span.

Table 5.31: Characteristics of the CCV unit's business model

Characteristics	CCV Model
Focus of investment	- Start up companies possessing technological know-how
Objective(s)	**1994-1997**: Combination of technology related and financial objectives - To carry out minority equity investments on new technologies and business models - To invest in services and products which could be used by Corporation C, either for international distribution or to be used as pilot products and services
	1998-2001: Emphasis on financial objectives - To achieve high financial performance for the company portfolio - To maintain a degree of relevance between the Unit's investments and Corporation C's business activities
Funding	Corporate funds were assigned from the CFO of Corporation C to Manager Ca
Source(s) of investments	-Type of source: Entrepreneurs, investment community -Geographic concentration: USA (1994-1997) / Europe and Asia (1998-2001)
Investment sectors	- Network related technologies (security, navigation, integration, systems management and performance)
CV Model Process	Comprises of the following stages: - Company and technology identification process - Potential investment evaluation process - Negotiations process - Investment process - Company portfolio management process
Investment identification process	- 1994-1997: Manager C approaches entrepreneurs carrying out desk research - 1998-2001: A combination of entrepreneurs approaching the CCV team and of CCV team managers approaching entrepreneurs Informal and formal social networking, presence in the geographic region where the entrepreneurs operated and capitalisation of emerging reputation of CCV unit were utilised to carry our desk research (i.e. collect information) and identify potential investments
Investment evaluation process	Technology related criteria - Type and potential of technology - Level of development in technology (not early stage technologies)
	Financial criteria - High financial returns anticipating the involved risk
	Strategic criteria - Scope of opportunity - Relevance with Corporation C's business activities - Business relevance among the portfolio companies - Management team of start up company
Negotiation process	1994-1997: Manager Ca is carrying out the negotiations with the entrepreneurs introducing to them the advantages of collaborating with Corporation C 1998-2001: no data available
Investment process	Initial strategy: - Making investments to funds - Not having a seat at the Board of the new venture - To start with minority stakes and progressively acquire the company
	Emerging strategy: - Direct investments to start up companies - Having a seat at the Board of the new venture - Minority or majority investment according to the technology involved - Commercial arrangement with start up company
Portfolio management process	Two strategies followed: - IPO of portfolio company when market conditions appropriate - Maintenance in the portfolio until an IPO appropriate

The investment focus remained the same through its life cycle, but its objectives were amended for three main reasons: (a) the positive financial performance of the initial CV investments, (b) the low degree of technology absorption from the corporation of the CV investments and (c) the treatment of the CCV unit as a venture capital company within the corporation after 1998. Consequently, while initially the CCV unit aimed to invest in technologically relevant and financially sound start up companies, after 1998 the objective was to improve the financial performance of the unit's venture portfolio.

The level of technological relevance of the CCV unit's focus of investment to the technological needs of the corporation was higher during the initial years of the unit's life cycle. However, it was not a necessary condition upon which the decision to invest in a start up company was taken. With the CV activities carried out exclusively by Manager Ca, the objective was to invest in technologies not yet realised by the market, but which could define the future of the corporation:

> *"[Manager Ca] was sent out to Silicon Valley to start investigating what companies were doing there, and he started investing ... taking small stakes in companies as a way of having access to their ideas, what they were doing, changing business models, as a way of being able to feed those back into [Corporation C] and possibly use some of these technologies ourselves" Manager Cm*

Corporation C was not necessarily interested in acquiring all the technologies in which Manager Ca and the CCV team had invested in, as the investment strategy and company portfolio of the latter were ahead of the existing needs of the corporation. This investment strategy was followed until the end of 1999. The investment focus of the CCV unit in technologies related to Corporation C's operations allowed the unit to gain expertise in these technologies, and at the same time increase the effectiveness of its investment portfolio, by associating them with a significant client, Corporation C.

The criteria used to screen and evaluate the potential of an external start up company reflected the CCV unit's objectives. The primary concern was on the anticipated financial performance of an investment; while of secondary importance was the technological and business scope of a technological opportunity. The management team of the start-up company was also significant, as the interpersonal relationship between the start up company and the CCV team was a catalyst for trust to emerge. Another criterion used was the stage of technological development of a potential investment. The closer to the prototype or to a developed product/service the business plan of the start up company was, the more attractive to the CCV model an investment would have been. This is indicative of the indented short time lag between investments and returns the CCV unit was operating on.

Through the years, Manager Ca and his team were gaining knowledge and becoming more familiar, confident and experienced in CV investments. They developed skills and a social (informal and progressively formal) network of contacts in sectors and countries in which they were operating. The unit's investment strategy was progressively amended by increasing the level of the unit's involvement in and control over the ventures. In 1999, the CCV team increased its size and intensity of activities. Moreover, its business model was formalised, being process oriented and highly sophisticated, mainly due to its formation within the corporation. The strong brand identity that the unit had developed demonstrated both internally and externally to the corporation its capabilities of bringing together demand and supply; entrepreneurs and investors. Manager Ct describes the social network of investors and entrepreneurs as a *"microcosm"*, where interpersonal networking and a good reputation as an investor were critical to secure access to the latest technological developments and investment opportunities. The CCV unit became a self-sufficient business entity, adopting an autonomous behaviour, and was perceived as an elitist unit by the rest of the corporation.

While a positive perception was created outside the corporation about the CCV unit, within the corporation the nature of the CV activities, as well as the objectives of the CCV unit were the focus of criticism:

> *"So that (Manager Ca's activities in challenging the technology strategy of the corporation) was done deliberately and it was recognised by some of the people in the organisation that that is what he was there for, but that is actually quite difficult to live with, if you are one of the people who is being challenged by this" Manager Cm*

> *"And there was a sense that the [CCV team], in many ways quite rightly, were focusing their efforts on the companies in which they had invested, and were not focusing their efforts so much in terms of bringing the rest of [Corporation C] along with them in what they were doing, in being able to say why this particular investment in this particular company makes sense.*

Actually to an extent, there is a degree of "not invented here", which is quite difficult to overcome. And at the time that [Manager Ca] was trying to push these individual companies within [Corporation C"] Manager Cm

"The [CCV unit] itself was a venture capital house, in its own right, almost. And it wasn't there to fulfil the operational and strategic demands or priorities of [Corporation C] as a company" Manager Cn

"Corporate venture capital is compensation and jealousy 'why should I help them, because I am just helping them make money', right?" Manager Cp

These quotes are indicative of the perceptions and emotions created towards the CCV unit and its managers. The other corporate divisions, and especially the technology related units, felt intimidated and challenged by the acquisition of external technological known-how that could replace the in-house developed technological know-how. In their eyes, the CCV unit after a point started to be more interested in the financial performance of its company portfolio, rather than in the technological relevance of its company portfolio to the corporation. The CCV unit started to be viewed as a VC company, creating distance between the CCV managers and other corporate managers. On the other hand, progressively the CCV managers identified themselves as being envied, as they could identify individuals within the corporation not willing to co-operate with them, on account of the financial gains they were achieving.

This lack of co-operation is also observed when the interviewees mentioned the co-existence of other informal entrepreneurial activities when the CCV unit was initiated. Managers Ca and Ct describe the other entrepreneurial activities as unsuccessful, lacking consistency and structure. These other activities were carried out by managers outside the CCV team, which had the support of the top management, but were following a different investment strategy than the one of the CCV team. According to Managers Cm and Cp, this also appears to be the case with the establishment in 2000 of an incubator in the CSR division. They argued that there was no association, coordination or collaboration between the external (CCV unit) and the internal (incubator) CV activities. The CCV unit is perceived to behave in an individualistic way, creating a distance from other venturing activities within the corporation. The CCV unit managers appear to be aware of this distinction and to present the implementation and performance of the other venturing activities as inferior to that of the CCV unit. Even though such behaviour could have been perceived as elitist, it could also indicate the degree of ethnocentrism characterising the CCV team.

5.4.2.2 Implementing the CCV initiative within Corporation C

The formation and the implementation phases of the CCV initiative overlap. The organisation of the CCV unit followed a transition from an informal and experimental phase to a more formal and professional approach towards CV. The relationship between the unit and the corporation was amended until an appropriate form was found in 1999 while the CCV unit was gaining power and recognition within and outside the corporate boundaries.

5.4.2.2.1 Organising the CCV unit

At the initial stages of the CCV unit, the formation of a small team of three people (one of them was Manager Ca) was considered as appropriate to carry out the CV activities in view of their experimental character. This core team was supported by other corporate units, which provided legal and financial consultation services. The size of the CCV team increased to 15 people in 1999, when the CV activities started to become more formal. While two of the initial members left, new partners (external and internal to the corporation) joined the team. Manager Ca was the champion and leader of the CCV team through its evolution. His role was critical in selecting his team members. The members of the California based team were chosen based on their functional roles in the team and their interpersonal skills. Manager Ca, maintaining his leadership role, was negotiating, making and overseeing an investment, while the other two team members were identifying and evaluating potential investments as they had the technical and business knowledge to do so. Table 5.32 provides a summary of relevant quotes about the characteristics of the CCV team and its members.

A mixture of objective and subjective criteria was employed to create the initial CCV team. The objective criteria are related to the market and technology knowledge the individuals had. The subjective criteria are mainly related to interpersonal skills (respectfulness within the corporation, interest to be involved in new ventures, friendship with Manager Ca, networking) and behavioural characteristics (enthusiasm, entrepreneurial spirit, process orientation). The subjective criteria

Table 5.32: People involved in the CCV unit

Constructs	Quotes
Size of team	- "[Manager Ca] was on his own, essentially, between 1994 and 1999 he had one or two people" Manager Cp - 1994: "It was a very small group, it was really myself and a technical guy and a journalist" Manager Ca - 1997-1999: "[Manager Ca] started to build a little team of people under him" Manager Ct
Roles and responsibilities	- 1994: "The journalist was good at finding small companies and the technical guy was good at the technology due diligence and what I would do was to specify which things were interesting" Manager Ca - 1999: "[Manager Ca] was doing the corporate venturing stuff and I was working with the (external) company" Manager Ct - 1999: "My focus always was external, make investments, make money" Manager Cp - 1999: "Some of the others that came in later…. were more interested in the financial structuring of the deal, rather than the technologies within the companies" Manager Cm
Characteristics of team members	- "One of them was self-selected, because he was a journalist who knew many of the start up companies anyway, he was welcome into the industry and he liked doing this. By him, it was fun. And then the technology guy, I knew him very well, he had a very broad base of technology expertise and he was highly respected for his opinion, but wasn't particularly organised or and organisational guy, he was, he liked to be a bit more loose in the structure. So he was perfect for me" … "So they had some characteristics that some people mistake for entrepreneurial, even some people themselves mistake it, but they weren't truly entrepreneurs" Manager Ca - "I don't think you could ever attribute the success of any venturing unit within a company, to the company because companies don't make things happen, people do. And if it has been successful, it is because 1 or 2 people basically fought for it and did it, and they manoeuvred and they manipulated and they did whatever they had to do, to make it happen. And that is whether they have come from inside or outside. And that is down to personality" … "you understand technology, you have to be a deal maker as well, you have to be somebody who is creative and can think about how to structure things, understands how to run companies" Manager Ct - "[Manager Ca] still has a very good group of people working with him, and they are a mixture… they are young, which helps. He has some very bright technology people working with him who could understand well what the companies they were investing in were trying to do… there is [Manager Ct] who is a Finance guy, with an accountant background, who actually is a very key person in [CCV company]…[Manager Ca's] other main team members were primarily technologists, bright people. Some of the others that came in later were much younger and fresher out of Business Schools and were very much 'deal doers' corporate finance kind of guys" Manager Cm
Team composition	- "I do (recruit) most of the new people. So we have two types of people. We have people like me. I basically hired people that I knew from [Business School 1] and from [Business School 2], who I knew, were very, very, very good... So the financial side of it was from [Business School 1] or [Business School 2], or both, and the other people tend to be all [Corporation C's] people, who have worked at [Corporation C], had operational experience in new technology" Manager Cp - "in VC you tend to hire people you know … the best hires, actually not just VC, also when we are hiring for our companies, are people that we know people that you know are good. These teams are too small that you can't take too many risks … because a mistake can be very, very expensive. Not just in terms of their salary or whatever, but also in terms of the deals that they do" Manager Cp
Team dynamics	- "There are certain functions that we have to do and those functions are very different the finance piece is different from the technology piece,

	which is different form ... so we tend to work as a team and we have a range of skills" Manager Ca - "So you have to work with people in the fund, because if a guy is unsure.... you have to trust each other to make good deals... there must be lots of trust. So that is key" Manager Cp - "we have a mix, and we have people who have run businesses, people who are financial guys. And over the past 5 years they have sort of blended, because I was on the finance side, but I must have been on 25 Boards in the past 5 years, and so you gain experience. At the same side, we have technologists on our team, they are business people, they are operations people, you know, they help with the investments as well, and they read the investment documents ... I mean still we have specialist skills" Manager Cp

appear to be significant for Manager Ca, as demonstrated by the way he had envisioned the team composition, being *"perfect"* for him. This is indicative of the team dynamics developed within the team, allowing complementarities and a collaborative spirit to emerge, while each team member had its distinctive role. However, there was a hierarchy of roles reflecting the decision making process within the team. At its initial stages, the lack of specified CV investment processes and procedures led to a more centralised decision making model. At the later stages, when a more formal CV investment process emerged and the team expanded, each individual was aware of their role and domain of activity.

In composing the London based CCV team in 1999, the same rationale was used as at the initial stages. Managers Ct and Cp were approached by Manager Ca to join it. The importance of interpersonal skills and relationships (i.e. friendship, colleagues, and graduates of the same university), and behavioural characteristics remained significant. As Manager Cp argues, it was important to maintain high levels of trust, collaborative spirit and compatible knowledge and skills within the team, considering its relative small size. Manager Cm identified the mixture of skills and individuals effectively working for the same objective, as one of the capabilities of the CCV team. Manager Ct argued that the individuals within the team were proactive, determined, driven to succeed and to prove themselves, willing to be involved in the team. It appears that the personal commitment and involvement of individuals in the CV process had a positive effect on the performance of the unit.

The main difference between the initial and the latter stages of the CCV team was the employment background of the individuals involved. The initial CCV team comprised people recruited from within Corporation C, while after 1999 the new members were recruited primarily from outside the corporation. Manager Cp argues that the externally recruited individuals dealt with the business and financial aspects of the CCV process, while the internally recruited individuals dealt with the technological aspects. The common characteristic of these two groups of individuals was the experience (investment and operational) they were contributing. Manager Cp argues that the initial CCV team was characterised by lack of experience and knowledge of carrying out CV investments. Through learning-by-doing and improvisation, the core CCV team developed capabilities which were reinforced by the recruitment of experienced individuals from within and outside the corporation. However, the recruitment of external people was in conflict to the corporate practice to utilise internal personnel for corporate activities. Managers Ca, Cp and Ct were aware of the criticism they were receiving for recruiting individuals outside the corporation, reinforcing various negative emotions the CCV unit attracted after 1999.

Despite the criticism, both groups of individuals were highly motivated to work for the CCV unit (Table 5.33). Each individual, according to their perception towards the CCV unit, had different motives. Manager Ca's motivation was driven from his emotional attachment and commitment to the team, championing its formation and development. There were two groups of motives: *tangible* (i.e. financial rewards, job role and responsibilities, hierarchical job status) and *intangible* (i.e. social status, involvement in novel task, internal recognition). At its initial stages, the CCV unit was portrayed as an alternative, novel, *"prestigious"* and interesting unit to work for. Corporate managers such as Managers Ca and Ct were attracted by the career prospects within the corporation by being involved in such activities.

Table 5.33: Motivating the CCV team's members

	Quotes
Manager Ca	- "I suppose the reason that I was motivated was because it was my thing, it was my project, my idea, my responsibility and my opportunity and the two people I recruited were inside the company, they saw it as very prestigious. People used to want to join, and when we recruited people, everyone always said yes, I never had someone say no. So we were considered to be a prestigious thing to do, it was fun, it was exciting" - "Well initially it (financial incentives) wasn't very important at all to begin with, because we didn't have any alternative, we were corporate people. So we didn't have any chance to go to be a venture capitalist, because we weren't venture capitalists. But after 2 years or 3 years and we became skilful and we were successful, we began to get offers from other people… then we began to become more motivated by finance, but to begin with it wasn't really about finance, it was about having our own enterprise - for me anyway"
Manager Cp	- …"frankly they are flattered, interested,… again most people have boring days this is like a field trip, you know, if you are in school… that is a similar thing, particularly in the boom times… people just wanted to be involved"
Manager Ct	-"in order to incentivise somebody to make that happen, you should really give them a percentage of that you should give them share options in that company or a profit share or whatever" - the reason I became involved more and more with [Manager Ca] was because I had seen some of the things he had been doing, he happened to be like 2 offices away from me, and so we got to know each other and we became friends.
Manager Cm	- "certainly the way we set it (the remuneration system for the CCV team) up, they were well rewarded and they were certainly motivated in what they were doing, just by the enjoyment of what they are doing I think. It is the other people they have to interact with that it becomes very difficult to motivate, and that is a much wider pool of people, so you have got a much more difficult problem"

As the CCV team became financially successful, financial incentives and other tangible motives gained more importance. Manager Ca argues that the transformation in the team members' motives was inevitable, considering the recognition the CCV unit was receiving from the venture capital industry, as being compared to other successful venture capital companies. In the late 1990s, the VC industry was rewarding its executives with very big bonuses and the CCV managers were aware of such financial incentives, especially as some of them used to be venture capitalists prior to joining the team. The comparison between the CCV team's financial incentives and the rewards of the VC companies was inevitable, altering the CCV unit's managers' sense of perceptual justice. Manager Ct noticed that the more skilful the CV unit's manager became the more financial incentives they requested. He argued that this was the outcome of a self-identification and evaluation process the managers went through and which resulted in a review of their perceived value as corporate managers and in a decline of the negotiation power of the corporation. Manager Cm was aware of the transformation of the CCV managers' perceptions towards what they worth. As the corporate remuneration scheme was not satisfactory for the CCV unit's managers, a distinctive scheme similar to the one of VC companies had to be established to compromise both parties:

> *"I think it is quite difficult, because I think certainly at the time that we were moving the [CCV unit] slightly (between 1997-1999), they (the CCV unit's managers) constantly compared themselves against external venture capital companies - and they were therefore not prepared to be bound by the restrictions, as they saw it, of being part of a big corporation. And I think if you are moving in that kind of world, it is very difficult for them to behave and be rewarded as normal corporate people" Manager Cm*

The introduction of a distinctive remuneration system for the CCV unit allowed its managers to be generously financially rewarded. This became known among other non-venturing managers, making the CCV team and its members a subject of envy. The non-venturing corporate managers felt that the financial rewards the CCV managers and specifically Manager Ca were enjoying were violating the perceptual justice within Corporation C:

> *"Because at the time [the Manager Ca] was earning big bonuses because some of the earlier investments they had made had become very successful for us ... earning ad hoc, big bonuses-big by Corporation C's standards anyway... not particularly big by American or other investment standards, but by Corporation C's standards they were big bonuses. ... and everybody*

knew about them, so the people who weren't doing this work and weren't getting the bonuses got really hacked off, and that is when it (the envy) started" Manager Cm

The CCV team was aware of the envy towards their financial gains and the financial performance of the corporation, as well of the problems the expression of such envy was causing to the CCV unit's operations. The *"enviers"* developed a negative behaviour towards the CCV unit, denying collaborating with it, because such an action would have reinforced its success:

" 'well my (envier's) desk is here, and this person's desk [CCV manager] is there, and they have gone with the new business and they have been given options and they are going to become billionaires, and I am sitting here doing my boring job with Corporation C options, and that is not going to get me anywhere' " Manager Cm

"Corporate venture capital is compensation and jealousy: 'why should I [non-venturing manager] help them [CCV managers], because I am just helping them make money', right?" Manager Cp

Another factor which contributed to the emergence of negative emotions towards the CCV unit was the allocation of resources from the corporation to the unit. Apart from human and social capital within the CCV team, the corporation was providing the rest of the resources (i.e. legal and financial consultancy, and financial recourses) involved in the operations of the CCV team. At its initial stages, the CCV unit was also dependent on the corporation for consultancy services, but as it became more skilful it reduced its reliance on the corporation. The financial contribution and support of the corporation to the CCV unit was central in defining the relationship between the two entities. Manager Ca, due to his seniority in the CMN business prior to his involvement in CV activities, had a close and direct relationship with the CFO, which was perceived negatively by other units. There was not a formal fund allocation system in place, but the funds were provided in an *ad hoc* and informal manner to Manager Ca by the CFO. Manager Cm described the rationale and approach Corporation C took towards funding the CV activities and how this approach changed though the years:

"When [Manager Ca] started out, it was a sort of 'suck it and see' approach, so it was agreed that he should do these investments, make some investments, and therefore he had to be funded ... he had to have the money to do that, so the money was made available to him" ... "[The CCV unit], initially there wasn't really any budget for it, but it does half help having the [CFO] as his boss. So that was kind of funded in a completely random way, as far as I could tell, just by the [CFO] allocating monies to it. And then gradually as it

became a clearer thing in its own right, it did have, effectively a budget allocated to it"... " when (1997) we changed the structure of the [CCV unit], and it was set up as a Limited Liability Partnership, and [Corporation C] was a Partner, so as part of the partnership agreement we undertook to fund it to a certain level" Manager Cm

However, Manager Ca argues that there was internal competition of resources and he had to *"make the case"* to obtain the funds, and justify to the CFO the amount of funds requested. After the initial investments, a justification and funds allocation process emerged and was progressively used, increasing the effectiveness of Manager Ca's activities and decreasing the time requirements for a fund approval. This change was demonstrated in 1997, with the allocation of a specific budget at the CCV unit by the CFO. The existence of a dedicated fund to support the activities of the CCV unit appears to have allowed Manager Ca to expand without restraints the size and investment intensity of the unit, meeting the funding needs of its activities. Manager Cm argued though that the allocation of a budget at the CCV unit caused irritation and antagonistic behaviour from other units which were not enjoying equal treatment. The funding privileges of the CCV unit were perceived by other units as violation of the existing funding procedures applying within the corporation.

The macroeconomic conditions were increasing the value of the CVC unit's portfolio and the 1997 budget was doubled in 2000, to reflect the funding needs of the unit, and the positive expectations formed for the unit's financial performance. The CCV unit was establishing its dominance in the market and was attracting external partners. However, in 2001 the macroeconomic slowdown affected negatively the market value of the CCV unit's investment portfolio and Corporation C was not willing to continue to fund its activities. This initiated a crucial amendment of the financial and legal status of the unit within the corporation, leading to its spin out. The participation of the corporation was decreased by 27% and external investors were invited to participate in the new company that emerged. This amendment signified the end of the venturing relationship between the corporation and the CCV unit. The CCV unit spun out to become an autonomous VC company, maintaining the management of the Corporation C's portfolio created between 1995 and 2001.

The CCV unit, as a VC company, used the capital created from previous investments, while its reputation helped to attract new partners and investors. Manager Cp argues that the contribution of Corporation C to the new company *"was heavily negotiated ...as easy as it was to get the first [budget], it was that difficult to get the [contribution to the new fund]"*. The hesitation of Corporation C to invest heavily in the new company can be explained by the financial performance of the CCV portfolio and the negative macroeconomic conditions. Manager Cm argued that the departure of the CFO, who was the main sponsor of Manager Ca's activities, alongside to a change of Chief Executive might have also contributed to this decision.

5.4.2.2.2 Relationships with the rest of the corporation

Organising the CCV unit reflected the relationship formed between the unit and the corporation. Whenever the relationship changed, the organisation of the CCV unit was amended to fit the new relationship. The structural and cultural context of the CCV unit affected the relationship of the unit with the rest of the corporation.

The attitude and perceptions towards CV, as formed at the initiation phase of the corporation's involvement in CV activities, influenced the organisational character of the CCV unit. Manager Ca's proposal to the Board to treat the CCV unit as a separate corporate activity personified the unit throughout its life cycle. Manager Ca and the CCV unit were acting as individual entities enjoying autonomy in conducting CV activities. On the other hand, the experimental approach towards CV at the initial stages favoured the adoption of a loose organisational design to host the CV activities. The CCV unit was formally established only when the relationship between the corporation and the CCV team was clarified and defined as a limited partnership with the corporation being the only partner. Table 5.34 provides indicative quotes with regard to the CCV unit's structural context.

Corporation C was organised around three businesses, two traditional and core to its operations, and a third one called CMN established in 1993 and responsible for the in-house development of *"new products to serve emerging information needs over the purchase of market share in existing segments"*[81]. Manager Ca was working for the CMN and reporting to the CFO, who became responsible for the corporation's

[81] Executive Vice-President of the CMN division between 1993 and 1998, Corporate Press Release

Table 5.34: Organisational Structure of the CCV unit

Constructs	Quotes
Model of organisational structure	1995-1997: "The division was called the [CMN] and that was collapsed into the parent company about 1997… (within which it was the venturing activities)… we used to call it the[CCV fund]" Manager Ca 1997: "There was a group called New Business Development within [Corporation C] that reported through to the Finance Director. There was basically 3 people in it there was [Manager Ca] that had the Venturing Unit, which was called the [CCV fund], there was another Unit trying to build research assets, buying core businesses … and they had quite developed businesses, and then there was me" Manager Ct 1999: "There was a division which was called [CSR], which was intended to be the sort of division in which we investigated new areas of business. So the [CCV unit] was in there, and the Incubator was in there" Manager Cm - "We had a lot of autonomy.. We could do pretty much what we wanted to do, as long as we justified it" Manager Ca - "Basically, we acted like a fully independent group" Manager Cp - "Those 3 legs (core businesses) had existed before the [CCV unit] and the corporate venturing occurred. When the corporate venturing came along it was very much because the internet was arriving, because there was an explosion of information….there were a lot of opportunities in [one of the businesses], and that is where we should put our growth efforts. And that is why it sort of came around, that area. So it was kind of more natural evolution" Manager Cm
Changes of organisational structure	- "The CFO became a head of this group. It was called [CSR] … sort of a hip word. And he moved from the big CFO to being the head of [CSR]" Manager Cp - "We were reporting firstly into the CFO and then they restructured and formed a new group, which they restructured again and again and again" Manager Cp - "Initially it was just [Manager Ca] reporting essentially to our Finance Director. As his operation got slightly bigger and he involved more people at that time, corporate venturing sort of morphed from just being a person doing some work to more of a venture capital model" Manager Cm
Model evaluation	- "It had no effect on us. The only effect it did have was you had to have an additional signature on the pages of the report" Manager Cp - "It was not ideal. It certainly made it more difficult on the communications piece, because there was an element of, you know 'you are doing this in your division it has got nothing to do with us in the other two main divisions', which couldn't have been further from the truth actually but that was certainly how it was perceived. So I say it was not ideal, although it did mean that these things were championed for a while and they clearly had a mandate to go and do these things, which they might not have got, had they been part of the main divisions. So there were some pluses, but it probably wasn't ideal" Manager Cm - "The governance on our side was loose, quite deliberately it was kept very, very flexible" Manager Cm - "I think we had some successes before, so I had some autonomy. I think they trusted my judgement" Manager Ca
Relationships & communication with rest of	- "They did talk to each other a lot, and they definitely had common interests, but they were fairly independent. They could have been operated together, in fact in many ways it would have been quite a good idea" Manager Cm - "Not directly, it was all in-direct, so because they were friends of mine, I would talk to them a lot. Especially the CEO, and 2 or 3 other main

corporation	Board Directors" Manager Ca - "They had no problems at all, no they were excited by it, it was considered to be fun and creative and fast moving and successful and when we did have problems later on was when it (CCV unit) became very successful and all of a sudden making significant salaries people got jealous and then they stopped being co-operative and when it became obvious that what we were saying was true and that you could in fact use software from small companies and you didn't have to write this yourself and that meant you could have many less people in the company, thousands less people, then they started getting much less co-operative because they realised, the middle managers realised that it was their jobs that were going to be, that were going to go, then they became less co-operative" Manager Ca - "Communication internally in the organisation was key, and I think that … in some ways … maybe it could have been done better" Manager Cm - "they would call me in as a kind of consultant when they had problems that they wanted to solve… Sometimes it was formal and I had a project and sometimes it was informal and I was just asked to come to meetings … So the communication was mostly informal, mostly verbal, 4 maybe 6 times a year I would be asked for a specific paper in writing, like a report paper… and I would go and produce this, so it was partly consultant, it was partly ad-hoc consultant on a daily basis… sometimes it was reactive" Manager Ca
Reporting	- "And all those different parts all reported into [CFO] who was originally the Finance Director he eventually stepped down as Finance Director and that was the reporting structure" Manager Cm - "I reported to a man who was the head of the division" Manager Ca - "we were reporting firstly into the CFO" Manager Cp

activities in internet related technologies. Due to the nature of its business, the CMN division became the subject of regular re-organisations, reflecting the intensity of interest the corporation was taking towards new technologies. Between 1997 and 1999, the CMN business became the organisational vehicle to promote the increasing interest of the corporation in internet related technologies and in developing an internet strategy by creating a specialised new division within its organisational umbrella. The new division was called CSR and dealt with all activities regarding growth and new business developments: CV, M&As, JVs, buy-outs. Besides its goal to embrace innovation activities and explore new business opportunities for the corporation, the CSR division lacked communication and collaboration with the other two core businesses. In early 2000, the CSR division was re-branded to reflect better its internet focus, and an incubator of internal business ideas was added to its operations. More importantly, the new brand name was used for the whole CMN business, demonstrating the significance of the internet strategy for the corporation. During this period, the CCV team was part of the CMN / CRS business, associated with the growth and new business development activities of the corporation.

In 2001, following the appointment of a new CEO, a major organisational restructuring took place which aimed to reflect the corporation's customer segments, as well as the refocus of the corporation to its core businesses. As an outcome of this, the CSR division was absorbed by the four new divisions that were created, while the internet strategy was abandoned. Managers Ca, Ct and Cp described the reorganisation of the CMN business as a destructive process for the corporation, but not affecting the operations and focus of the CCV team. The data indicate that while these changes were taking place within the corporation, a social identification process started for the CCV team. The unit's domain was clarified and its autonomous character was reinforced further. Manager Cp, who joined the CCV team in 1999, described the operations of the CCV unit as *"fully independent"* with the corporation having control only over the amount of funds involved in the CV process. Manager Cm argued that the governance structure of the CCV unit was deliberately structured to be *"loose"* to allow flexibility for its operations.

Besides being independent, the CCV unit reported to the CFO and the Board. Manager Ca, due to his hierarchical seniority, was responsible for reporting the activities of the team, and Managers Ct and Cp identified him as the main point of contact between the CCV team and the top management. Reporting to the Board was expected and requested in a more formal way after 1999, while before it was informal. In any case, Manager Ca argues that the reporting procedures employed (written and verbal reporting at frequent times during a financial year, quite similar to the one used by a VC company) aimed to act as a technology consultancy service to the corporation. He recognised that by reporting the CCV team's activities, they were informing and "*educating*" the divisional Board and the rest of the corporation on the technological developments and the business potential of their venture portfolio.

This type of reporting is indicative of the communication channels and relationship between the CCV team and the divisional board and the rest of the corporation. According to Manager Ca, the nature of the internal communication methods used was formal or informal, proactive or reactive according to the requirements at each occasion, as well as direct with the top management team and indirect with other divisional managers. In both cases interpersonal skills, internal networking and the friendship Manager Ca shared with other corporate managers were critical to form these relationships. Manager Cm suggested that the internal communication could have been more effective and efficient. She argues that after 1998, the CCV unit was perceived to have been focused more on its activities, rather than in associating them with the rest of the corporation. Manager Ca argues that from the perspective of his team, they had been quite efficient and it was not the lack of communication that caused tension between the two entities, but the lack of co-operation from corporate groups and divisions towards the CCV unit.

The data indicate that due to its operation, the CCV unit had three main internal stakeholders: (a) the top management team of the division, (b) the corporate technology group, and (c) the legal and commercial departments of the corporation. The first stakeholder was involved in forming the relationship between the CCV unit and the corporation and affected the approach taken towards CV; the second one was challenged by the outcomes of the CCV unit's activities, while the last one assisted the operations of the CCV unit. In terms of the level of dependence of the CCV unit on these three stakeholders, it appears that there is dependency only on the top management team of the division. As the CCV unit was evolving and becoming more skilful and autonomous, it became less dependent on the others. The relationship with the legal and commercial departments of the corporation terminated progressively, as the CCV unit was formalised and its business model realised and documented.

The relationship with the corporate technology group initially was of a supplier-buyer nature; the CCV team supplied the technology group with a portfolio of new technologies. Manager Ca argued that at the initial stages of his team, this relationship was critical to the success to the CCV team's investments, as the technology group could have been an internal customer for their investments. Nevertheless, the two groups had adopted two different approaches but aimed for similar outcomes. The technology group was developing new technologies in-house, while the CCV team was acquiring new technologies from outside. As Manager Cm argued, it was inevitable that the two technology routines would clash and create competition and tension in between them. The technology group adopted a "*not-invented-here*" attitude towards the CCV unit's ventures while the adoption of the CCV unit's technologies and new business model by the corporation started to affect the jobs of the middle-level managers of the technology group.

The emerging tension was expressed from the technology group as lack of co-operation and scepticism towards the CCV unit. It was supported by a feeling of injustice and envy that these middle-level managers felt towards the remuneration, salaries and financial performance of the CCV team. Manager Cm recognised that the intended provocation and destruction to the technology group by the CV activities led to the creation of a destructive climate within the corporation. Manager Ca was not threatened by this negative climate as the progressive reinforcement of his relationship with and recognition by the top management of the division gave him confidence and made the position of the CCV unit stronger. In the 1999 *Annual Report*, the CCV unit occupied a page outlining its activities and performance.

When the CCV unit spun out, its relationship to the corporation was amended. The CCV team, as an autonomous VC company, provided financial services to the corporation by managing the business portfolio of the latter. The new communication and reporting practices employed were characterised by Manager Cp as the typical VC firm-investor one. Manager Ct argues that this amendment was in alignment with the values and operational processes of Corporation C. His perception is that it was an illustration of the way the skills and experience of the people involved in the CV activities were valued and transformed into a new business entity. The corporation helped the CCV unit to grow and become a business entity and even though its strategic focus had changed, it did not terminate the unit's operations.

Such an approach was indicative of the cultural context within which the CV activities were cultivated in Corporation C. Managers Ca, Ct and Cm argued that the existing cultural context within the corporation was the *"best place"* to carry out CV activities. Manager Ca argued that the CCV team after a certain time symbolised the openness of the corporation to external innovation with regards to new technologies and new business models. Moreover, Corporation C was supportive of individuals such as Manager Ca who were creative, proactive, conscious of trends and changes in the external environment, taking risks and venturing into novel activities. Table 5.35 summarises indicative quotes regarding the corporate and the CCV team's cultural context. Experiential learning and competition between internal projects was encouraged within the corporation, allowing the identification of an innovative solution or opportunity to be exploited by the corporation. Manager Cm described the corporate culture as anarchic, being adventurous and open to uncertainty, allowing corporate managers to be involved in new activities, but expecting them to contribute back to the corporation. Amongst the corporate employees appears to be a commonly shared belief that such behaviour was rewarded by the corporation through tangible (financial rewards) but most importantly intangible recognition (hierarchical status and promotion).

Managers Ct and Ca explain that even though such expectations existed within the corporation, there were informal cultural norms and rites that guided how such a proactive and creative behaviour was exercised. The corporation was more interested in the implications and the implementation of a novel activity, rather than on the experimental process of its discovery. This could explain the relatively long experimental phase of the involvement in CV activities and the level of autonomous and individualistic behaviour Manager Ca and his team developed through the years.

Table 5.35: Culture within the CCV unit and Corporation C

Constructs	Quotes
Cultural aspects	Within the CCV unit - "[Corporation C] was, you know, kind of a club; nobody got fired. You were just sort of promoted or put aside and given a big pension. It wasn't about blood thirsty, hungry MBA's who were going to kill their mother for a dollar. It is a completely different, different culture" Manager Cp Within the CSR Division and Corporation C - "It somehow manages to be incredibly bureaucratic and anarchic at the same time, which seems impossible… And there is a very sort of adventuresome, free spirit, don't look too closely, let them go out, let them come back with the story, and that is all that matters, sort of character around the company. So there is that piece …. of liking of adventure and uncertainty and kind of wild crazy ideas that might come home to roost fantastically well" Manager Cm - "Nobody stopped you from being creative and doing things, and the company had the money to invest and do all those sorts of things" ..."So as long as you played the game where you just went off and did it and got on with it" … "it is a great place to learn all your mistakes and things and build a process and so forth"… "It had a culture of if you perform, then you are going to get looked after" Manager Ct - "Well it's always been very risk taking, although it doesn't look like it from the outside. But it was quite a risk taking company, it had a lot of encouragement to take risk, but also a lot of control to stop the risk being too much risk" … "but you have to wait for the case sensibly and responsibly and you have to do your lobbying to get people to agree" Manager Ca
Degree of integration of CCV unit's culture	- "So I think what we did was show people that you could change the company, you could change the culture, you could change the speed of operation, you could change the way to how it was used but you had to do it by process and by formal well thought through, well structured ideas"… "I think it (CV) fitted very easily because we had often had a very project orientate mentality. And there was a culture in the company of not being afraid to have competing projects, where one was a fall back for the other" Manager Ca - "In some ways the corporate venturing piece fitted very well in a certain piece of [Corporation C], throughout the organisation not just at the top level" Manager Cm - "I think they had a culture change, which was away from large projects that were interconnected and incredibly complicated, almost impossible to understand" ... "for a faster, more staccato, standalone projects which had identifiable responsibility and accountability and speed" Manager Ca
Cultural reaction to CV activities	- "at the time that [Manager Ca] was trying to push these individual companies within [Corporation C], it was a combination of not-invented-here, 'why should I help [Manager Ca], because if I help him and his businesses do well, he becomes personally rich and I don't', and 'I don't particularly need to be disrupted by this new technology, actually I have got plenty on my plate doing what I am doing'"… " for a period there was a fairly uncomfortable culture of envy, and the corporate venturing piece was, to an extent, brought up on that" Manager Cm

For a novel activity to be accepted by the corporation it required internal lobbying and networking to identify significant stakeholders and promote it, as argued by Managers Ca and Ct. This could explain the necessity for the interpersonal relationships Manager Ca developed with middle-level and top-level managers at different stages of the CCV unit life cycle. It indicates the existence of strong informal structures within the corporation, affecting the selection and adoption of new routines. Part of this informal organisation was an experiential approach to learning adopted by the corporation, which according to Manager Ct acted as a catalyst to the approach taken towards CV, and the way the CCV unit evolved.

Besides the informal cultural structures that influenced innovation within the corporation, there were formal procedures and processes in place, acting as control mechanisms for the corporation's risk exposure. Manager Cm characterised this aspect of the culture as bureaucratic but justified, considering the corporate governance systems in place to sustain such a large corporation. Manager Ca was aware that these procedures made many corporate managers frustrated, perceiving them as barriers to innovation. His experience though was that such procedures were vital to make them more conscious and considering of innovative ideas they intended to bring forward. This last point influenced the way the involvement in CV activities was facilitated and the way the CCV unit developed its business model. The process orientation of the corporation was identified by Manager Ct in the CCV unit.

Within the CCV unit, besides the identified influences from the cultural rites and values of the corporate culture, a team-based culture started to emerge in parallel to the social identification process of the team. Manager Ct recognised that the unit's well defined and entrepreneurial culture attracted individuals such as himself. Manager Cp characterised the culture within the CCV unit as distinctive from other venturing teams in Europe, being very aggressive, oriented towards financial goals and competitive. The cultural context of the unit is demonstrated in its team dynamics. Manager Cp, comparing the CCV unit's and the corporate culture, identified the second one as conservative and predictable, while the recruitment of external personnel reinforced even further the distinctiveness of the CCV unit's culture.

While the entrepreneurial and adventurous cultural traits of the CCV unit did not influence the corporate culture, the macroeconomic and social-economic conditions formed in late 1999-early 2000 affected significantly the culture of certain divisions, such as the CSR:

> *"in 2000 actually, there was a shift in [Corporation C]'s culture to be much more adventurous, experimental and our share price was very high, and there was a sense of tremendous energy and 'anything is possible'... and anyway the [CCV unit] was an element of that, but it wasn't the driver of it, it was the whole market"... "Everything was very hot and new and modern, it was a whole kind of new kind of thing, which was a very strange phenomenon" Manager Cm*

The creation of the incubator within the CSR division in 2000 was a demonstration of this cultural change. Managers Cm and Ct argued that this put pressure on the CSR division's managers to act entrepreneurial, creating a false perception of what Corporation C stands for. Other divisions and corporate managers were sceptical towards and not comfortable with such change. The CCV unit, portrayed as part of this change, attracted these negative emotions as well. A negative behaviour emerged towards the CCV unit from units and corporate managers not involved in this *"entrepreneurial hype"*. This behaviour was expressed as envy and lack of cooperation towards the CCV unit and its operations. Manager Ct used the analogy of *"small empires"* to describe the situation within the corporation in 2000, where the performance of the CCV unit triggered competitive and envious behaviour towards it, undermining further its relationship to the rest of the corporation.

5.4.2.3 Outcomes

The involvement in CV activities had a number of outcomes for Corporation C listed in the sections that follow.

5.4.2.3.1 Performance: Financial and Strategic

The data indicate that the involvement in CV led to two types of performances (financial and strategic) at two levels (for the CCV unit and for the corporation) as demonstrated at Table 5.36. All managers were able to comment on the performance of the CV investments. Managers Ca, Ct and Cp commented on the performance of the CCV unit, and Managers Cm and Cn on its impact to the corporation. The performance of the CV involvement of the corporation is illustrated in both tangible

Table 5.36: Performance of CCV initiative for the unit and the corporation

	Quotes	
Performance	Area	
	Intangible	Tangible
CCV unit	- “after 2 or 3 years we became skilful and we were successful, we began to get offers from other people (from outside the corporation)” Manager Ca	- “I think through 1999, we were tracking the value of the portfolio. So we had invested at that stage, maybe £200m, and the value of the portfolio publicly, so we hadn’t sold, we peaked at over £1b” Manager Cp
Corporation C	- “They (Corporation C) were exposed to a number of ideas very early on, and they became masters of this new technology, so they could make their own roadmap. And with that came the flexibility to have many fewer people inside the company they were able to reduce the size of the company and operate at a lower cost. So they got much more operating than average, to use the jargon, in the company a lower fixed cost base” Manager Ca - “there are occasions when we have used [CCV unit’s] companies … used their technology in particular applications, which have been tremendously successful very successful for us and good news for them, too” Manager Cm - “a lot of the investments that we were showing [Corporation C], stuff they could be using, they should be using, they should start thinking about. So it was more on the ‘this is what is possible, this is what exists’, rather than ‘oh because of us, they went that way’ everything is sort of influenced. If you have a super tanker, and we are sort of a small thing. And we had influence, but it is a super tanker, it takes a long time to stop it, 30 miles to turn around. So, on the fringes we made people aware” Manager Cp	- “Well on the balance sheet, I think our investments were held at cost. So a tiny bit. But, one year we were 10% of our profits, I think that was in 2000, and the year before we were 7%. So we were a very significant … we were 10 people, we were a very significant part of the performance” Manager Cp - “In 1999 it was a really significant impact, and in a way one can judge the importance of a piece of activity by the extent to which it is discussed by brokers in their notes. And during 1999 and 2000, the [CCV unit] was seen as being a significant piece, and now it has completely gone from peoples radars” Manager Cm - “They (Corporation C) made a lot of money. In the year 2000, the venturing activity was 10% of profit talking some of the good profit, so it made a lot of money. So financially it was very successful, and in fact the internal rate of return to [Corporation C] was more than 30%” Manager Ca

and intangible terms. Manager Ct argues that it is challenging to identify the intangible performance of CV investments as it can be quantified in strategic, cultural and technological terms. On the other hand, he argued that the tangible aspect is mainly and reasonably associated with their financial performance.

The financial performance of the CCV unit had a direct positive impact on the financial performance of the division and the corporation, both in terms of return on investment rate and of generated profits. Individually each investment and the overall portfolio appear to have a significant financial impact on the corporation. Even though all managers acknowledge that the financial performance of the CCV unit had been successful, fulfilling its financial expectations, they recognise that it fluctuated according to how the market was performing at that particular period. At the end of 1999, the portfolio reached its highest value (its market value was £438 millions). The CCV unit was perceived as a *"money machine"* unit and associated with high financial gains. By the beginning of 2001, the CCV team had invested in 82 companies but not spun out all of them (in terms of IPO). Following the macroeconomic slowdown occurred in 1st and 2nd quarter of the same year, the value of the portfolio dropped significantly and the managers of the CCV unit argue that the previous good financial performance was forgotten. A negative perception towards the CCV unit started to develop within the corporation. Manager Cm argues that once the market declined, non-venturing corporate managers undermined further the actual performance of the unit.

The achievement of specific strategic returns was not in the objectives of the CCV unit. However, the corporation managed to achieve them by strategically utilising the unit's start up companies. The IPO of certain portfolio companies created new customers and markets, as well as new business models for the corporation. For example, DELTA Company, which achieved $848 m market capitalisation in the first week of its public offering, became a significant advertising vehicle for the brand name of the corporation and reinforced its operations in North America. The creation of a portfolio of 82 companies operating in new technologies that were so close to the technologies used by Corporation C was recognised by all interviewees as one of the most significant strategic and technological contributions of the CCV unit. Besides the access to significant know-how of new technologies and to external innovation, the corporation reinforced its innovative image in the financial and technology communities, as well as among its corporate clients and suppliers.

Manager Ca argues that one of the most significant contributions of the CCV unit investments and the CCV unit's business model to the corporation was the decline in the operational cost of the latter. The unit demonstrated how the corporation could move away from large, interconnected and complex projects to a flexible business model of smaller, stand-alone projects with identified accountability and responsibility. Nevertheless, this potential was not fully exploited by the corporation. Manager Cm criticised the corporation for failing to incorporate enough of the CCV unit's acquired technologies (approximately one quarter of them), which reinforced the scepticism formed within the corporation around the unit and its actions. The primary and secondary data indicate three main reasons which explain the limited absorption of the unit's acquired technologies: (a) the co-existence of a rival to the CCV unit's approach to technology acquisition, (b) the inability of the corporation to strategically decide how and whether to use these new technologies, and (c) the relatively small size of the CCV unit and lack of communication with the Board.

5.4.2.3.2 Learning outcomes

The evolution of the CCV unit was assisted by the on going learning-by-doing attitude towards CV adopted by Manager Ca and his team. The learning that occurred through the involvement of the corporation in CV activities occurred at the individual, team and corporate level (Table 5.37). The learning among the individuals of the CCV team was significant and contributed to a dynamic evolution of the unit's business model, especially before its formal establishment. The CV managers gained significant knowledge on the operations of a CV unit and on conducting CV activities on the behalf of and within a large corporation. Managers Ca and Ct explained that they learnt how to work with small companies and how to deal with the investment process. This knowledge was disseminated among the team members allowing the CCV team to develop best practice around the investment process, as formalised and documented in 1999 by Manager Cp. With respect to conducting CV activities on the behalf of a corporation, the CV managers learnt the importance of internal networking and communication in facilitating the CV process,

Table 5.37: Learning and the CCV initiative

	Quotes	
	About the CCV model	About CV
Individual Level	- "When we started, we didn't know what we were doing. We really did not have a clue. It was only by looking at what other people were doing … we got invited to go and look and things and we could see what was going on, and we had learned how to do it. And you could do it that way, sure, and learn how to do it" Manager Ct	- "I am not a believer in corporate venturing" Manager Cp - "You have little empires and there is a "wasn't invented here" type mentality. So I don't think that the success of the corporate venturing unit or the failure or whatever, necessarily leads to innovation as a direct link" Manager Ct
Team level	- "what we do is we make mistakes, we all make mistakes, we all learn. And as that happens, we basically build it into our process… and hopefully what we do is we capture all our learning as we go along" Manager Ct	- "the learning that did come from doing corporate venturing for example, was just in people's heads it was never built into the process or the culture of the company. So when people leave, they have got it in their heads all of that intellectual property goes with them" Manager Ct
Corporate level	- "But we did learn, it generated a lot of ideas. It made us think about how we go about our own business, which I think was quite valuable. It made us think about completely different business models actually, which is also valuable not that we adopted them, but we did think about them. So it brings new ideas into the organisation" … "the current people in [Corporation C] have no knowledge of that, so the lessons have largely just evaporated because people have moved on" Manager Cm	- "I think we have learned that it probably pays to be much clearer about … why you are getting into this corporate venturing"….. I think we have learned that …there is no point doing this if you haven't got the buy in of the people who really count, and actually working out the people who really count is not that obvious" Manager Cm - "I think different people would say different things, but what people say to me is 'yes, they have learned a lot' both the old CEO and the new CEO both feel that they learned a lot from this activity …, recognising that a lot of bright people whose ideas are important don't work for the company, so you have to organise yourself so you can pick their brains and understand what is happening, being open to the environment not just talking about next years product to your customers, but talking longer term. I think all those things, are things which people on the whole would consider as a result of this" Manager Ca

as well as the importance of maintaining a balanced relationship between the CCV unit and the corporation.

The data indicate that the team level learning was not disseminated across the CMN/CSR division and the rest of the corporation. Manager Ct argues that, even though learning was embedded in the corporate culture, other units and teams (such as the incubator team and the M&A team) were unwilling to consult the CCV team on issues of its expertise, preventing any dissemination of learning. He argues that the lack of a learning process to capture and utilise such knowledge within the corporation had a negative impact on the integration of the CV activities in the corporation. Manager Cm acknowledged that the exposure of the corporation to CV activities *"evaporated"* once the CCV team spun out.

Nevertheless, Manager Ca and Cm argue that the top management team of the corporation learnt from their involvement in CV activities and from the CCV unit's business model: (a) the benefits of experimenting with alternative business models of technology acquisition, (b) the strategic benefits of hosting an entrepreneurial unit within the corporate structure, and (c) the ability of anticipating changes in the external environment through a proactive and flexible unit. Manager Cm, reflecting on the CCV unit's experience, argues that the top management team learnt that the lack of clear purpose and governance of a CV team within a corporation could be destructive for both.

5.4.2.3.3 Impact on venturing activities

Corporation C's involvement in CV activities through the CCV unit's business model had a direct impact on the overall approach of the corporation towards CV. Figure 5.3 presented the fluctuation in the corporation's interest towards CV activities. This reflects the top management team's expectations of CV activities' contribution to the corporation's value creation. Table 5.38 summarises indicative quotes on how the CCV managers and managers outside the team evaluate the impact the CCV unit's experience had on the corporation's involvement in CV activities.

Manager Cm argues that the evolution of the perceptions and expectations towards the CV activities depended on how the CCV unit's investment portfolio performed.

Table 5.38: Impact of CCV initiative on CV activities within the corporation

	Quotes
Manager Ca	- "I think it is what happens very often with corporate venturing, is that when it gets difficult, people stop doing it and they stop just at the wrong time, because now is the right time to be looking forwards. And if you look at corporate venturing, boom bust, boom bust, boom bust, it is always out of phase by 18 months to 2 years, because people try and turn the market and they say "oh things are getting interesting" and they come in too late. And then they say "oh things are getting bad", so they leave too early always. And I think what we need is a steady approach not too much, disciplined, probably outsourced and that is what we now do with our funds"
Manager Cm	- "I think when it (CV involvement) was set up; it was never thought it would be anything like as successful as it was. I think it was thought that this would be sort of an interesting side issue, sort of running alongside to test and explore and something might come out of it. And had the dot com boom not happened, that is how it would have stayed. And actually, there might have been some better benefits for [Corporation C], had it not got so very successful, so very hyped up, and then it ended blasting itself out of the organisation. The expectations change over period was one of such rapid change that depending on when you looked at it, the expectation initially was "well this will be an interesting little side piece to development work that we do generally, but probably not hugely more than that" then suddenly the dot com boom came along and you thought "crikey, maybe … maybe there is a huge business to be had in this kind of CMGI model", which is what a lot of [CSR division] was around that as well, not just the [CCV unit]. And then that just sort of blew up overnight and now, as I say … so the expectations at that time were different. They were much more that this could be something very big, perhaps, and that was very quickly hit on the head. And more recent expectations are very low for the corporate venturing" - "I can imagine that we would do"…. "It probably wouldn't be from technology driver, it might be on the contents side that would be a possibility" … "I certainly don't think the corporate memory is so badly burned that we wouldn't touch it with a barge pole. We would have the same issues again though"
Manager Cp	- "Venture capital is so far back in his mind that it isn't ever going to happen again at [Corporation C], not for the next 20-50 years, because they have done it, it happened, they were successful, they can do it through us if they have money to spare"

While the market valuation of the CCV unit's investments fluctuated, different perceptions and levels of acceptance towards CV were formed within the corporation. The decision to be involved in CV activities transformed from an insignificant, experimental, non-purposeful activity, to a *"money machine"* activity, and then from a great success to a financial failure, between 1997 and 2001. As the CCV unit was evolving, the approach of Corporation C towards CV was amended from an internal and informal approach to a more formal. Eventually, in 2001 even though the corporation acknowledged the benefits of CV, the business model of an in-house CV unit was abandoned.

Managers Ca and Cm argue that the emergence of negative emotions towards the CV activities from non-venturing managers had not necessarily created a negative perception towards CV activities. These emotions were mainly feelings of injustice and unfairness that the performance of the CCV unit had caused. However, the CCV unit managers acknowledged that such negative emotions created significant constraints to the smooth operation of the unit, and jeopardised its integration within and retention by the corporation.

5.4.2.3.4 Impact on corporation

The activities of the CCV unit besides the direct impact on the performance of the corporation appear to have impacted other aspects of the corporation such as its image, business level strategy, organisational culture and operational management. However, all interviewees acknowledged that this impact was relative to the size of the CCV team and the degree of its interaction with the rest of the corporation.

In the late 1990s, the involvement of Corporation C with the CV market was recognised by the market and the shareholders as a positive association, projecting an innovative and open image to the outsiders. The activities of the CCV unit and the CV investments it carried out in the USA, Europe and Asia appear to have contributed positively to the brand awareness of the corporation in these geographic markets. The corporation achieved recognition as a reliable and important investor in the new technology markets. However, Managers Cm and Cp argue that when the macroeconomic conditions changed in 2001, the association of Corporation C with CV activities was not well perceived. Manager Ca and Manager Cp argue that until

2000, the association of Corporation C with CV activities reinforced the relationship between the corporation and its business to business clients, who were happy to see Corporation C being innovative and leading the new technological era:

> *"They would say 'hey we are going to see Morgan Stanley, we are going to see Deutche Bank, can you come along and tell them what is happening in [CCV unit], because there isn't much happening in terms of our products'. So [Manager Ca] went and the feedback was like 'Oh we didn't realise that there was so much happening at [Corporation C] that you guys were winning'. They used us ... not all the time, but a couple of times on that sort of stuff. It gave [Corporation C] the entry card into the hip club, you know, the internet club the new media club, the new world club" Manager Cp*

The CCV unit's investment portfolio was perceived by many of the corporation's clients as gaining indirect access to the latest technological advantages of that era. Corporation C had the potential to broaden the nature and quality of its services by incorporating the technologies of the CCV unit's investment portfolio.

Considering the CCV unit's strategic context, the data indicate that it indirectly influenced the strategy formation process within the CSR division. The investment focus of the CCV unit in *"breaking through"* technologies made the top management team more aware of the need to adopt a longer term horizon in planning their strategy. Manager Ca argues that the CV activities were ahead of the existing strategy (in 1996-1999). The information the CCV unit was gathering, utilising this proactive position, were available to the Board in forming the corporate strategy, but not necessarily used. However, other units and departments had also an input in the strategy formation process. The challenge for the Board was to prioritise and evaluate these inputs and accordingly form the strategy. Manager Cp used the metaphor of the corporation being a tanker and the CCV unit being the boat ahead, feeding the corporation in with *"intelligence"* about its strategic direction. Table 5.39 provides a summary of indicative quotes of the relationship between the CV activities as experienced within Corporation C and the strategy making process of the corporation.

Viewing the evolution of the CCV unit, the intensity of its activities, and the evolution of the corporation's interest in CV activities from a retrospective perspective, it appears that initially there was not a clear strategic view on the corporation's involvement in CV activities and its implications.

Table 5.39: CCV initiative and strategy making in Corporation C

	Quotes
Manager Ca	- "we were allowed to be ahead of the strategy of the company" ... " especially the venture activity is ahead of the strategy, so the venture activity feeds information to the strategy, about the number the ducks that goes across the water" - "The main thing is, in the period we were doing intensive corporate venturing of the kind I described, they (top management team) were looking further. They were looking further onto the horizon and they were interested in what the customers thought about the horizon. They weren't looking a year or 2 years ahead" - "it (CV activities) was more to take the existing franchise and develop it, than to say 'okay, let's go into a different area'. If you are going into a different area, you had to buy a company... it is difficult to do that through corporate venturing I think"
Manager Cm	- "the corporate strategy in 1999/2000, particularly 2000, was absolutely the right strategy to enable corporate venturing to occur. There was an openness. I think the strategy since then has been more focused, which is completely not the right environment for the corporate venturing, which is why we don't do it. So the likelihood of CV being able to exist, I think is closely aligned to strategic direction"
Manager Ct	- "I think what is interesting about corporate venturing at [Corporation C] is it just was another component in the tool kit of the Board to manage the business. So they had input form the Technology Dept, from the Business Managers and so forth, and that was all taken into account, what their view of the future was. But they also had this (the CCV unit), you know, completely different view. I am not saying it was any better or any worse, it was just a different view"
Manager Cp	- "You can use it (CV activities) for intelligence. But to be part of your strategy or to change your strategy.... it is unclear how information goes from a corporate venturing group all the way to the top to the Board. It is not as if the Board members themselves are on the Boards in these little companies" -"it was more on the 'this is what is possible, this is what exists', rather than 'oh because of us, they went that way' everything is sort of influenced. If you have a super tanker, and we are sort of a small thing. And we had influence, but it is a super tanker, it takes a long time to stop it, 30 miles to turn around"

The corporation was open to experimenting and improvising with at least three different approaches to technology acquisition: (a) in-house development, (b) external acquisition through CV investments, and (c) adoption of existing technology developed by a specialist. These three competing options aimed to gain legitimacy and to be selected by the top management team. The changes in the macroeconomic environment forced the Board to take a more focused strategic direction for the corporation, and the third approach in technology acquisition better suited the new situation. The outcomes of the CCV initiative were evaluated as not suitable for the new direction the corporation was taking in 2001, and consequently this option was abandoned.

With regards to whether the CV involvement caused any change in the corporate culture, the data indicate that any change was limited within the CSR division. Managers Cm and Ca argued that during the period of high intensity of CV activities CSR division's mangers associated themselves with innovation and wanted to behave in an entrepreneurial way, which in some occasions was portrayed as opportunistic behaviour:

> *"People say they thought it was, at difficult times, kind of an important thing to see that the company could still be innovative" Manager Ca*
>
> *"Like a midlife crisis"... "[CSR division's and incubator's managers] run around in Ferrari's and wear shades and open shirts ...all of a sudden they decided they were going to be hip" Manager Cp*

The emerging culture within the CSR division was in conflict to the culture within other divisions, and especially the two core businesses. The opportunistic behaviour developed among CSR managers and the financial rewards the CCV unit's managers were enjoying triggered a culture of envy within the corporation towards them. This situation was perceived by other corporate managers as violation of the corporate status quo. Both managers from within and outside the CCV unit were aware of the culture of envy that emerged:

> *"I would say corporate venturing generally has a negative impact on culture, because it creates the culture of greed, of making a quick buck, of 'what am I worth', and 'what is my time worth to you' and short-termism" Manager Cp*
>
> *"Again at the time, but it wasn't just [CCV unit], it was these other subsidiaries that were IPO's as well they had a rather negative impact on our culture, it brought out the worst in everybody, because it engendered this culture of envy, which was rather unfortunate really" Manager Cm*

5.4.3 Case Summary

The emergence of internet network technologies directly threatened the survivability of Corporation C's operations in the mid 1990s. The corporation needed to gain access to such technologies by investing in start-up companies which possessed such know-how. Behind this technological threat, Manager Ca identified an opportunity and an alternative way to acquire technologies that resided outside the corporation's technological expertise. By conducting minority equity investments to network technologies start ups was proven to be a big financial success for the corporation in the late 1990s. However, the exposure of the CCV unit to technologies of high uncertainty affected negatively the market value of its venture portfolio following the macro-economic slow down in 2001. Corporation C's top management team amended its technological priorities, and risk preferences and ceased the funding of the CCV unit forcing its management team to identify external funding and eventually spin out.

5.5 CASE STUDY OF CORPORATION D

5.5.1 Introduction and characteristics of Corporation D

Corporation D is a global group in the energy and petrochemicals sector with a net income of $12,496 millions, operating in 145 countries and employing 119,000 people[82]. The group was organised around five companies[83] with distinctive operations in energy exploration and commercialisation, with each company directly linked with each other. The interviews were conducted in summer 2003, seven years after a corporate innovation scheme was implemented within the corporation and three years after the involvement of the corporation in CV activities through the establishment of the DCV unit. Corporation D was among the last corporations to join the CV hype of the late 1990s. Its innovation scheme attracted the attention of the media in the late 1990s, while its venturing activities maintained a low profile.

5.5.1.1 Company background

Corporation D, an international player in the energy sector, operates in energy exploration, production, commercialisation and distribution. Access to leading edge technology related to these core businesses has been critical for the corporation. Innovation and continuous research and development are highly significant for Corporation D and in 1996 an innovation scheme (DI scheme) was implemented across the group's five businesses, exploring innovative ideas originated among its employees. The mission of the innovation initiative was to *"deliver new business opportunities to [Corporation D] Group of Companies by stimulating breakthrough innovation in D1 business"*[84]. The emergence of internet related information and communication technologies and of the e-business business model presented the corporation with business opportunities that could bring the corporation closer to its end-customers. This was an area Corporation D still had to explore.

While these technological challenges were occurring, the energy sector had attracted criticism and activists' pressure for its operations in developing countries and lack of social responsibility towards pollution creation. Corporation D started to invest in the

[82] Corporate Annual Report, 2003
[83] The five businesses of Corporation D will be referred from now as D1, D2, D3, D4 and D5.
[84] Corporate Annual Report, 1996

exploration and production of sustainable energy from alternative sources other than oil, gas and chemicals. Technological innovation towards this direction became of strategic importance to the corporation. While four of the five core businesses of the group dealt with the traditional energy resources (D1, D2, D3 & D4), the D5 business looked at alternatives resources.

5.5.1.2 Setting the venturing scene

With innovation and the exploration of alternative growth paths at the core of Corporation D's philosophy, venturing activities were undertaken by various teams within the corporation, across its five businesses. There were complementarities between the DI scheme and the various venturing teams across the group serving the innovation needs of the all five businesses of the corporation. In 1998, the DIT unit was set up following the intention within the D1 business to explore *"how they must implement new technologies in [Corporation D]'s marketplace"* (Manager Dp). In the late 1990s, the emergence of internet related technologies expanded the exploratory interest of the corporation in the e-business and digital economy. This interest was expressed by setting up a new operational unit to focus on the e-business activities of the corporation. The unit (DIW unit) aimed to co-ordinate the existing e-business activities of the core businesses, and to invest in internet related technologies through an incubator and the DCV venturing unit.

The champion of initiating and running the DCV unit and a core member of the DCV team were interviewed to gain insight into the unit and its operations. A core member of the DIW unit was interviewed to gain insight into the immediate corporate environment within which the DCV unit was operating. Two more corporate managers were interviewed as key interviewees contextualising the evolution and activities of the DCV unit. One of these corporate managers was involved in core venturing activities of the D1 corporate business, which were managed by the DIT unit. The fifth interviewee was heavily involved in the DI scheme of the corporation, working for D2 corporate business. Table 5.40 summarises the attributes of these managers who were core and peripheral to the DCV unit.

Table 5.40: Interviewees' attributes: Corporation D

Attributes	Interviewee A	Interviewee B	Interviewee C	Interviewee D	Interviewee E
Code name	Manager Dp	Manager Db	Manager Dt	Manager Dc	Manager Dv
Gender	Female	Male	Male	Male	Male
Association with DCV unit	Direct Championing and running of DCV unit	Direct Core member of DCV team	Direct Core member of DIW team	Indirect	Indirect
Core responsibility	Vice President	Investment execution	Launch start ups from DIW unit's incubator	Director of DIT team	Technology and Innovation Strategy Manager
Time of involvement in DCV unit	1999-2002	2001-time of interview	2000-time of interview	No direct - Working for DIT unit in D1 business since 1998	No direct - Responsible for the DI scheme in D2 businesses since 1996
Employment background	Corporate Manager	VC managers	Business Development manager	Corporate Manager - working for Corporation D for 27 years	Corporate Manager- working for Corporation D for 32 years

5.5.2 Corporate Venturing in Corporation D

Technological advances have historically contributed to the evolution of the exploration, production, commercialisation and distribution of natural energy resources, and the development of alternatives ones. Corporation D was affected by these technological advances, but also contributed to them:

> *"[Corporation D] is disposed to technology... [Corporation D] is disposed... to innovation, the [energy] business is a high tech business" Manager Db*

Corporation D, aware of the importance of technological innovation, introduced an innovation scheme in the D1 business in 1996. The DI scheme established an internal innovation process to identify and commercially exploit internal ideas which was progressively adopted by the rest of the corporation serving its core technological needs. However, information and communication technologies, as emerging in the late 1990s, were not part of the scheme and Corporation D needed to gain access to them. Its existing venturing activities through the DIT unit were not suitable either, as it aimed at *"technology commercialisation with a venture capital, private equity type attribute for the funding of these things in the marketplace*"(Manager Dc).

During 2000, the emerging digital economy and the Internet were seen as having significant implications for the supply chain management of the corporation, while the opportunity to *"extend and deepen relationships with customers"* [85] was recognised. The establishment of the DIW unit in early 2000 focusing on such technologies, within and outside the corporation, was an illustration of this strategy. The aim of the DIW unit was to *"develop cross-business and novel internet-related opportunities"*[86] operating *"in the business-to-business, business-to-customer and venture capital and works with other entities in the Group to accelerate the digitisation of business processes"*[87]. Its operations included the establishment of the DCV unit. Figure 5.5 outlines the chronology of the critical events that led to the creation and termination of the DCV unit, demonstrating with the dotted line the intensity of venturing activities by the DCV unit, and with the dashed line the overall interest of the corporation in CV activities.

The first investments of the DCV unit took place at the end of 2000. Following the resignation of its main sponsor in early 2002 and after a strategic consideration of its activities, the DIW unit consolidated its operation with another corporate unit, while the DCV unit stopped operating. However, members of its managerial team continued to manage its portfolio investments at the time the interviews took place.

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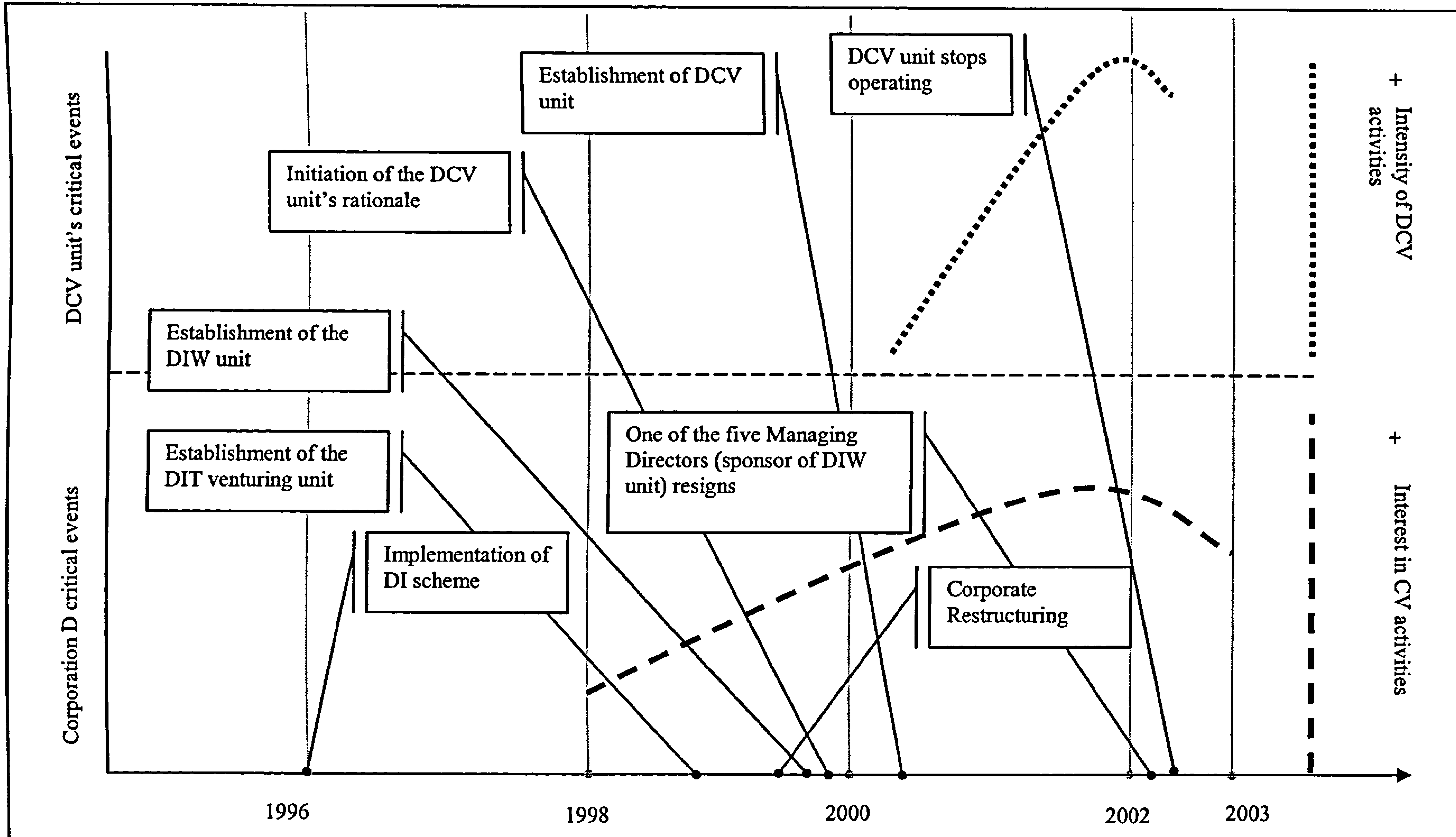
85 "Message from the President", Corporate Annual Report, 2000, p. 3
86 Corporate Annual Report, 2000, p. 33
87 Corporate Annual Report, 2001, p.25

Figure 5.5: Chronology of critical events in Corporation D and in the DCV unit



5.5.2.1 Formation of the DCV unit

5.5.2.1.1 Approach towards CV and initiation process of the DCV unit

For Corporation D, CV was associated with venture capital activities, with the approach taken towards CV to be consistent across the corporation. CV was perceived as an investment mechanism rather than an innovation process. This is evident by considering the relevant quotes that Corporation D's managers provided regarding to CV (Table 5.41). Even though the managers represent different businesses within the corporation, the perception towards CV appears to be associated with two constructs: the capital involved in the innovation process and the anticipated financial outcomes of the investment.

Table 5.41: Definitions and perceptions towards CV in Corporation D

Interviewee	Quotes
Manager Dp	- "I think corporate venturing is two things; one I call corporate venture capital, and this is indeed making investments in external companies for various objectives, usually minority equity investment … Corporate venturing, as I see it, is more trying out new innovative activities, businesses, usually within the organisation, but also could be in an incubator outside" - "no company should go into corporate venturing to make money, because that is not their core business … if through my corporate venturing we could have made an investment in a company that brought us a new insight that allowed us to beat [the main competitor of Corporation D] somewhere; that is worth it"
Manager Db	- "our business was very focused on making capital gains but also bringing insight into the Group" …"CV is only one of the tools perhaps"… "an asset tracking capability"
Manager Dc	- "(CV) is one of the ways of increasing the value of the portfolio (of D1 business) a speedier application of specific technologies"… "It has to do with the financial bottom line of the (D1 business). And therefore the means to get there had to be different than the traditional long cycle thing (R&D) … by definition, it had to be more commercial"
Manager Dv	- "Just corporate venturing is just playing with money. You get money, you invest money, you get money back and that is it. So for me, it is the least enriching part" - "(DI Scheme) is finding champions, finding internal entrepreneurs who are willing to take it up… and it is much more finding the person who is going to do it, than with corporate venturing it is like the emphasis is on finding the capital"

Manager Dp distinguishes corporate venture capital (what DCV unit was involved in) from CV, as the latter is perceived as an internal process, closer related to innovation. However, when Manager Dv was asked whether the activities of the DI scheme could have been identified as internal CV activities, he perceives CV as an activity of *"finding capital"*. With the existence of a predominant innovation scheme within the corporation, CV is perceived as an alternative, more capital and commercial related activity, with defined financial outcomes that allows the corporation to have access to business activities that might interest the corporation.

Comparing the quotes in Table 5.41, it can be concluded that there was consensus among managers Dp, Db and Dc about what CV is, as they were directly involved in the CV activities of the corporation. On the other hand, Manager Dv, being more involved in the innovation scheme appears to be critical of CV, portraying it as a limited activity. Manager Dc's perception towards CV is critical, identifying a widely shared perception within the corporation on CV activities and how they were differentiated from innovation related activities.

The involvement in CV activities was intended to allow the corporation to explore alternative avenues to growth and value creation, having access to technologies that could reside outside the corporation. CV was viewed as an alternative to the pre-existing path of organic growth, innovation, and R&D that Corporation D had traditionally explored. CV activities, as exercised by the DCV and the DIT units had an experimental character. While the approach towards CV appears to be unified across the corporation, the method to implement CV varied according to the needs and purpose each CV initiative was serving. The CV models used appear to differ regarding whether the unit of investment resides within or outside the corporation, and the degree of financial participation of Corporation D (through its businesses) in the ventures created. Even within the DIW unit, Managers Dp and Dt argued that CV activities were exercised both by investing in external ideas through minority investments and in internal ideas by incubating them. Manager Dt was responsible for the latter CV activities.

With regards to the CV approach taken by the DCV unit, Manager Dp argues that it was an imperative to take a clear stance on what CV would mean for them. She was aware of the misconceptions and various definitions existing around the term *"corporate venturing"*, recognising that in the process of defining their CV approach it was difficult to distinguish between the financial and strategic aspects of it, as they co-occur. However, her perception is that the initiation of the DCV unit was identified as different from the DI scheme and the other venturing activities of other units and teams across the corporation. The point of differentiation of the DCV unit from the other CV activities was with respect to the unit of investment and the degree of technological relevance of the investment to the core technological focus of the corporation.

The official establishment of the DCV unit took place in autumn 2000, but the initial discussions behind its establishment started in late 1999. The DCV unit was the first CV unit to invest in technologies not directly related to the core technological focus of the corporation. The establishment of the DIW unit (part of which was the DCV unit) in early 2000 was part of the formalisation process of the corporation's e-business interest. The DIW unit became the organisational place to explore ideas and initiatives related to how Corporation D could have taken advantage of internet related technologies.

This interest was championed by one of the Managing Directors of the corporation (MD1) who was keen in providing the corporation with *"opening options in a changing world"* [88]. The scepticism that surrounded the engagement of the corporation in e-business activities was transmitted to all elements of the e-business implementation within the group, including the initiation of the DCV initiative. However, MD1 strongly believed that the corporation could use e-business technologies as *"a step change, as a way of creating new businesses, accelerating all business processes, delivering more products and services more economically, and creating more value faster"*[89]. This view was supported by the belief of various managers around MD1 who argued that the corporation had to invest in *"deep technology software technologies"*[90] that resided outside the corporation.

Manager Dp was brought in to join the initial discussions and to identify which was the best way to carry out such activities. Even though Manager Db did not initiate the establishment of the DCV unit, she was the champion in making the business case for establishing the unit, and became its Vice President. Manager Dp is identified by Managers Db and Dt as the master-mind behind the business plan put forward to support the establishment of the DCV unit. She argues that she was aware of the scepticism surrounding the initiation of a CV unit within Corporation D and shared this scepticism over its success. She was aware that investing in technologies that were not directly related to Corporation D would jeopardise the success of the DCV

[88] Corporate presentation by MD1, 2001
[89] Corporate presentation by MD1, 2001
[90] Manager Dp

unit. She appears to have anticipated such scepticism by carrying out a thorough desk research of the approach towards CV and the CV models other corporations had adopted until 2000. She argues that research allowed her to develop an understanding of good practices around CV, and the knowledge she obtained appears to have influenced the business model of the DCV unit:

> *"I believe in the model where you invest in technologies that have linkages into [Corporation D], for every investment I had to say 'this is a threat to [Corporation D], or some linkage into [Corporation]', otherwise, why do it? Any venture capitalist can do it" Manager Dp*

This quote is indicative of the DCV unit's importance in differentiating its identity and operational rationale from venture capitalists firms during its initiation process, as a good practice. Table 5.42 outlines the main events and decisions, actions and people involved in the initiation process of the DCV unit. The data indicate that there are three distinctive phases: identification of the need for a distinctive business unit, preparation of the business unit and its launch. Manager Dp describes the initiation process of the unit using the analogy of preparing a business plan for a new venture, indicating the formality and the importance of *"making the case"* of the need the new unit was proposed to meet. Being part of a large corporation run by processes, the documentation of the new unit through a business plan was expected and justified.

The identification of the need to establish a new CV unit appears to be part of a more generic strategy explored in the late 1990s within the corporation and by MD1. The data indicate that the generic strategy involved the e-business implementation within the group, and the involvement of the corporation in CV activities in such technologies was one of the many experimental business models proposed. The preparation phase that followed, according to Manager Dp, was mainly associated with identifying best practices related to how to conduct CV activities, and determining which one of them were more appropriate for the proposed unit:

> *"Basically what I did was using desktop research. It is interesting, people say 'oh didn't you call McKinsey'? I said 'no, we just did it ourselves'. So I looked at the corporate strategy board, I read as much as I could, and I distilled from that, best practices (...) financial driven, internal, external (skills) and that. And then I realised one thing: the key to start up this business is to get deal flow, quality deal flow" Manager Dp*

Table 5.42: DCV initiative: Initiation Process – Phases, events, outcomes and actors involved

	Identification phase	Preparation phase	Launch phase
Events	**Mid 1999**: Managing Director 1 volunteers to take on the responsibility for e-business implementation within Corporation D **Late 1999**: Decision to establish a separate unit responsible for: - e-business implementation within the corporation - co-ordination of pre-existing e-business activities across the group - investment in internal and external ideas related to e-business across all businesses of the group	**Spring 2000**: Manager Dp starts preparing the business plan of DCV unit Main features of the business plan: combination of internal and external (to the corporation) skills form partnerships with VC companies driven by financial returns for the unit, with strategic returns for the corporation	**Sept 2000**: Identification of external co-investors in the venture fund of the DCV unit; two VCs were identified, one based in USA and the other in S. Asia **Nov 2000**: Approval of VCs co-investors by the Board of the DIW unit
Outcomes	- Establishment of DWI unit and appointment of an executive vice president for it - Identification of internal champions (such as Manager Dp) to take on e-business related business initiatives	- Approval of the DCV unit business plan by the Board (Vice President of DWI unit and Managing Director 1) - Approval to involve VCs to co-invest in the DCV fund	**Nov 2000**: Official launch of DCV unit and media coverage of the deal between DCV unit and external co-investors The first deals start being screened and the first investment takes place in **March 2001**
People involved	Managing Director 1 Executive Vice President of DIW unit	Manager Dp Executive Vice President of DIW unit Managing Director 1	Manager Dp Executive Vice President of DIW unit External VC manager recruited as Vice President of the DCV unit
Time length	6-8 months	3 months	2 months

The lack of experience by Manager Dp to set up such a unit was recognised, but it did not limit her willingness to learn how to do so. She claims pride in being able to set up the unit and identify how to carry out CV investments by themselves, without the consulting services of external partners, as might have been expected. Her interpretation of the outcome of the desk research she carried out influenced positively the formation of the DCV unit and the approach taken towards CV, as well as the DCV business model adopted.

A significant element of the *"preparation phase"* appears to be the relevance of the proposed CV unit with the existing corporate strategy of the group. Manager Dp identified the corporate strategy board as one of the initial sources of information and practices of how to carry out CV activities on behalf of the corporation. This can be indicative of the strategic fit Manager Dp was trying to identify between the existing corporate strategy and the proposed new initiative. Even though the DCV unit was ahead of the existing corporate strategy and not directly related to it, it was important for the survival of the DCV unit to demonstrate elements of its strategic relevance to the corporation:

> *"our success would not be on the return on capital, it would also be on whether this company had brought some insight into the business units of [Corporation D], earlier perhaps than would otherwise have occurred, so that [Corporation D] might be adopting innovation a little bit earlier perhaps than its competitors" Manager Db*

With regard to the launch of the DCV unit, the data indicate that it was the outcome of a formal, but relatively fast process lasting almost five months. During this period, she had to approach the board and ask for approval for one of the main features of the business model. She proposed the creation of a team combining internal and external skills and expertise. Managers Dp, Dt and Db argue that the proposition to involve external to the corporation people (i.e. venture capitalists) in the DCV team, who had experience and expertise in carrying out venturing activities, was distant to the corporate practice:

> *"They took their time and set up their sort of processes and got their stakes in the ground around what they were going to do, and then they very quietly did a very quiet launch to the right people (...) So when they went out to talk to people outside, they didn't claim to know everything. You know, they went with their ears open, which is unusual for [Corporation D]" Manager Dt*

The preparation and the modest approach taken towards the establishment of the DCV unit by Manager Dp and the DIW are recognised as indicative of the targeted, carefully designed and process-based way the DCV unit was launched in late 2000. The people behind the DCV unit were aware of how distinctive their activities were in comparison to the rest of the corporation and they did not want to over-emphasise these differences.

Among these people, MD1 had critical involvement at the first phase of the initiation process of the DCV. He is recognised as the *"sponsor"* and main supporter of the corporate involvement in e-business activities. It is evident that the new unit enjoyed support from the Board, as MD1 was one of the five members of the Management Board of Corporation D. This is also indicative of the unit's dependency on a single senior manager. MD1's involvement in the initiation process of the DCV diminished progressively, as Manager Dp started to have a clear role as internal champion of the new initiative. MD1 adopted a hands-off approach towards it, ensuring financial and political support to the DCV unit. The Executive Vice President of DIW unit had a critical role in delegating the formation and execution of the business plan of the DCV unit to Manager Dp. His role was significant in the first and second phase of the initiation process as the person directly approving and authorising the business approach and model of the proposed CV unit. Manager Dp had a hands-on approach in preparing and executing the business plan of the proposed unit, taking the role of the project manager.

Throughout the initiation process, it was essential to justify and communicate the rationale behind the proposed CV unit. Managers Dt and Dp were aware of the pressure that existed within and on Corporation D in the late 1990s to be involved in the e-business economy. As Table 5.43 illustrates, the rationale for the involvement in CV activities was justified on the basis that CV could have allowed new external technologies to be introduced into the corporation. The main motive for the involvement in CV activities, specifically in developing an e-business interest, was twofold: (a) the anticipated threat internet was evaluated to impose on the operations and nature of the Corporation D, and (b) an internal and external *"pressure"* to demonstrate an e-business strategy. The corporation was under pressure to experiment with CV activities in order to deal with this technological threat, as well as to participate in investments which appeared at that specific time to be critical for all companies, across all industrial contexts.

Table 5.43: Justification and validation of CV involvement by Corporation D

Construct	Quotes
Rationale	- "at the end of the day, it was to do corporate venturing to get new technologies into [Corporation D] faster and better than our competition … So we talked about strategic returns, but on top of financial returns" Manager Dp - "there was a lot of sense from an investment point of view in this strategy and there is a lot of sense from [Corporation D]'s point of view in terms of its drive for innovation and productivity and growth and all those things that a large corporate is looking for, so that was the nature of the investment strategy" Manager Db
Motives	- "pressure for innovation and the fear that the new internet economy would undermine [Corporation D]'s rationale plus the perception that the hydrocarbon economy was under risk and would be declining in 20 years…"The intended justification was the emergence of an internet based economy, and the fear that unless [Corporation D] did invest in it and get to learn and understand it, it would miss a major opportunity for developing major stuff in our business. That was the driver" Manager Dt - "There was a lot of external pressure from the City in particular… because they didn't have an articulated internet strategy they just sort of said 'we are waiting to see'" Manager Dt
Intentions	- "we are a big boy, but we want to learn the game" Manager Dp - "To deploy the capital … not just to make a good venture capital investment but was also to create relevance for [Corporation D], and what that meant was introducing the businesses that we had invested in, into various business units within [Corporation D]" Manager Db - "it was all about getting external thinking into the company as soon as possible" Manager Dp

The corporation had already been involved in other CV activities supporting the innovation outlook of the corporation. However, in the case of the DCV unit, the motives and the rationale were different, as the proposed involvement in such CV activities was justified on the grounds of the corporation needed to gain access in the newly defined technological, economic and social conditions of the digital economy. The fact that all other companies were investing in e-business related technologies in the late 1990s was an extra pressure to justify such a decision from Corporation D.

The intentions of the involvement in CV activities appear to be associated with the technological insight the CV investments in internet technologies could have brought back to the corporation. Besides the importance on the anticipated financial gains, Managers Db and Dp clearly state that the intentions of the CV involvement were not limited only to what would have interested a venture capitalist. The CV involvement was justified on the basis of its intentions to bring insight in e-business related technologies to the corporation. Emphasis was also placed on the learning in external CV activities of which the corporation had no prior experience and knowledge and intended to acquire. Due to the lack of prior experience in this field, the collaboration with and the involvement of external venture capitalists in the DCV team and fund was justified.

Even though the initiation process had been relatively straight forward, Manager Dp argues that "*we had a hard time getting it through approved*", because of the lack of internal political support to the proposed initiative. She explains that the proposed unit was supported only by one of the five managing directors of the corporation, which was sufficient but restricting at the same time. She identifies internal politics to have resisted and in parallel positively influenced the establishment of the proposed DCV unit. Manager Dt explains that within the corporation there was internal competition among middle level managers to achieve recognition and promotion. It appears that the establishment of the DIW unit and of the DCV unit were part of the agenda of some senior managers who attracted the attention of the MD1 and gained support from him at the right time of the economic cycle, when internet related innovation was highly important:

> *"I would call it a 'sparring senior management' ... there is this level of CMD[91] at [Corporation D] and then there is the level below .... there is the top 300 (managers) in [Corporation D]. Once you are in that club, you are passed the furniture. And to get above the other 299, you have got to have something different, and if you can become 'Mr Innovation' at the right time in the cycle, then you will get attraction and there will be somebody on the CMD who wants to be the sponsor of it. And that is certainly what happened with [DIW], they got a sponsor, [MD1], and he was into all the newish areas, IT and the rest" Manager Dt*

This quote indicates two main issues regarding the introduction of experimental and innovative initiatives, such as the e-business initiative, within the organisational context of a corporation: (a) the behaviour of the individuals which introduce them, and (b) the timing of the introduction. The individuals who drove them acted as their sponsor and "political" supporters. Their hierarchical position within the corporation and their networking with the top managerial team positively affected the selection and survivability of the initiatives. In the case of Corporation D, these middle level managers promoted their e-business initiative to the appropriate MD to secure his

[91] Abbreviation of Committee of Managing Directors – The CMD was alongside with the Board of Management the two top boards for the management and long term planning of the corporation.

political support and "lobbying" to favour the newly introduced initiative. There was a matching of motives and intentions between these middle managers and the MD: the internal appraisal and recognition of their involvement in innovative activities distinguishing them from the rest of the middle managers and the other MDs. Manager Dt argues that the timing of their introduction was associated with *"the cycle"*. This cycle might be the organisational cycle of interest in innovation and experimentation, as well as the industry cycle indicating the industry trends and hype.

5.5.2.1.2 The DCV unit and its relationship to other venturing activities

The strategic context within which the new unit was introduced and established have been exploratory and experimental, in the sense that it allowed alternative innovation paths to co-exist, and because it allowed these paths to be distinctively different from the existing innovation corporate practices. The DCV unit's initiative was a novel approach to innovation and different from the existing innovation practices of the corporation. The proposed investments of the DCV unit were in a technology area where Corporation D had no prior experience and knowledge to leverage. On the basis of this, it can be argued that this strategic initiative had an autonomous character, and it was institutionalised through the formal establishment of the DIW and the DCV units.

However, in order for the initiative to be approved (internally by the Board) and to be sponsored (by one of the five top executives of the corporation), the autonomous character of the DCV unit appears to have been compromised by the need to identify linkages to the core business and to demonstrate a degree of relevance to the pre-existing strategy. This is evident from the initiation process and the approval of the DCV unit's business model. Indicative of this is that one of the screening criteria of the DCV unit's investments was the degree of relevance of the investment to the core business of the corporation (see Table 5.44). The internal support the DCV unit gained and the identification of a degree of relevance of it with the existing corporate strategy appear to have been necessary conditions for the existence of the DCV unit. This assessment is also supported by the fact that the DCV unit was terminated once the degree of its relevance to the corporation was perceived to have decreased in 2001.

Comparing the strategic contexts that led to the creation of two different CV units (DIT and DCV units) within Corporation D, it can be argued that the first (in the case of the DIT unit) was induced, while the second was autonomous (in the case of the DCV unit). The first was closely associated to the core strategy of the corporation, oriented toward maintaining technological leadership for the core D1 business, while the second was introducing a new approach to innovation. These differences in the strategic context of the initiation of the two CV units was reflected in their objectives and CV model that they follow.

The identification of a clear objective for the DCV unit appears to be perceived as a critical factor by Manager Dp in defining the scope and the investments' character of the unit's business model. The objectives of the DCV unit appear to derive from the rationale of its initiation. Comparing the CV activities of the DCV unit and the DIT unit, the first appears to be more focused on using a venture capitalist model to deliver financial returns, while the second was focused more on delivering commercialisation of technology through the creation of new ventures. It is not only the target of the investment that is different between the two CV units but also the CV model used. Table 5.44 provides the comparison between the two. The DCV unit only invested in external companies in the sectors of information and communication, while the DIT unit invested in both internal ideas and external companies, which were in the technology interest of D1 business. However, both of the CV units were operating in Europe and in North America, with the majority of the potential deals identified in these two geographic markets.

Considering its investment strategy, the DCV unit was an intermediary between the corporation and external business opportunities, acting as venture capitalists. The investments were primarily evaluated from a venture capitalist's point of view (meeting the financial criteria of anticipated performance), and secondarily from the corporation's technological needs (meeting the technology relevance criterion). On the other hand, the DIT unit invested to meet identified internal demands within the D1 business. Moreover, the DCV unit aimed to spin-off the new ventures created, while the DIT unit would have done so if this was in the interest of the D1 business. The investment criteria employed by the DCV team expressed the anticipated financial and strategic returns of their CV activities. While the anticipated financial

Table 5.44: Characteristics of the DCV and the DIT units' business models

Characteristics	DCV unit's business model	DIT unit's business model
Unit of investment	Early to mature stage technology based companies	Technology commercialisation of internal and external ideas
Objective(s)	Financial objectives for the DCV unit with technological and strategic returns for the corporation: - To co-invest in start up companies with other external VC investors through minority equity investments - To achieve financial gains and technological insight to the corporation by exiting the portfolio companies	Technological and strategic objectives for D1 core business and secondary economic (value creation): - To accelerate the market launch of new ventures through equity investments (minority and/or majority) - To exit the ventures created if no more value is added to the DIT portfolio
Funding	Co-funding between corporate funds and venture capitalists	Corporate funds (from the budget of D1 business)
Sources of investments	Type of Resources - Venture Capitalists (VCs) - Technology Conferences - Intermediates between technology entrepreneurs and VCs - Collaborative initiatives with other energy companies Geographic concentration - North America, Europe and S.E. Asia	Type of Resources - Within D1 business and the through the DI scheme - External ideas from entrepreneurs Geographic concentration - North America and Europe
Investment sectors	Information and communication technologies	Energy exploration and production technologies
CV process	Comprises of the following stages: - Company identification process - Company screening process - Investment process - Portfolio management process	An opportunity funnel and stage gate process in place: - Business Opportunity Team - Business Development Team - Portfolio Management Team
Investment evaluation process	Criteria: - Technology related: e-business application in energy sector - Time: relatively mature technologies - Financial: returns on existing the venture in 5 years - Commercial: business ideas related to core business	Criteria: - Technology related: disruptive technology with market potential Time: short time lag between prototype and launch of technology - Financial: risk adjusted returns of investment - possible market exit

returns were highly regarded from the venture capitalists point of view, the DCV team had to ensure that their CV activities would deliver strategic returns for the corporation in order to justify their presence within the corporation. On the basis of these two criteria, each investment was approved by the investment committee and the DCV unit would have been evaluated.

The screening of the deal flow was carried out by the DCV team, while the final approval was authorised by the Investment Committee, who was comprised of the Executive Vice President of the DIW unit, an external venture capitalist, an external advisor and an internal executive responsible for the finances of the deal. Managers Dp and Db argued that the combination of internal and external skills in the Investment Committee was beneficial as the internal managers were learning about CV. Moreover, the introduction of such a committee was perceived as an innovative procedure for Corporation D, as in no other venturing activity of the corporation external people were involved in the investment process.

Once the deal was approved by the committee, the DCV unit co-invested with an external VC, and a member of the DCV team was allocated to the board of the new venture, initiating the relationship between the DCV unit and the new venture. Simultaneously, a second process took place, where the technological know how and the business model of the new venture was introduced within the corporation. Manager Dp and other corporate managers of the DCV team were involved in this process, trying to identify internal demand for each investment made. Internal networking was critical in *"introducing"* e-business technologies to the corporation. The decision to integrate these investments was given to each operational division. The DCV unit does not appear to have had any responsibility or authority to enforce any of the investments to the core businesses. The investment criteria used in the prior stages of the investment process allowed each investment to be an independent business entity, not requiring a commercial relationship with Corporation D to survive, but also a level of relevance to the core businesses if the latter were keen to integrate them. As Manager Dp explains, the investments were *"buy to sell"*, indicating the exit of them when the market conditions were appropriate.

As the DCV unit started to operate and to develop its processes, it began to build on its capabilities, behaving as an entity within the corporation. Managers Dp and Db were aware of the capabilities and distinctive character of its business model: combining internal and external skills and funds, establishing a distinctive brand name in the CV market, creating an entrepreneurial image for Corporation D among entrepreneurs, establishing channels of communication across all corporate businesses, introducing an alternative approach to innovation for the group. The last two capabilities the DCV unit developed were quite novel and different from what was the norm in Corporation D. Traditionally the corporation had approached CV activities respecting the vertical structure of its operations (i.e. the DIT unit was tailored and aligned to the needs and requirements of one operational division). Even the DI scheme was operating around the vertical organisational structure of the corporation. The horizontal approach to CV activities as expressed through the DCV unit was a departure from such tradition. This departure benefited the operations of the DCV unit but it was not equally appreciated and understood by the rest of the corporation.

The perceptions created within the corporation about the DCV unit were mainly associated with criticism regarding the degree of relevance of the unit to the corporation. The DCV unit was established in 2000 to introduce a new path to technological innovation. However, the corporation had already in operation the well-establish DI scheme. Corporate managers of other divisions could not see how the new initiative was contributing to the corporation. Moreover, the association of the DCV unit with the DIW unit was not beneficial for the DCV unit:

> *"(the DCV unit) was not welcome – they didn't understand what you had learned, they thought maybe you had wasted those 2 years. This organisation, [DIW unit], didn't have a very good reputation in [Corporation D], because I think it wasn't run tight. [DCV unit] had a very good reputation, but we were a group of 6 – who knows a group of 6? ... I think they never really liked it, and we had no time to prove them wrong" Manager Dp*

The relatively small size of the DCV unit, its short life cycle and its association with a not well performing unit (DIW unit) compromised the good reputation the former was trying to build within the corporation. The DIW unit, working mostly as an incubator, had not managed to perform financially and strategically well, creating negative associations within the corporation towards such venturing incentives. Even though the DCV unit managed to attract the attention of the media and of VCs, and gain the interest of some internal corporate managers, it failed to convince its internal audiences of its business relevance and contribution to the corporation during the two years of its operation.

The co-existence of the DCV unit with well established venturing activities (i.e. DIT unit) and innovation schemes (DI scheme) appears to have had a negative effect on the DCV unit. In fact the DIT unit was competing with the DCV unit for internal recognition and resources, besides their different objectives and business models. The most relevant initiative to the core strategy appears to survive. Manager Dp explained that at the initiation phase of the DCV unit, there was an attempt by an executive of the DIT unit to *"take (the DCV unit) over. Anyway it is a long (negotiation process of) internal politics, and I said 'no, no, no, no, no'. But in hindsight, if we were within (the DIT unit), maybe we would have been alive"*.

5.5.2.2 Implementing the DCV initiative within Corporation D

The existing organisational context influenced the way the DCV unit was implemented within Corporation D and its relationship with the rest of the corporation. On the other hand, the organisation of the DCV unit was primarily influenced by the initiation process and approach towards CV the DCV unit's executives took.

5.5.2.2.1 Organising the DCV unit

One of the most distinctive elements of the DCV unit's business plan was the involvement of external personnel. Manager Dp identifies this to be one of the best practices followed by the unit and it was the outcome of her secondary research on best practices on how to carry out CV activities. With the intention to make the DCV unit competitive in the CV market, she proposed the involvement of executives with VC experience from its initiation. The lack of prior experience from corporate managers to run such activities in a technological sector in which Corporation D had no prior presence justified her decision. Consequently, two sub-groups can be identified within the DCV team: a group of internally recruited and a group of externally recruited executives (Table 5.45).

Managers Dp and Db characterised the composition of the DCV team as balanced regarding: (a) the number, (b) the skills and (c) the expertise of the two identified sub-groups. They acted as internal promoters of the DCV unit and its investments in identifying internal corporate customers, utilising their knowledge of the corporation. It appears that they also had a political role to serve alongside with their role within the DCV team regarding the CV process. Manager Dp was particularly interested in the intra-organisational networking capabilities of these individuals, as well as on their willingness to participate in *"risky business"* involving uncertainty and risks different from the perceived safety and security a corporate position might be offering them. She argues that being involved in CV required the internally recruited mangers to take the initiative in identifying deals and technological opportunities, as well as to anticipate potential failure.

The criteria to recruit external managers to join the DCV team were different. Manager Dp explains that for this group of individuals emphasis was placed on their excellence as VCs, but also on their ability to work for a corporation. She was aware of the challenges externally recruited VCs would have faced once joining the DCV unit. Managers Db and Dt, who were externally recruited to join the DCV and DIW units retrospectively, admitted to have experienced such challenges:

> *"whilst there is recognition that they needed people other than [Corporation D] employees to work this, [Corporation D] has this blind spot in that the leadership team are almost exclusively internal people" Manager Dt*

Manager Dp argues that the combination of two different types of business mentality within the DCV team was a source of *"healthy"* tensions, bringing technological and VC knowledge into the team, and allowing different perspectives to emerge, improving the investment process. Balancing the individuals and respecting the degree of specialisation and expertise each one of them characterised the team dynamics. The external executives dealt with executing the transaction part of the investment process and externally identifying deals, while the internal executives were better in identifying internal customers for the unit's investments. It appears that each individual fitted appropriately into the investment process in a harmonious way, making sure that each group was equally represented.

Table 5.45: People involved in the DCV unit

	Quotes
Size of team	- "Two senior venture guys recruited from the outside and we had another more junior guy who was a venture capitalist as well and there were 4 [Corporation D] executives who joined the unit" Manager Db - "So one V.C. guy and me… so he brought V.C., I brought [Corporation D] that was the idea. And underneath we had 6 people and half of them inside, half of them outside again" … "we were a group of 6?" Manager Dp
Roles & responsibilities	- "My job was deal flow, building the deal flow, evaluating the deal flow, and executing the transactions. I was a venture capital guy. [Manager Dn[92]]'s role as the head of the unit was to get around the [Corporation D] organisation with his peers, helping people become aware of what [DCV unit] was trying to do" Manager Db - "we were doing deal sourcing, deal screening, due diligence, closure of the deal, we sat on Boards; the whole venture capital process" …"we looked at deals and then we progressed and studied them. We sent them one pages, to the Investment Committee saying 'we are looking at this, do you have any comments' … after it went to the Investment Committee, we basically then closed the deal" Manager Dp
Characteristics of people involved	- "a combination of external venture capital skills and internal [Corporation D] executives who had their own networks within [Corporation D] which is very important for our business proposal was… they wanted someone who was an experienced venture capitalist, the criteria therefore were: probably based in London, experienced venture capital person, able to work with the team, understood the aspects of working in a large company… an ability to bring in deal flow, ability to execute that transaction without too much supervision" Manager Db - "[Corporation D] people don't know venture capital. So you have to understand when you start a risky new business, not everybody is excited to come and join … you are looking for people who are not mainstream, who want to do something risky, something new. I was looking for talent, brainpower, and connections in [Corporation D]… you need to take people who are willing to take risks. In the V.C.'s … you have to have people that like to sit in large organisations. But venture capitalists never do, so it is kind of difficult... are they good venture capitalists? Do they have experience across the whole chain of doing V.C. deals? Do they have experience in this area? Do they have a good network?" Manager Dp
Team composition	- "Bring expertise in, but make also sure that … both sides are represented. This is a good set up, but also one that is not aligned. Because a V.C. guy, when he sees a good deal, no matter how weak the link is with [Corporation D], he wants to pull it through. Whereas I am thinking 'no, I don't want to do the deal, I want to do what is good with [Corporation D]'. On the other hand, I think that is a healthy tension" Manager Db - "In the Investment Committee, we had one woman, she was basically a part time advisor, and on the Review Committee we also had somebody who was like a part time advisor…. we were not knowledge about information technology, but she was. So she could give us an external market perspective. Of course if you go and invest with VC's, they give you their perspective, but we wanted her to be there. And on the Review Committee we had somebody from [Corporation C] …who could give us some new perspective. Because otherwise you get just [Corporation D] people …I wanted to give some challenge to the V.C. people" Manager Dp

[92] Vice President of DCV unit – He joined the team at its initial stages and with Manager Dp were running the unit.

Team dynamics	- "there are a couple of senior executives in the team, so [Manager Dn], who led the business, would have given a lot of support for the early investments"… "for the transactions I have been involved in, I don't need any guidance, I just take legal advice" … "we were looking at 700 deals for crying out loud, in a year you could divide that by 7, that's 100 deals, so you were saying if you don't like it, you say so…no one was second guessing people, but we worked as a team as well, so we obviously like all venture capital funds, a Monday morning team meeting to talk about deal flow, opportunities, market observations, things like that" Manager Db

There also appears to have been a high level of trust and collaboration between the executives. Managers Dp and Db argue that this was essential in such a small group of only seven people, three of which were external and the rest internally recruited. Two members of the team were based in the USA, while the remaining five were based in the UK. The size of the team is perceived to be small not only in actual numbers but also in terms of the relevant power and significance within the corporation. The DIW unit employed 110 people, while Corporation D employed around 130,000 people around the world in 2000. However, the small size of the team was necessary to ensure fast and immediate decision making.

The DCV unit's governance structure reflected the two groups of internal and external executives. The DCV team was managed by two Vice Presidents (VPs): Manager Dp, the champion of the initiative, and Manager Dn, an externally recruited VC executive:

> *"She (Manager Dp) did it extremely well, because she did all the planning for it and brought it together, and was almost like VP. And then in comes this guy, [Manager Dn], from outside who came in as the VP, and he took her thunder, if you like" Manager Dt*

Manager Dt explains that even though it was remarkable that Manager Dp brought another VP to co-manage the DCV unit, it was a decision demonstrating the collaborative character between the two different types of executives within the team. The external VP was mainly responsible for supervising the investment process, and promoting the activities of the DCV unit within the corporation.

There were no significant changes in the people involved in the DCV team during its short life cycle. The only significant, but exogenous, change was the departure of MD1 in 2001 which according to Manager Dp contributed to the termination of the operations of the DCV unit. The unit lost its main sponsor and the other Managing Directors did not share the same enthusiasm and interest in the DCV unit as MD1 did. The suspension of the investment activity of the DCV unit forced externally recruited personnel such as Manager Dn to leave the team. Manager Db remained and continued to be actively involved in the portfolio management of the DCV unit's investment portfolio. Manager Dp continued to work for the corporation but she was moved to another unit, not relevant to any venturing activities of the corporation.

Manager Dt describes more negatively the way externally recruited people faced the suspension of the two units:

> *"And all the external hires have failed, and defined new roles in [Corporation D] once they closed down the operations. Some have moved into parallel roles in another new organisation which is just as vulnerable as [DIW]" Manager Dt*

Table 5.46 summarises relevant quotes which illustrate why both groups of executives were motivated to work for the DCV unit. The importance of both tangible and intangible motives, at a personal and group level is indicated. The involvement in a venturing team was equally appealing to both internally and externally recruited executives. For the externally recruited members, there was an element of enthusiasm of joining a CV initiative. For the internally recruited executives, there was the element of differentiating themselves from the rest of corporate managers by being involved in a corporate activity distinctive from the corporate norm. As Manager Dt explains, the initiation of the DIW unit was considered under the pressure that Corporation D was facing in late 1990s of retaining important personnel, and keen to be involved in internet related venturing activities. If the corporation had not offered them this opportunity, they would have left the corporation.

The tangible motives for both groups of executives were associated with financial gains based on the performance of the DCV unit's investments portfolio. Manager Dp had proposed a remuneration scheme for the DCV unit tailored to *"attract"* and *"maintain"* internal and external executives in joining the DCV team. She argues that it was essential the DCV unit's remuneration scheme was based on criteria and practices employed in VC companies in order to compete successfully in the CV and VC market, to attract and retain personnel and to achieve its financial goals. In the late 1990s, VC executives were highly rewarded and CV managers quite often compared themselves with them. Managers Dp and Db were aware that proposing and implementing such a scheme within Corporation D was challenging, being distinctive from the corporate remuneration routine. It is interesting though that DCV unit's remuneration scheme was not known to the rest of the corporation.

Table 5.46: Motivating the DCV team's members

	Quotes
Manager Db	- "we had a remuneration which was sensible for a V.C. fund … salaries and bonuses carried interest for (each) investment, all normal venture capital remuneration" - " its interesting work, there is good financial motivation on a personal level as well, there is a lot of autonomy, if you get it right and it's a small team who could work together, there was a good team work aspect to it. Very straightforward to motivate… lots of people want to get into venture capital, they think its an interesting business, and this was I think the issue was trying to persuade…I mean I chose to come here and I chose not to go somewhere else, and I wasn't concerned whether [Corporation D] was committed for the long term" - "(the establishment of a distinctive remuneration scheme) caused problems with the HR Executives, it didn't cause problems with the rest of [Corporation D], because they didn't really know about it"
Manager Dp	- "We had remuneration … I think the only way to attract top talent is if you give them a V.C. type remuneration, so we also have carried interest to everyone. And it is important because you can only do if you are focussed on financial returns as goals. And also, it focuses the mind to really financials"
Manager Dt	- "they are bored with the norm of the [Corporation D] career, so they want to do that sort of stepping into the unknown. And [DIW], they were very much of that ilk … don't forget there is the Internet, the economy, the boom, lots of people making millions of pounds apparently, and they wanted a bit of that action, you know. So there was all this bit 'if you don't let us do this, we will leave'. There was that sort of thought round big corps 'all our good people will leave unless we let them have incentives that they can make millions of pounds with and all that stuff'"

Even though the DCV unit's focus was of a financial nature, during the initial years of its operations the performance of the unit was evaluated on input merits: number of deals screened, amount of funds invested, number of investments completed, number of pilot technologies and number of new ventures created. The emphasis on the input performance measurements for the unit's operations explains two main aspects of the unit's business plan: (a) the maturity stage of technology that the unit intended to invest in (relatively mature stage, not early stage technologies) and (b) the recruitment of personnel who were external to the corporation (experienced VC executives). Both these aspects allowed the unit to achieve its performance targets by attracting a good flow of deals and by shortening the time lag between the investment phase and the commercialisation phase of a product or service in which they had invested. The intention was to enhance the performance of the unit in the first years of its operation, and justify the continuation of its existence within the corporation.

However, the suspension of the DCV unit in early 2002 exposed the lack of time commitment of the top management team to the CV initiative. Manager Db had anticipated the unit's time frame to be between 5 to 7 years, but it was suspended in less than 3 years, before any of the investments managed to perform strategically or financially. The budget of the DCV unit was proposed by Manager Dp as part of the detailed business plan to the Board of DIW unit and to the MD1. The fund of $200 millions was approved and allocated to the DCV unit by the board of the DIW unit and the MD1. The amount was calculated on the basis of risk diversification and image building:

> *"We got the $200m approved, and what I proposed to do firstly (was to use) the first $100m, and then do a check. And then basically ask for the next $100m, so there would be a clear, 'Go', 'No Go' decision"... "The reason why we took a look at the $200m we said, (...) 'What is a good size in terms of risk diversification?' and we said that we would invest between $2m and $5m per deal, per financing round, maximum 15 per project. So we wanted to put together a portfolio of 20/25....it all comes back to the portfolio. Now of course what happened, when the prices started to tumble, you can buy much more for $5m. So I think at that point in time, we could have really done with a smaller fund ... the other thing is of course, is 'how big a player do you want to be?' If I show up in America and say 'I only have $10m', they would say 'sorry'. If it turns up with $200m, they will say 'well let's talk'. So it is about portfolio risk, it is about being a credible player, having a number, and also to attract talent. People don't come for a $10m fund, but they come for $200m, because they carry interest it is obviously worth a lot" Manager Dp*

In order to gain credibility in the VC and CV market and to attract a good quality of deals and of executives, the size of the fund had to be significantly big, especially in the USA market. In 2000, Corporation D had to create a strong investment profile and image in this geographic market as indicated by the size of the DCV fund. However, supported by media reports in FT there was a level of secrecy during the launch of the DCV unit about revealing the actual fund size. This might be explained by the targeted and *"modest"* approach taken in launching the unit simultaneously with the unit's first investment.

Using the brand name of Corporation D in the brand name of the DCV unit was indicative of the relationship between the two entities. The unit and its ventures gained access to the distribution system, global presence, services and products of the parent corporation. Moreover, besides the financial resources involved in the DCV initiative, intangible resources regarding financial, legal and accounting consulting services were provided by Corporation D, which the unit utilised to enhance its operations.

5.5.2.2.2 Relationships with the rest of the corporation

The DIW unit was set up in early 2000, as a *"self-standing business"*, to be a profit centre working independently from the rest of the corporation. This mentality was kept for the DCV unit which was one of the three sub-groups of the DIW unit. Both units resided operationally far away from the core business of the corporation. It appears that throughout their life cycle the pre-existing organisational structure and corporate culture affected the degree and nature of relationships the two units and in particular the DCV unit had with the rest of the corporation. The data indicate that both units (DIW and DCV) were designed with the intention of operating across the group, going against the vertical way the corporation was operating to reflect its organisational structure. The five core businesses were organised to be autonomous businesses in the energy sector and together to create one of the biggest energy groups globally. Table 5.47 provides a summary of indicative quotes regarding the structural context within which the DCV unit operated.

The e-business initiatives were hosted in a corporate division, created in the late 1990s, providing organisational space to all exploratory initiatives related to customer activities in which Corporation D had an interest. The secondary data indicate that some of these initiatives survived by proving themselves, while others were suspended (i.e. DCV) or absorbed (i.e. by the incubator of the DIW unit). The DCV unit appears to be isolated from the rest of the corporation from a structural and operational point of view. The self-sufficiency of each core business to conduct its own venturing activities did not allow operational territory for the DCV unit to demonstrate its capabilities and meet the business need of any of the core businesses. Managers Dt and Dp explain that there was no internally identified demand for e-business investments from the core businesses to use the services of the DCV unit. Both units (DIW and DCV) were not established to be services centres to the core businesses, but as independent profit units which had to stand alone as businesses.

Managers Dp and Db argued that the DCV unit enjoyed sufficient autonomy on the investment process, and the portfolio creation and management. However, they argued that their autonomy was relevant and restricted to the degree of their activities, as the decision to suspend the unit was taken by the Committee of Managing Directors. The DCV unit was reporting directly to the Executive Vice President of

Table 5.47: Organisational Structure of the DCV unit

	Quotes
Model of organisational structure	- "We had the Committee of Managing Directors (in which) there was one guy, [MD1]. And under this, there was [the DIW unit] (in which) There was the [Executive Vice President of DIW] and (underneath the DIW unit) there was [the DCV unit]. So we were very close to the top. So it was me, [the Executive Vice President of DIW] and then straight into [MD1]" Manager Dp - "we were separate from [DIW unit], we had our own governance structure" Manager Db - "It was all (e-business related venturing initiatives) under [DIW unit] set up as the Division "[DCV unit] was a third leg of our business. And we were set up as an independent company with the mission to launch and grow new businesses" Manager Dt
Model evaluation	- "It was a very good structure [Corporation D] is very good on governance, how we govern our investments" Manager Dp - "I think one of the issues was that we sat within that organisation which was shut down and I think if we'd been a separate organisation inside business development and strategy for example, things might have been different" Manager Db
Relationships / Communication with rest of corporation	- "The companies all had a level of relevance, the [DCV unit] Executives, made a number of presentations to [Corporation D] business units, we took the companies on road shows round [Corporation D], introducing the technology to various different business users where we found there was interest, and that had lead to a couple of paid pilots" Manager Db - "Well we didn't fit into the rest of the organisation … We sat within a funny business called [DIW unit]. We were autonomous within it, within [DIW]. [DIW] was on its own, a slightly unusual organisation … But new businesses don't tend to fit into the organisation, I mean it's difficult a new business to fit. It's fine if they are a natural extension, [D6][93] was a natural extension, with energy" Manager Db - "A couple of ideas or ventures that came through to me that I put to them (DCV unit), because the ventures were wanting money and we couldn't conceivably bring them in" …"We were a separate profit centre... rather than being a service centre to the rest of the business, we were set up as an independent business" Manager Dt - "We didn't have much time, you know trying to run a business as well as communicating internally, and not just run a business, build a business. But I mean part of our job was to get people aware of what we were doing and I think we were kind of 'stillborn'" Manager Db - "We started from the wrong proposition, was that we should be an independent profit centre business. [Corporation D] is driven by what is called a score card anything that we put on our score card was technically taken away from somebody else, because we were reducing somebody else's opportunity. So just as a fundamental proposition, it didn't work" Manager Dt
Reporting	- "We call it a Review Committee, so on a quarterly basis [MD1], together with again an external person, they looked at the overall fund. So these people looked deal, by deal, by deal and he looked on a quarterly basis as how is the fund doing? Do you have enough deal flow? How can we help you … relationships in [Corporation D]. So that is more at the high level" Manager Dp - "[Manager Dn], who was the head of the unit, reported to [executive President of DIW unit], who was the head of [DIW unit], and [Eecutive Vice President of DIW] reported to one of the group-managing directors" Manager Db

[93] One of the corporate initiates taken at the same time as DIW and DCV units – D6 focused at alternative energy sources

the DIW unit, and he was reporting to MD1. The review of the DCV unit's operations and activities was taking place on a quarterly basis by a Review Committee within which the Executive Vice President of the DIW unit and MD1 were sitting. Managers Dp and Dn, as Vice Presidents of the DCV unit were also participating reporting not only on the investments the unit was carrying out, but also on the relationships the unit was trying to build within the group.

There appears to be a close relationship between the DCV unit and the DIW unit as both dealt with similar type of activities and technologies. Quite often as Manager Dt argued, ideas that did not meet the criteria of the incubator were forwarded for consideration to the DCV unit. Both units were positioned very close to the top management team of Corporation D. Their political and financial sponsor was MD1, who used his authority and seniority within the corporation to promote the DCV unit and act as an intermediary between the two entities. The establishment of relationships between the DCV unit and early adopters of technology within the corporation was also one of the responsibilities of the internally recruited executives of the DCV unit, such as Manager Dp. Manager Db argues that there were individuals within the corporation who could appreciate the type of technologies the DCV unit was investing in and potentially become internal buyers of them.

The communication between the DCV unit and the rest of the group was depended on the interpersonal relationships and internal networking that each of the DCV team's executives had with the rest of the corporation. The DCV unit tried to promote and increase awareness about its activities within the corporation through meetings and presentations Managers Dp and Dn carried out with other corporate divisions and managers. However, Manager Db argued that it was difficult at the initial stages of running the DCV to try to combine two activities: running the unit and creating a financially sound investment portfolio and at the same time marketing internally its activities. He recognises that both activities were equally essential, but with DCV unit being at its *"stillborn"*stage, this combination was challenging. During its two years of operation, the DCV unit did not exploit all communication channels available, while its rationale failed to be appreciated by the core businesses.

However, the establishment of relationships and identification of relevance with the rest of the corporation were necessary for the survivability of the DCV unit. Manager Dp was aware of this necessity when preparing the business plan of the DCV unit. Manager Db argues that the lack of relatedness of the DCV unit to the corporation from the beginning of its establishment was a liability for its survivability. Managers Db and Dc recognised that autonomous initiatives such as the DCV unit do not necessarily fit with the pre-existing organisational setting. The distinctiveness and differentiation of the DCV unit (remuneration scheme, recruiting both internal and external personnel, and dealing with internet related technologies) were not understood and appreciated by the rest of the corporation. Manager Dc argues that one of the reasons that the DCV and DIW units were suspended was due to their position away from the core business interest of the corporation, while the DIT unit survived because of its direct relevance to a core business. Manager Dp argues that if the DCV unit was part of the DIT unit there would have been a better chance for it to survive. She recognises that organisationally, the DCV unit was not associated and related to the appropriate business activities within the group.

Manager Dt argues that the overall involvement of the corporation in internet related investments in an era of internet hype was not viewed by the rest of the corporation as positive and justifiable. He argues that there was *"resentment across the group"* about the DIW unit. The arrogant behaviour of DIW unit's personnel contributed to this. Manager Db argues that the DCV unit being associated with the DIW unit became also the attractor of such resentment. Manager Dp was aware of these emotions and she argued that frequently the two units (DIW and DCV) were considered as similar, even though the DCV unit was run in much tighter governance with regards to the use of resources and performance progress than the DIW unit.

The resentment towards the DCV unit might also be indicative of the cultural rites towards innovation existing within the corporation. Manager Dv explains that Corporation D is characterised by two types of innovation: (a) the incremental type, driven by the existing corporate businesses, and (b) the break-through type, driven by the corporate level executives. The business initiatives regarding the incremental type of innovation were intended to reinforce the competitive positioning of the existing businesses providing solutions to specific technological problems the businesses had. Attempting to position the DCV unit in this categorisation of initiatives, it appears that the e-business venturing unit dealt with breaking-through innovation and therefore needed to have the support of the top management level to exist. Considering the distance between an innovative technology and business model to the core existing businesses of the corporation, Manager Dv classifies innovation as *"inside the box"* and as *"outside the box"* innovation. The data indicate that the e-business venturing initiatives were perceived as *"outside the box"* innovation. Managers Db and Dt, being critical of the culture within Corporation D, imply that the corporation had an inwards approach towards innovation, restricting the identification of external innovative technologies and business models.

Manager Dc explains that between 1998 and 2000, Corporation D went through a significant *"transformational change (which) focuses on transformation and diversity"* with the corporation moving towards the direction of *"becoming a more dynamic organisation, focused on delivery and promises to the shareholders ... becoming more results focused, and therefore more driven, more dynamic"*. This kind of change in the corporation had started prior to 1998. Manager Dv argues that it was evident within the corporation that after 1996 the corporation was becoming less of a civil service corporation and more of entrepreneurial and innovative, taking an interest in *"breaking through"* or *"outside the box"* innovation. However, as demonstrated in Table 5.48, Manager Dt argues that this change of culture was mainly noticed among the lower level managers, rather than the senior management.

Table 5.48: Culture within the DCV unit and Corporation D

Construct	Quotes
Aspects of corporate culture	- "[Corporation D] is disposed to innovation, the oil business is a high tech business... all over the group in [Corporation D], which are all driven to try to improve technology, productivity, growth, you know all those things. So [Corporation D] is doing all this stuff and there are people out there interested" Manager Db - "My reading of [Corporation D] now is that at the senior level, it has still got that kind of civil service ... I mean you have got the CMD which is 5 people, but below that the heads of the divisions, or the ones I have met, I would say that they are more towards civil service than to entrepreneur. As you go lower down in the organisation, then it is moving more to the entrepreneurial rather than civil service" Manager Dt - "We are not very entrepreneurial, no not at all that I think, is the long and short of it. But then again, we are not designed to be entrepreneurial, and we don't have to be entrepreneurial, because as you know, we are pumping money out of the ground so we are not really entrepreneurial, no. It is very interesting, I find currently in industry, everybody is going back to the core" Manager Dp

The quotes in Table 5.48 describe the cultural context within which the DCV unit emerged and was developed. The transformational phase the corporation was going through allowed exploratory initiatives to emerge, with the senior executives at the corporate level being keen to support financially and politically new initiatives that could bring insight within the corporation. Manager Dv explains that initiatives that reside within the *"outside the box"* innovation domain could be adopted by the core businesses through two avenues: (a) the initiative could have migrated and become relevant to any of the core businesses, or (b) the existing core business would have *"stretch"* towards the business area of the initiative. Simultaneously, Manager Db argues that technological innovation was viewed from the corporation as the means to energy exploration and commercialisation. Corporation D was a user of technology, and not a supplier of it.

The venturing units though were providing access to the corporation to innovative technologies *"outside the box"* of its domain. Moreover their business model and commercialisation of technology approach created value for the corporation in a different way than the traditional corporate routines. Manager Dc argues that within D1 business there was:

> *"questioning (over) the independence and ability to do things differently. So at the end of the day both parties, if you like, the traditional part of the organisation and the entrepreneurial part, realised that they have to work together to get to a win/win situation" Manager Dc*

This aspect of the corporate culture towards the *"entrepreneurial units"* is indicative of how differently various units were operating within the corporation. Some units were more attached to a traditional, *"old economy"* type of culture, while there were some parts within the corporation that were representing the *"new economy"* of doing business. With Corporation D being characterised as an *"old economy"* corporation, it was expected to observe tensions between the two cultures.

However, by the late 1990s, Corporation D recognised the value of *"outside the box"* innovation, and allowed to some entrepreneurial units to *"migrate"* and to explore new technologies and new markets. Some of these ideas, when successfully identifying niche and feasible markets, were integrated into the core businesses stretching the existing boundaries of the latter. An aspect of this rationale was the introduction of the DI scheme which was also viewed with scepticism. Manager Dv argues that the character of the DI scheme dealing with *"outside the box"* innovation was criticised of wasting resources at its initial stages. This was a demonstration of the tension between the *"inside"* and *"outside the box"* innovation that occurred during that period within Corporation D. Considering the fact that both streams of innovation were competing for access to resources (i.e. financial, human capital, political support), it was expected that the *"outside the box"* innovation would be subject to severe criticism over the spending and management of resources allocated to them. This also explains the negative perceptions created towards the DIW unit over its financial management.

Moreover, in the late 1990s the surfacing of a highly entrepreneurial external environment, with many corporations getting involved in CV activities and VCs achieving high financial gains, a group of middle-level managers keen to participate in this investment and e-business hype emerged in Corporation D. In one of the press releases following the establishment of the DCV unit there is a reference to the threat Corporation D was facing during this period regarding the possible loss of valuable corporate employees who would prefer to leave Corporation D for a more entrepreneurial one. The DCV unit was positioned as an entrepreneurial environment created to retain these employees. Managers Dp and Db argue that, due to the unit's short life cycle, it was difficult for them to identify a distinctive unit-based culture. However, they argued that by adopting a more financial oriented approach towards opportunity commercialisation, they were culturally different from the corporate innovation scheme and from the DIT unit.

5.5.2.3 Outcomes[94]

The involvement in CV activities had a limited number of outcomes for the DCV unit and the corporation, listed at the sections that follow.

5.5.2.3.1 Performance: Financial and Strategic

The DCV unit was set up to operate on meeting financial targets regarding the return of the each investment carried out. The financial targets were decided considering the

[94] This section is mainly drawn from the interviews carried out by Managers Dp and Db, as the other managers were not in position to comment on the outcomes of the DCV unit's operations.

way the market was performing in 2001, the commitment of the corporation to such activities and the fact that it was the first time that such activities would have been carried out by the corporation. Manage Dp argues that their financial targets, as presented in the business plan of the DCV unit, were realistic and modest. However, both Managers Dp and Db argue that two main conditions were lifted during the initial 18 months of the unit's operations, compromising consequently its performance. Internally, the strategic review that took place in 2002 led to a decline in the commitment in CV activities among other initiatives, while externally the economic slow down and the crisis in the venture capital market restricted the performance of the unit and of its investments. Table 5.49 provides a summary of indicative quotes regarding the tangible and intangible performance of the unit and its contribution to the corporation.

Table 5.49: Performance of DCV initiative for the unit and Corporation D

	Quotes	
Performance	Area	
	Tangible	Intangible
DCV unit	- "we ended up making 6 investments, 4 in the States, 2 in the U.K" *Manager Db* - "we looked at 600- 750 deals in 2001" Managers Dp and Db	- "It (the outcomes) has not been determined yet, because the investments haven't been realised" Manager Db - "I think the outcome is unlikely to be positive from a financial point of view, because we haven't built a portfolio of investments, we only have a few, 6 investments. We don't have the portfolio spread" Manager Db
Corporation D	- "the companies continue to trade in one form or another and I think in the case of all the companies had relevance for [Corporation D], most of the companies have explored business and working relationships with [Corporation D]" Manager Db	- "(one of the ventures) went into bankruptcy, but we sold the rest ... two we have merged (...) I mean none have really come to profit" Manager Dp

The suspension of the unit's funding and the termination of its investment activities were the outcome of the decline of the corporation's interest in CV, as the latter was considered to add cost to its operations and not to fit to its core business activities:

> *"[Corporation D] was moving; we had a new senior management, and really moved back to the core. And I think a lot of peripheral activities like [the DIW unit] were really critically looked at. Why? Because all these new step-out activities were adding overhead costs to [Corporation D] and they looked at the whole gamut and basically everything that was further away from the core, they chucked (it), and this is why we were basically chucked; nothing to do with performance" Manager Dp*

"We set up a good opportunity, we executed it well, we made some quite useful and interesting investments which show some relevance for [Corporation D]. [Corporation D] for its own reasons, perfectly sensible reasons, decided it didn't want to continue this initiative. Therefore the outcome is stillborn, that's the nature of a business which was going to be $200m and ended up being 25. And instead of being (having invested in) 15 companies, 6. And instead in (having) 7 executives, 2" Manager Db

While the anticipated performance targets for the DCV unit included the investment of £200m in 15 business ventures, in 2002 the unit had invested only £25m in 6 business ventures (4 in the USA market and 2 in the UK), developing a very small business portfolio. When the interviews were conducted, Manager Db was pessimistic about the financial performance of the portfolio. Manager Dp explained that out of the 6 investments, one was bankrupt, two had merged and the rest were exited, while none of them achieved profits from its operations. One of the reasons that Manager Dp used to justify the poor performance of the investments on an individual basis was the experimental character some of them had. She argued that even though experimentation was needed for the kind of activities they were involved in, it led to investments that had not been screened properly and consequently to poor performance. This explanation implies a degree of urgency from the DCV managers' point of view to carry out investments while the investment hype was continued during that period. Another reason to justify the poor performance according to Manager Db was the small size of the portfolio of business ventures created by the DCV unit. With such a small portfolio spread, he argues that the return of the funds invested was not going to achieve its target. His role after summer 2002 was to maintain the financial management of these 5 ventures aiming to exit them with the minimum financial effort.

From a strategic performance point of view, Managers Dp and Db recognise that the short life of the DCV unit and the suspension of its funding from Corporation D did not allow significant strategic returns to occur. The fact that five out of the six ventures the unit invested in continued trading even in 2003 was perceived by both managers as a positive outcome of the unit's activities. Moreover, quite a few of these investments gained significant publicity, promoted as one of the most innovative collaborations that Corporation D had attempted in the energy sector with its main competitors. The fact that all ventures created by the DCV unit had established strong business relations with the rest of the corporation is perceived by its managers as a significant outcome, considering that this was one of the main aims of the unit's activities. Manager Dp argues that in retrospect, Corporation D withdraw from the CV market far too soon to allow any strategic or financial outcomes to emerge. She argues that the length of the involvement of the corporation in CV activities needed to be equal to the length of the investments life cycle for any strategic outcomes to emerge. In the DCV unit this was not the case compromising its performance.

The business impact of the CV activities of the DCV unit on the corporation was limited and insignificant. The small number of ventures created, the short investing activity of the unit in combination with the small size of the unit are considered by Managers Dp and Db as the main reasons to have restricted a direct and significant impact of the CV activities on the corporation. Manager Dp also argues that the lack of political support by senior managers towards the activities of the DCV unit might also have contributed to the limited impact of the latter on the corporation:

> *"We were a subset of that and in my view an efficient, a more efficient way of creating innovation and things like that, but because we were smaller, therefore less impact, so therefore I don't think whether we were ever here or not doesn't make too much difference to [Corporation D]" Manager Db*
>
> *"We ran a great show without any political support" Manager Dp*

5.5.2.3.2 Learning outcomes

Despite the poor financial and strategic performance of the DCV unit and of its investments, Managers Dp, Db and Dt argue that there are significant learning points to be drawn regarding how to run CV activities within a large corporation and the efficiency of the DCV unit's business model. Table 5.50 summarises indicative quotes regarding the learning that occurred within and around the DCV team.

From the individuals' point of view, the learning which occurred was related to the conditions that facilitate or restrain the implementation of CV activities within Corporation D. Managers Dp and Dt argue that the timing of running CV activities in relation to the corporation's life cycle and to the macro-economic environment is critical to determining the success of a CV unit's operations. Manager Dp characterises as *"a personal thing"* to carry out CV activities suggesting the role

Table 5.50: Learning and the DCV initiative

Constructs	Quotes	
	About the DCV model	About CV
Individual level	- "The key learning around is that this can work. But top support, sponsorship at the top. I mean if you just don't have it, you are just simply not going to survive. I think that is really what the long and short of it is" Manager Dp - "We found that people were very interested in [Corporation D] being an investor" Manager Db	"I think my conclusion from corporate venturing, and I have looked at it for many years now, is there is no right business model. There are business models which were better and worse. Context is always very important, and timing, and the sponsor. It is really a personal, personal thing, I find" Manager Dp - "The only thing you could say is that you have learned different things, and you as a person, as a professional, are different" Manager Dp
Team level	- "Others in the team need to learn those skills, and therefore Manager Dn would have been supporting them in the early investments" Manager Db	- "Even some of the [Corporation D] people in the team were saying that it just proves that [Corporation D] can't do this sort of thing. There aren't any entrepreneurs in [Corporation D]. So to some extent it undermines initiatives like [DI scheme]" Manager Dt
Corporate level	- "We advised them (other corporate units) on this a little bit. So we do some of it. What worries me in [Corporation D], is that venture capital, knowing venture capital is a very useful skill, and we do not have it in [Corporation D]. If you don't have a Venture Capital Unit, you won't have the skill. So we do a bit here, a bit there, but we don't have venture capital skill. And I find, for one of the largest organisations in the world, it is interesting that it is a skill that we don't have" Manager Dp - "[The Executive Vice President of the DIW unit], whom I report to, would say that bringing in venture capital skills into the group is a good thing, and that's a kind of notion nebulas comment" … "Manager Dn is no longer with us for example, so one of the experienced venture capitalist is no longer with the group and to what extent therefore the group can adopted some of the benefits of venture capital skills?" Manager Db	

individuals have in determining the way a CV model is conceptualised and implemented. Political support by the top management is also highlighted by Manager Dp as a critical condition for CV activities to flourish within a corporation and to have an impact on it. Another element of the learning obtained at individual level regards the actual carrying out of the CV activities. Manager Db was impressed with the positive response the team was receiving from the investment community to co-invest with a large corporation such as Corporation D. He argues that the creation of such positive profile for Corporation D was due to the activities of the DCV unit.

Within the DCV team, it appears that the mixture of experienced and inexperienced managers led to the occurrence of significant learning about the investment process. The internally recruited DCV managers learnt from the externally recruited managers about all aspects of the CV investment process. The team dynamics and the recruitment of experienced venture capitalists allowed the internally recruited DCV managers to gain significant exposure to the CV process (e.g. negotiations, investment process, attending boards of the new ventures), which according to Manager Dp contributed to the personal development and job prospects of each one of them.

However, Managers Dp, Db and Dt acknowledge the inability of the corporation to utilise such knowledge occurred at the individual and at the DCV team level. The suspension of the DIW and the DCV units forced managers involved in CV related activities to leave the corporation. The managers that continued to be employed in Corporation D were not placed in positions or in initiatives, in which their CV knowledge and skills could have been utilised. There appears to be a lack of processes in place within the corporation to maintain these skills and utilise the exposure some of its managers gained by being involved in CV activities.

5.5.2.3.3 Impact on venturing activities

The involvement of Corporation D in CV activities through the DCV unit was very short for a significant impact to emerge regarding the venturing behaviour of the corporation. Manager Dp argues that the inability of the corporation to identify and use the learning occurring from the involvement in CV activities has not allowed the corporation to develop venturing skills at the organisational level. Table 5.51

summarises indicative quotes regarding the impact the DCV unit's operations had on the venturing activities and behaviour of the corporation.

Table 5.51: Impact of DCV initiative on CV activities within the corporation

	Quotes
Manager Dp	- "I think they never really liked it (the DCV unit), and we had no time to prove them wrong"
Manager Db	- "They've got these [DI scheme] ideas (…) they have deployed commitments to venture capital funds made specific investments in venture capital companies. So yes, I think they remain to have interest, and that is the legacy of [DIW] or [DCV] is that the kind of venturing concept, e-business ideas are instilled inside [Corporation D] (…). Even though the business units themselves are no longer in existence. One could argue they are no longer needed to be in existence"
Manager Dt	- "It is very difficult to represent [Corporation D] as one voice, so there are other parts of [Corporation D] who are doing corporate venturing with a 'small c and a small v',. I think you take a cycle and then it will come back in another form. Because there is still the underlying imperative upon [Corporation D] to look beyond oil drilling"

This demonstrates that even though the activities of the DCV unit were not understood and valued (as perceived by the DCV manager), the corporation was expected to continue to take an interest in CV activities. According to Manager Db the fact that in 2003 the corporation continued to be involved in venturing activities demonstrated the positive view the corporation had towards CV activities. The experience from the DCV and the DIW units overall does not appear to have discouraged the corporation for a future involvement in CV activities. Manager Dt argues that it is expected from a large corporation such as Corporation D would experience cycles with regards to the intensity and the types of business models of involvement in CV activities.

5.5.2.3.4 Impact on corporation

The impact of the DCV on the corporation is identified in terms of the degree that its operations and investments affected the image of the corporation (internally and externally), as well as the corporate culture and strategy. With regards to the image of the corporation, the involvement of the corporation in CV activities by setting up the DCV unit brought mixed reactions within the corporation. The activities of the DCV unit were perceived as indicative of the innovative and entrepreneurial spirit attempted to be promoted within the DIW unit and other corporate businesses. Outside the corporation, the venture capital market welcomed the involvement of Corporation D in CV activities and two venture capitalists collaborated with DCV unit in collaborative investing in e-business related ideas. The image of an innovative company and *"keeping up with developments"*, started to be developed for Corporation D. However, its exit from the venture capital market in spring 2002 is characterised by Manager Db as damaging for the image of the corporation among the community of entrepreneurs and venture capitalists.

The impact of the DCV unit's activities on the organisational culture of the corporation was also examined. Manager Db was optimistic that *"the kind of venturing concept, e-business ideas are instilled inside [Corporation D], so I think from a point of view of cultural success, yes I think you could say it has been a success"*. However, both Managers Dt and Dp argue that the inability of the corporation to retain the personnel involved in venturing activities and to utilise their learning did not allow for a significant change in the organisation culture to occur. Manager Dp argues that for a company like Corporation D there is no requirement to be entrepreneurial, or for the involvement in CV activities to lead to a cultural change within the corporation: *"we are not designed to be entrepreneurial, and we don't have to be entrepreneurial ... we are pumping money out of the ground, so we are not really entrepreneurial, no. It is very interesting; I find currently in industry, everybody is going back to the core"* explaining that *"in Corporation D, entrepreneurs never really get into the top flight, because they get frustrated and they leave or we don't like them"*.

Considering the occurrence of any impact on the strategic context of the corporation, the data indicate that at its initiation phase the DCV was in a position to challenge the existing corporate strategic context. The DCV unit benefited by the experimental conditions formed within the corporation and its business model and investment portfolio were introducing new innovation routines. However, by 2002 this experimental behaviour was dropped and the corporation decided to focus on the core business. Manager Db argues that as far as the strategic interest of the corporation was in 2002 only in the core businesses, it was not a revelation that the DCV unit was suspended.

Consequently, it appears that in the case of Corporation D, the venturing activities did not trigger any change in the corporate strategic context. The strategy context was the driver of the involvement and termination of venturing activities by the corporation. The proportional small size of the venturing activities, the short involvement in CV activities and the insignificant business impact of the DCV's investments on the corporation were the main reasons that have prevented any adjustment of the corporate strategic context:

> *"if I can take $200m and make it $800, is not going to move [Corporation D], I am nothing on their bottom line. The only thing is, if through my corporate venturing we could have made an investment in a company that brought us a new insight that allowed us to beat [Number 1 competitor of Corporation D] somewhere, that is worth it. But you have to deliver a financial return, and overall your portfolio has to deliver strategic benefits" Manager Dp*

The pre-existing strategic context appears to be dominant enough to absorb the involvement in CV activities and after a phase of experimentation to return to the core business domain. The decision to be involved in CV activities appears to have been a step forward to understand *"out the box innovation"*. This involvement and its outcomes do not appear to have improved the position of the corporation in *"stretching"* its boundaries, but to have consolidated the corporation's existing state.

5.5.3 Case summary

The involvement of an old economy firm such as Corporation D in e-business technologies and business models by carrying out minority equity investments to internet technologies start ups by the DCV unit was never understood by the rest of the corporation. However, Corporation D needed to be present in the internet hype of the late 1990s and the DCV initiative aimed to contribute financially and strategically to the corporation. When the senior manager who supported the DCV initiative left the corporation, 18 months after its initiation, the rest of the top management team decides its cease. The low degree of relatedness and absorption of the DCV unit's ventures by the rest of corporation supported its suspension.

CHAPTER 6: DISCUSSION

6.1 INTRODUCTION

This study started with the intention of unfolding and enlightening the CV process: how CV activities arise and are developed within the organisational context and what is their impact on the corporation. Building on the existing CV literature, the outcomes of this study accorded with that of prior work. However, the study has also uncovered significant new findings not previously identified in the literature and not highlighted by practitioners. The most important of these findings are, first, the dynamics of the relationship between the parent corporation and the CV unit, and second the identification of the role of emotions in the CV process. The absence of alignment and adjustment mechanisms to monitor, manage and resolve tensions and conflicts between the parent corporation and the CV unit restricts the realisation and emergence of positive outcomes for the corporation (such as learning and acquisition of new capabilities) from the involvement in CV activities.

Having presented the individual cases of four corporations, the attention of this chapter turns to the cross-case presentation of the findings. By clustering the individual cases across to relevant variables and constructs, propositions are developed and tested against the individual cases to be confirmed and improve understanding. Relevant literature is used to sharpen the insights yielded by the inductive process. The chapter follows the structure of the proposed process model of the conceptual framework and is organised around the initiation and the implementation of the CV process, and its outcomes. In each section, two levels of analysis are present: (a) middle-level management/CV unit, and (b) corporate management/corporation.

6.2 CV POSTURE ACROSS THE CORPORATIONS

Each of the cases of corporations studied are characterised by its idiosyncrasies and uniqueness in the way CV was employed as a process for the development of new ventures. Nevertheless, comparing their individual features with regards to the aim, the intensity, the duration and formality of their involvement in CV activities, and the CV model employed, allowed for valuable conclusions to be drawn. Table 6.1 outlines the outcomes of this comparison.

Table 6.1: CV posture across the cases[95]

Case	Aim of CV involvement	CV model	Intensity of Involvement in CV activities	Duration of involvement	Formality of Involvement
A	- To build an innovation capability - To support the growth strategy of the corporation	- Internalising external business ideas - Corporate funds used - Ventures treated as spin ins & spin outs	- High levels of commitment from top management team between 1997 and 2002 - Co-existence of other venturing and innovation schemes	At least 6 years	- *Induced decision*: initiated by the Chairman & part of corporate reorganisation strategy
B	- To extract value from in-house intellectual property - To develop entrepreneurial capabilities	- Incubator of internal ideas - Combining both corporate & venture capitalists funds - Ventures treated as spin outs	- High levels of commitment from R&D division's top management team - High levels of intensity between 2000-2003 - After 2002: coexistence with other venturing activities in other divisions	3 years of Direct CV	- *Induced decision*: the CEO of the R&D division initiated it, tapping on the bottom-up pressure to act on the innovation capability of the corporation
C	- To respond to an external threat - To protect internal capabilities and build new technological ones - To protect the core business domain	- CV capital fund: minority stakes in external ideas - Corporate and VC funds - Ventures treated as spin outs	- High intensity after 1997 when top management commitment was secured and until 2001 - After 1999 there is co-existence with other venturing activities (incubator)	- 2 years of CV experimentation - 4 years of formalised CV activities	- *Autonomous activity*: by a senior manager, which after 1997 gained legitimacy and became part of the core business
D	- To acquire external capabilities - To attain a competitive advantage / immediate aim financial gains and strategic gains	- CV capital fund: investing in external ideas - Corporate funds and venture capitalists funds - Ventures were treated as spin outs or potential spin ins	- 2000- 2001: high levels of commitment from top management - Co-existence with other entrepreneurial and CV activities	1 and a half year	- *Induced decision*: Initiated by one of the fine managing directors of the corporation

[95] Developed by the author by adopting Zahra's (1993) entrepreneurial posture's dimensions

Paraphrasing Zahra's (1993) conceptualisation of the level of a corporation's entrepreneurial posture, I used these variables to assess the level of CV posture, as a measurement of the significance of and the exposure to the CV phenomenon for each corporation. The comparison concluded that all corporations intended to use CV as the means to acquire new or protect existing capabilities. In the cases of Corporations A and B, the CV involvement was intended to resolve internally identified problems related to the Intellectual Property (IP) capacity of the corporations, while in the cases of Corporations C and D it was intended to resolve a problem caused by changes in the external technological environment.

With regards to the characteristics of the business model used by the CV units of the four corporations, it can be concluded that Corporations A and B used an incubator model of external (Corporation A) or internal (Corporation B) business opportunities. In the cases of Corporations C and D, the business model used by the CV units share many similarities with the venture capital (VC) models of making minority equity investments in externally developed business opportunities, while the ventures were treated as potential spin-outs. The way Corporations C and D treated the new ventures and the employment of a VC model to conduct CV activities was consistent with the conceptual classification of these two corporations as examples of *"external CV activities"* during the theoretical sampling process of the current study. Considering Chesbrough's (2002) typology, I could argue that while all corporations aimed at both strategic and financial targets, in Corporations C and D the financial objectives of their CV units were of higher importance than the strategic ones. Manager Dp stated that *"we talked about strategic returns, but on top of financial returns"*. In the case of corporations C and B, the objectives of their CV units were initially primarily strategic, but during their life cycle they became primarily financial, and the strategic motives became of secondary importance. These observations suggest that corporations being involved in CV activities do not adopt strictly dichotomous objectives, but rather a combination of them with their ordinal priority evolving as the corporation and the CV unit evolve.

Evaluating the intensity of the involvement in CV activities, it can be concluded that for a certain period during their life cycle[96] all four CV units enjoyed considerable support and high level political commitment from their parent corporations. This is also illustrated by the chronological representation of the critical events and life cycle of each CV unit in the previous chapter. During these periods of high intensity for each CV unit, other formal venturing and innovation initiatives co-existed. Some of the latter initiatives existed prior to the formation of the CV units I studied (as in the cases of Corporations A and D) and others followed (as in the cases of Corporations B and C). This classification of the four cases was consistent with the second variable used during the theoretical sampling process of the study (i.e. the existence of innovation schemes, as an indication of the existence of prior entrepreneurial posture by each corporation) as a potentially positive contributor to the survivability of CV activities.

The exclusivity of a CV unit in conducting venturing activities on the behalf of a corporation indicates: (a) the degree of attention and focus the corporation exhibited over venturing initiatives, (b) the degree of direct competition of resources the CV units faced from other venturing initiatives, and (c) the degree of synergies developed between the CV units and other venturing initiatives. In order to examine the importance of venturing exclusivity on the survivability of CV activities I examined the dynamics of the venturing co-existence and exclusivity the four CV units experienced. The relevant literature (e.g. Sorrentino & Williams, 1995; Thornhill & Amit, 2002) argues that fit and relatedness (strategic and operational) between the CV activities and the core corporate activities increases their success rates. I used the construct of relatedness as a positive contributor to the survivability of the CV initiatives. I used the construct *"sectors of investments"* towards which the CV units targeted their CV activities as an indicator of the relatedness of the CV unit exhibited to the core business of the parent corporation. The ACV and BCV units focused their activities on the current business sectors of their parent corporations, while the CCV and DCV units explored new ones. Figure 6.1 positions the CV units in relation to their degree of relatedness and venturing exclusivity.

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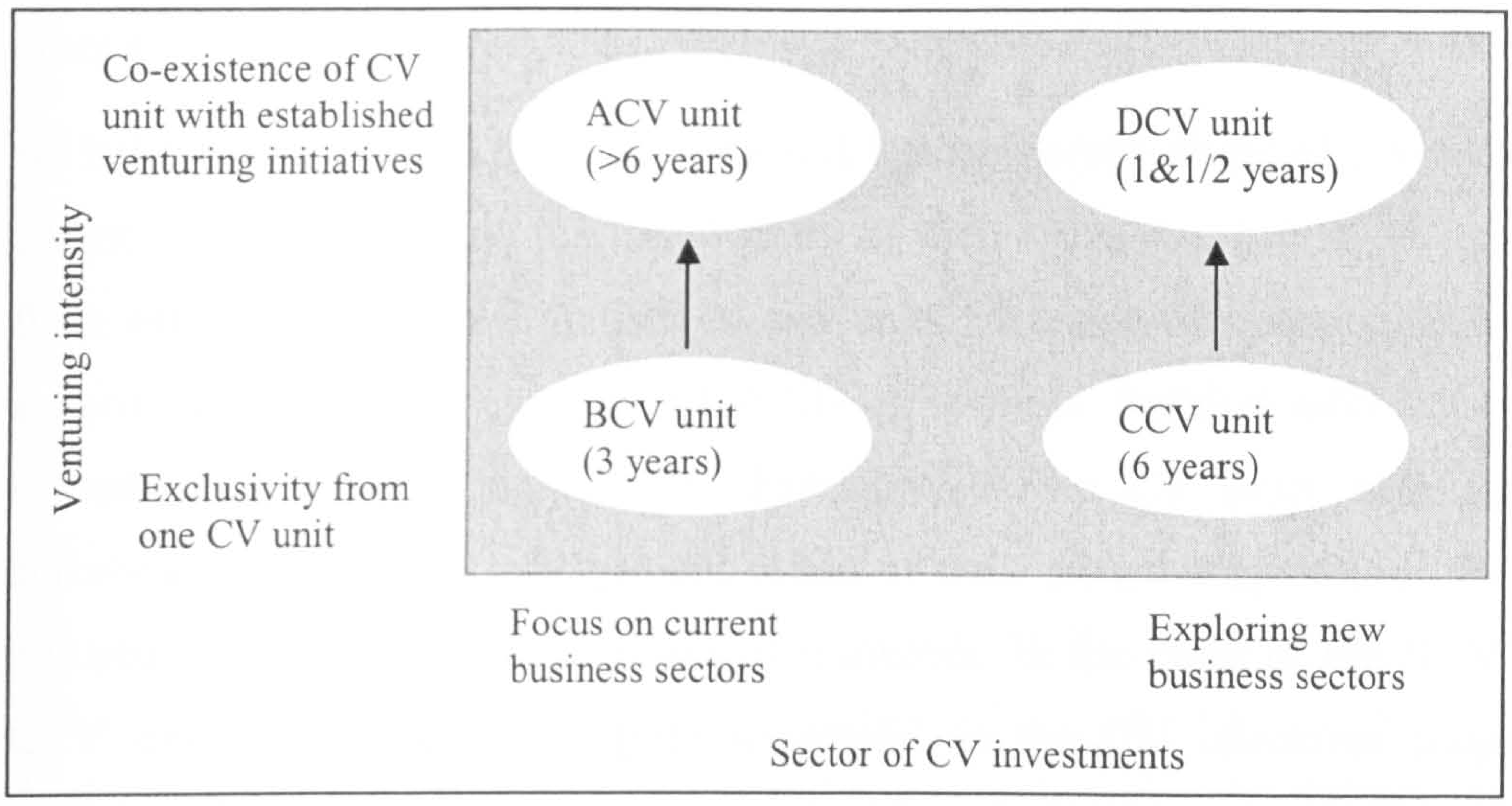
[96] Its length is indicated by the duration of involvement in CV activities

Figure 6.1: Venturing exclusivity, synergies and duration[97]



While it would be expected that the CV units with the highest degree of relatedness to have the higher duration (i.e. ACV and BCV units), it appears that the exclusivity and lack of competition of the CCV unit from other venturing and innovation activities might have also contributed positively to its survivability. The ACV unit's co-existence with other venturing activities was not competitive but synergetic. The ACV unit was operationally linked to the AVN initiative, and the internal venturing activities of the core businesses of Corporation A. In the case of the DCV unit the lack of synergies and relatedness of its activities to other core and venturing activities of the corporation restricted its duration to only 18 months. As Manager Dp suggested a possible association of the DCV unit with the established venturing activities (DIT unit) of the D1 core corporate business would have enhanced the survivability rate of the DCV unit.

These observations contribute to the evolutionary perspective on the ecology of routines (Galunic & Esenhardt, 1996; Garunic & Weeks, 2001) and on intra-firm competition of organisational units (Birkinshaw & Lingblad, 2005). This literature suggests that the routines (or organisational units as bundles of routines) do not always compete over scarcity of tangible resources (i.e. finances), but also over intangible resources such as political support, organisational familiarity, and

[97] Developed by the author

attention from the parent corporation. Moreover, routines may also complement each other either in their operational or their symbolic domain (i.e. intended charter).

As indicated in Table 6.1 all CV units had been allocated financial resources by the parent corporation during the initial years of their operation, but faced competition from other organisational initiatives and units in terms of attention and political support, as a consequence of their liability of newness. Political lobbying and intra-organisational networking by the champions of the CV units with significant stakeholders at the top management teams of their parent corporations could have ensured access to those other forms of resources. In the cases of the BCV and the CCV unit this process was quite successful as the CV initiatives projected an intended charter of activities that were significantly innovative and distinctive from other organisational initiatives and units, not producing any competitive responses from elsewhere in the corporation. In the case of Corporation A, even though there was direct overlap between the operations of the ACV unit and the internal venturing initiative, the sharp definition of operational boundaries of each initiative and their intend charter to complement each other allowed for a synergetic effect to emerge. In the case of Corporation D, the political lobbying and interpersonal networking was limited in the D5 division within which the DCV unit was structurally positioned, while the intent charter of the unit was in co-existence with the DIT venturing initiative and the DI innovation scheme. Consequently, besides the distinctive capabilities of each, they did not share any complementarities but were competing directly over attention and political support among them.

In the case of corporation D, it appears that the deciding factor which influence the duration of the DCV unit was the degree of relatedness to the core business focus of the corporation. It can be proposed that where a high degree of operational relatedness of a CV initiative to the parent corporation co-exists with other venturing and innovation initiatives this will allow for synergies to emerge and enhance the survivability rates of the CV initiative. In the case where the CV initiative has a low degree of operational relatedness to the parent corporation, the exclusivity of the CV initiative in conducting CV activities might positively affect its survivability rates, because of the lack of competition from other established venturing and innovation initiatives.

Moreover, Figure 6.1 also demonstrates how the exclusivity of the CV units changed. The BCV and the CCV units lost their exclusivity, as the venturing intensity of their parent corporations increased and new venturing incentives emerged. In the case of Corporation B, the BRS division also got involved in CV creating a bundle of venturing initiatives. They were not complementing each other in an operational way, but rather in a symbolic way, as both were portrayed as part of the entrepreneurial outlook the corporation took in 2001-2002. Moreover, Manager Bb sat on the board of the In the case of Corporation C, the CSR division within which the CCV unit was positioned expanded its venturing activities by establishing an incubator. However, this bundle of venturing activities did not lead to the emergence of complementarities of an operational or symbolic nature.

The majority of the CV initiatives were quite formal, as the top management teams of Corporations A, B and D were directly involved during their initiation. In the case of the CCV unit, Manager Ca initiated informally the involvement of Corporation C in CV activities in 1994, while the CCV unit was formally established and gained legitimacy by the top management team of the corporation in 1997. In the rest of the cases the length of time between the decision to be involved in CV activities and action to establish a CV team or unit lasted a few months as indicated in the previous chapter. From an evolutionary perspective, the duration between the decision and action to conduct CV activities can be conceptualised as equivalent to the exploratory phase each CV unit experienced in developing capabilities. Consequently, it can be proposed that a long exploratory period might contribute positively to the survivability of a CV initiative as it allows for sufficient time to search, experiment and develop capabilities to support its survival. On the other hand, the formality with which a corporation treats a CV initiative might be conceptualised as the degree of legitimacy provided to the initiative by the top management team, as the outcome of the selection process carried out. In this case, the faster a CV initiative is treated as a formal corporate initiative, the faster its position within the organisational context is established.

6.3 THE CV PROCESS

Undertaking CV activities is not a simple, impartial activity that accidentally takes place. Besides the anticipated outcomes of creating new ventures, the CV process itself is an exploration of an opportunity for the corporation, and an exploitation of a novel way in developing businesses. In all four cases, there was no prior corporate experience of conducting CV activities. Each of the corporations had their own traditional way of creating new businesses. They approached CV as an initiative, as an opportunity with uncertain outcomes and involving higher risk in comparison to existing corporate routines of business development. In Corporation A, CV was the opportunity to gain access to externally developed innovation. In Corporation B, CV provided a process to extract value out of the intellectual property (IP) capacity of its R&D division. In Corporation C, CV was an opportunity to create a degree of creative destruction within its technology group, while in Corporation D, CV was an opportunity to explore new technological avenues to shorten the gap between the corporation and the end customer.

With all corporations having identified these opportunities CV was used as a business model not only to create ventures, but also to create a strategic and structural context for these opportunities within their existing organisational context. CV involves identifying resources (the creation of CV funds and allocation of budget for their CV units), defining the strategic (implicating or challenging existing strategy) and operational (placed as part of an existing operational division, following reporting procedures) relatedness of these opportunities to the existing corporate strategy and operations, and maintaining their momentum through integration mechanisms and interdependencies created between the core businesses and these opportunities.

This sequence of actions shares many similarities with the stages of a new venture development process, suggested by Birkinshaw (2005). An entrepreneurship process is unfolded around the business opportunity (a novel routine for the corporation) which requires a new combination of existing resources and involves risk and uncertainty with regards to its outcomes and the potential contribution to the corporation. In the case of Corporation D, a business plan was developed to rationalise and justify the involvement in CV activities. In the other three corporations the CV champions did not follow such formal procedures but they still had *"to make the case"* in order to secure financial and political support from their senior management teams.

Pursuing the CV opportunity bears strategic significance and implications for the division involved. The development and definition of a strategic context (Burgelman, 1983c) in order to conceptually and operationally set boundaries around this opportunity involves a strategy process, mainly at business level. It is not solely the managerial process of implementing CV activities that occurs as argued by the CV literature (e.g. Venkataraman et al., 1992), but also the emergence of a new strategic context is implied by the involvement in CV activities. In the case of Corporation C, the routine followed by the CCV unit to invest in small, independent projects and to acquire externally developed technological know-how was revolutionary in comparison to the corporate tradition of exploring, large-scale project with interdependencies across the corporation. The low cost benefits of the CCV unit's business model were acknowledged from the top management team, and its model replaced the existing practices within the corporate technology group. However, it needs to be acknowledged that in none of the cases did the involvement in CV activities lead to the emergence of a new corporate strategic context. The short period of involvement in CV activities and the lack of their integration across the corporation did not allow for this to happen.

Consequently, the CV processes I studied existed at two levels of analysis: (a) pursuing of an opportunity and conducting CV activities, and (b) forming and organising a strategic context around CV as an organisational routine. The first level of analysis involves the entrepreneurship process of identifying a new business opportunity for the corporation and stretching the organisational boundaries, by creating new ventures containing capabilities which the corporation did not possess before. The second level of analysis involves the exemplification of entrepreneurial behaviour within the existing organisational context of a corporation, with the establishment of a CV unit as part of the attempt from the corporation to administratively organise such behaviour and provide identity to the behaviour within the organisational boundaries.

This study suggests that the two sub-processes co-exist at different levels of analysis, with the strategy sub-process positioned at a macro-organisational level, while the entrepreneurship sub-process is identified at the micro level of analysis of an organisation. The existing CV literature argues that the operational level managers are mainly involved in identifying and commercially exploiting a business opportunity, while the top level managers deal primarily with the selection and retention of a new routine by the corporation, and emphasising the role of middle level managers as negotiators and intermediates between the two levels. This study contributes to this literature by confirming the capacity of the CV process to cut across the micro and macro organisational domains of operations and decision-making of a corporation. It also contributes to the literature by proposing the interaction of the entrepreneurship and strategy sub-processes comprising the CV phenomenon. In Corporation B, for example, the incubation of internally developed IP led to the creation of new ventures, but at the same time created an organisational unit which encouraged and rewarded entrepreneurial behaviour (entrepreneurship process). On the other hand, the realisation by the CEO of the BRD division of the need to extract value from the IP capacity of the corporation led to the adoption of a new approach to develop new businesses and the creation of an organisational unit to act as an entrepreneurial incubator on the behalf of the corporation, developing a venturing strategy (strategy process).

The two processes meet at the establishment of a CV unit to conduct these activities and at viewing CV as a new approach to business development. In all cases, the CV units as indicated by Table 6.1 provided the corporation with a novel approach on the way to do things (Nelson & Winter, 1982). Figure 6.2 attempts to illustrate the way the entrepreneurship and the strategy processes of the CV phenomenon meet. The two processes interact at the meso-organisational level, with middle level managers having a significant role in linking the entrepreneurship and the strategy process. Venkataraman et al. (1992), Day (1994) and Burgelman (1983b) have identified the role of champions of CV activities as critical in leading and initiating the strategic context of the new ventures. The current study argues that middle level managers are also critical in setting the foundations for the strategic context of CV as a new routine, as an emerging approach on the way a corporation does things.

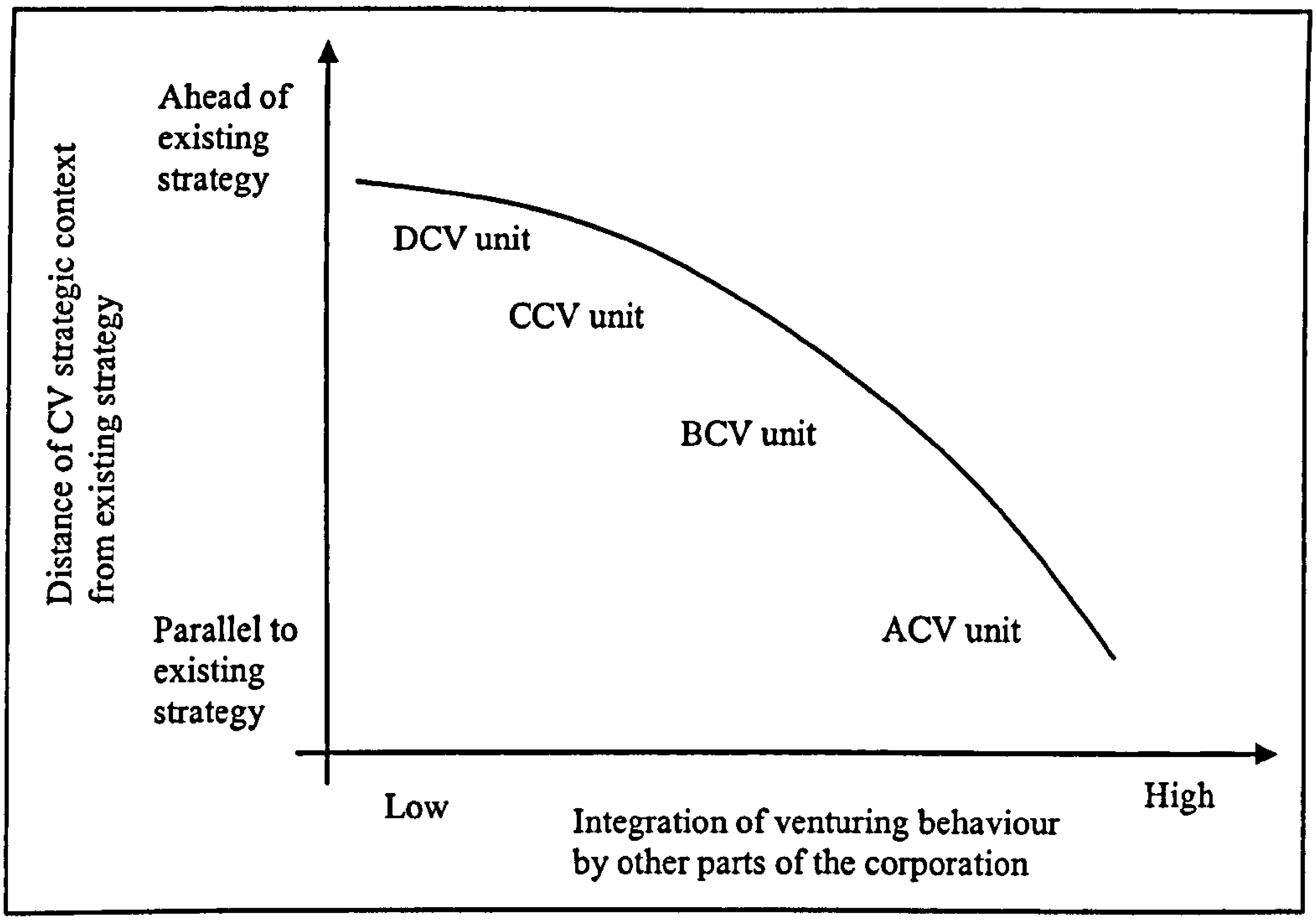
Figure 6.2: Strategy and entrepreneurship processes: Co-existence and interaction

Level	Activities	Processes
Macro	Venturing strategic context	Strategy Process
Meso	CV as new routine / opportunity	Entrepreneurship Process
Micro	New venture creation	

Covin and Miles (2007) have argued that the strategic use of CV by a corporation can take various forms. They provide five configurations of interactions between CV and the business strategy: (a) no interaction, (b) business strategy drives CV, (c) CV drives business strategy, (d) CV and business strategy operate in a relationship of reciprocal causality, and (e) CV is the business strategy. While Covin and Miles provide a list of propositions on the anticipated benefits from the effective integration of CV in the organisational strategy of a corporation, they do not explain how this integration takes place. This study argues that the CV process potentially has both an entrepreneurial and a strategic domain. Consequently, the *"strategic* (or not) *use of CV"* depends on the utilisation by the corporation either of both domains or the underutilisation of only the entrepreneurial one. In all the cases of CV activities the strategy process was restricted and not appreciated by the top management teams of the corporations. Consequently, while the entrepreneurship process was strong with CV being associated directly with the creation of new ventures, its strategic context as a new routine and initiative on how to do things within the corporation was quite weak and not realised. In Burgelman's terms, the strategic context determination process was not fulfilled.

The current study also indicated that it is not only important to examine the causal relationship between the business strategy and the CV activities, but also the level of embeddedness of the CV process within other organisational processes. I propose that the embeddedness of the CV process can be measured as the level of integration of the venturing (i.e. entrepreneurial) behaviour by the corporation and the distance of the strategic context of the CV process from the existing business strategy of a corporation. Figure 6.3 positions the corporations and their CV unit according to the level of embeddedness of their CV processes.

Figure 6.3: Embeddedness of the CV process[98]



Considering the level of intra-organisational integration of the venturing behaviour, the ACV unit scores higher in comparison to the other units I studied. ACV unit was directly linked to all other units of the corporation, especially between 1997 and 2001, while the Chief Executive was very keen in associating its activities to the rest of the corporation. At the same time the ACV unit was perceived as a major facilitator of the existing strategy of the corporation, with the top management team considering the strategic context of the ACV unit equivalent to the existing strategy.

At the other extreme, the DCV unit's strategic context was ahead of and distinctively different from the existing corporate strategy in 2001. While the DCV unit was introducing a new approach to the corporation to expand its operational boundaries by acquiring externally developed capabilities, Corporation D's strategy was focused on exploiting organic growth strategies. Moreover, the DCV unit appears also to be the least integrated CV unit of the four cases. Figure 6.3 proposes that the higher the

[98] The diagram was constructed by considering the informants' perceptions on the level of integration (i.e. association and utilisation) of the CV units by their parent corporation, and the degree of co-ordination between the existing strategy of the corporation and the strategic context of the venturing activities. The positioning of the corporations represents the level of integration and degree of co-ordination of the CV units to the corporation at the time that the CV units had reached the higher level of their venturing activities.

distance of the strategic context of the venturing activities of a corporation (i.e. the realisation of the strategy process of the CV process) from the existing strategy of a corporation, the lower the integration of the venturing behaviour by the corporation, and the level of embeddedness of the CV process.

On the other hand, the high degree of integration of the CV activities and behaviour, (i.e. over-embeddedness) does not allow for an autonomous strategic context around the CV activities as a new routine to be developed, as in the case of ACV unit. Manager Ax argued that the activities of the ACV unit were restricted by the existing corporate and business strategy for exploring business opportunities that fitted the needs of the existing strategic focus of the corporation. It can be argued that in the case of Corporation A, the CV process was limited to the entrepreneurial process and the strategy process of defining a strategic context around the ACV was never initiated. The ACV initiative was driven by the business strategy, as in the proposed typology of Covin and Miles (2007). In the case of the DCV unit, the absence of embeddedness, despite Manager Dp's efforts to ensure operational linkages with the core corporate businesses, did not allow for the entrepreneurial process to contribute strategically and financially to the corporation. The business strategy had no interaction with the DCV unit. One explanation for the differences between these two extreme examples might be March's (1991) conceptualisation of initiatives as exploitive (refinement, choice, efficiency, selection, execution) and exploratory (search, experimentation, flexibility, innovation, risk taking, variation). The ACV and the BCV units can be characterised as exploitive initiatives, while the CCV and the DCV units can be classified as exploratory.

It can be concluded that the two extremes of high and low levels of embeddedness of the CV process in a corporation restricts the outcomes of the strategy and the entrepreneurial processes for the corporation[99]. In the cases of the BCV and the CCV units the interaction and co-existence of the strategy and the entrepreneurship processes is present, as exemplified by the presence of two strong CV units. In the

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[99] Marx and Lechener (2005) propose the inverted U-shaped relationship between four dimensions of social embeddedness (cognitive, positional, structural and relational) and the performance (i.e. survivability) of strategic initiatives

cases of the BCV and the CCV units, the findings indicate that both achieved a certain level of integration of the venturing behaviour and a degree of co-ordination between the emerging CV unit's strategic context and the existing corporate strategy. I propose that the *"strategic use of CV"* is (a) about the emergence of a strategic context around the CV process and its evaluation by the top management team by feeding it into the existing strategy of the corporation, and (b) about the level of integration of the entrepreneurial behaviour reinforcing the impetus of the emerging strategic context. The initiation and implementation of the CV process configures the *"strategic use of CV"*.

However, in the case of the corporations I studied no such outcome occurred. The importance and trajectory of the changes introduced by the CV activities in the four corporations can be classified as significant but not sufficiently major to cause a change in the strategic context of the corporation, given the extent of involvement of the corporation in CV activities, and the value of resources allocated (Aldrich, 1999). Table 6.2 demonstrates that the value of the financial and human resources involved in the four CV teams were proportionally insignificant in comparison to the size of the corporations. The transformational potential of the activities of the ACV unit may be considered substantial, only because the whole corporation was involved in the new innovation scheme the ACV unit was representing.

Table 6.2: CV activities and organisational transformation potential

Cases	Dimension of potential transformation	Number of Units associated to CV activities	CV fund / Annual Revenues[100]	CV team's personnel / Corporation's labour force
A	Introducing new innovation scheme	The whole corporation	£50,000-70,000 / £264,3m total turnover	3 / 4,000
B	Introducing a new commercialisation process	One of the 4 divisions of the corporation	£6m / £18,223m total turnover	20 / 96,300 (in the UK)
C	Introducing a new model to acquire technological innovation	One of the 3 divisions of the corporation	$70m / £2,882m group revenues	5 / 15,000 (in 2001)
D	Expanding the corporate operations	One of the 6 divisions of the corporation	$100m / $122,453m group revenues	6 / 119,000

[100] At the year of the CV team/ unit's formation

6.3.1 "How do CV activities arise within the organisational context?"

From an evolutionary approach, the emergence of an initiative is the outcome of variation and selection processes (e.g. Aldrich, 1999). From a contingency perspective, an initiative is the response of an organisation to a change in the organisational environment as part of the process the organisation undergoes to regain fitness with the environment (e.g. Donaldson, 1996). In this section I compare the initiation patterns of the involvement in CV activities of the four corporations I studied across the two theoretical lenses.

Table 6.3 compares the four corporations on the variation process which led to the emergence of CV as a new corporate initiative. I use the term *"variation process"* to explore how a corporation at a certain time of its life cycle begins to consider being involved in CV activities. It is acknowledged that the sample of the four corporations of the current study was selected on the basis of being involved in CV activities. This retrospective methodology did not allow for the exploration of variation processes which did not lead to the emergence of CV as an alternative or new corporate initiative[101]. With the exception of Corporation C, the variation processes followed by the other corporations can be characterised as intentional. This is due to the fact that they were triggered and supported (politically and financially) by the top management teams (e.g. the Chief Executive of Corporation A, one of the five Managing Directors of Corporation D). Moreover, in the cases of Corporations A and B the variation process, which led to the selection to be involved in CV activities, co-occurred with internal, formal reviews of the corporations' innovation practices. In the case of Corporation C, the variation process that led to the involvement in CV activities was *"blind"*, following a middle level manager's interpretation of the changes in the technological environment as a potential threat to the corporation's technological capabilities. Manager Ca acknowledged that his actions to champion the CV initiative were encouraged by the experimentation, tolerance to error-and-trial cultural traits, and the informal incentives of recognition and promotion characterising Corporation C.

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[101] Moreover, it was beyond the scope of the current study to examine the other options which were produced from the same variation process. I had access only to data related to the selected options of the variation processes in the four corporations (see last column of Table 6.3)

Table 6.3: Initiation of CV involvement: Variation process

Cases	Type of Variation	Source of variation	Conditions enhancing variation	Managerial levels that produced CV option	Produced options selected
A	Intentional	- Need to enhance corporation's commercial capacity and capabilities	- Shareholders' pressure - Prior experience on similar variations from top management team	Top management of corporation – Chief Executive	- Invest in external ideas through CV (i.e. ACV initiative) - Set up internal innovation process
B	Intentional	- Need to extract value from the technological capabilities of a costly corporate division	- Frustration of not exploiting the corporate technological capabilities - Clear vision from top management on how to meet identified need	Top management of division – CEO	- Incubation of internal technological ideas (i.e. BCV initiative) - CV investments in external technological ideas
C	Blind	- Identification of an opportunity in the changing technological environment	- Dependency on technology - Technological advantages from external environment - Cultural trait: proactiveness and experimentation rewarded	Middle level manager – Sales manager	- Incubation of internal ideas - CV investments in external ideas (i.e. CCV initiative) - Technology acquisition with collaborations with external partners
D	Intentional	- Need to enhance relations with end-customers and to follow new-economy developments	- Pressure (internally and externally) to follow e-business economy - Pre-existence of supportive culture	Top management of division – Managing Director	- Innovation scheme (DI scheme) - Incubation of internal e-business technologies - CV investments in external e-business technologies (i.e. DCV initiative)

In order to understand the institutional situation within which the decision to be involved in CV activities emerged, it is critical to examine the conditions which enhanced and influenced the variation process. In the cases of Corporations A and B the source of variation was an internally identified problem associated with the need of the corporations to increase their growth and value generation capacity. In the cases of Corporations C and D the source of variation originated outside the organisational boundaries with changes in the technological environment. These changes threatened Corporation C's business context and put pressure on Corporation D's top management team not to be excluded from the e-business era.

Another feature of the institutional situation characterising the variation process of the CV initiatives was the intentionality (operational and political) of each variation. The data indicate that prior experience, clear vision of intended outcomes of the variation and the involvement of top managerial personnel in the variation process moderate the intentionality of produced variations and decrease the number of produced variations. In the case of Corporation A, the prior experience of the Chief Executive and Manager Ac in venturing activities produced a variation of two initiatives, similar to the ones that the two managers were familiar with. In the cases of Corporations B and D, the top management teams had a clear vision of the intended variations. Managers Bb and Dp, accordingly, were allocated the task to develop and support the variations, but the scope and vision of the involvement in CV activities were intended and outlined by the top management teams. The actual business plan and justification for the selected variation was assigned though to Manager Bb and Dp.

The data also indicate that the faster the intentionality of variations is defined the shorter the variation process will last. In the case of Corporation C, the lack of both prior experience in venturing and clear vision from the top management team about how to deal with the emerging need for variation led to a prolonged variation process. This also explains the fact that the time lag between the initiation of variations regarding the involvement in CV activities and formal decision to do so differs significantly between the case of Corporation C and the rest of the cases. The selection to be involved in CV activities by formally establishing the CCV unit took place three years after the first CV investment was carried out. For the rest of the cases, the first CV investment took place a few months after the formal decision to be involved in CV activities. Moreover, it needs to be noticed that in the case of Corporation C, the variations which emerged are more diverse than in the rest of the cases.

The conditions that enhance variations within the four corporations and the catalysts that influenced the selection process to decide on the involvement in CV activities overlap. The changes in the external technological environment have simultaneously acted as catalysts for the corporations to select the involvement in CV activities. These external discontinuities, besides the imposing threat on the four corporations, were interpreted as opportunities by the agents involved in the selection process. Table 6.4 provides a summary of the main characteristics of the selection processes undergone by the four corporations.

The example of Corporation C is illustrative of the selection process followed: the emergence of new network technologies was interpreted by Manager Ca as a threat for the existing technological capabilities of the corporation. Simultaneously, network-technology became the external selector to get involved in CV investments. While in the past, the selection criteria of the corporation were promoting internally developed technologies, the external discontinuity promoted the involvement in CV activities and the acquisition of externally developed technologies.

Comparing the external catalysts and the internal selectors developed by each corporation, it can be argued that the intra-organisational emergence of willingness and openness towards experimentation and innovative practices facilitates and supports the selection process. The data indicate that such traits of organisational culture made the variation and the selection process possible, confirming the relevant literature (e.g. Miner, 1994; Moorman & Miner, 1998). The data indicate that the external discontinuities contributed for such openness to occur within the corporations. However, selecting to get involved in CV activities occurs only because it fits with the internal selectors. The external selectors provided the framework within which the variation and the selection processes were taking place in order to respond to these external discontinuities. In all four cases, the internal selectors defined the features of the option that was finally selected. It can be argued

Table 6.4: Decision to be involved in CV activities: Selection process

Cases	Internal selectors	External catalysts and discontinuities	What is selected?
A	- Willingness to accept long term experimental initiatives - Selection criteria biases from top management towards venturing activities	- Privatisation, increased shareholders' pressure to improve financial performance - Reduced governmental funding & commercial relationship	- Routine: building on a new innovative process - Competence: increase level of corporate innovativeness
B	- Willingness from top management to explore experimentation in commercialising technologies - Pressure to improve the input/output ratio of the BRD division	- Deregulation of telecommunications sector (domestic & international markets) - Increased competitive rivalry from the emergence of new entrepreneurial firms	- Routine: commercialisation process of internal ideas - Competence: realise and extract value from in-house R&D
C	- Inclination to experimentation of internal projects	- Emergence of disruptive technologies jeopardising the core technological asset of Corporation C - Increased competitive rivalry from the emergence of new entrepreneurial firms	- Competence: reinforcement of corporate technological assets - Routines: moving from large, complex projects to small, flexible ones
D	- Pressures towards homogeneity to follow other corporations in e-business initiatives - Willingness to explore initiatives residing outside the core business	- Pressure from media and shareholders to follow New Economy developments – imitation	- Competence: build a new technological asset related to e-business - Routine: work with external parties in internal projects

that the external selectors aimed to cause a possible transformation, while the internal selectors aimed to preserve the pre-existing organisational, technological and business context of the four corporations.

Selecting to be involved in CV activities is not limited to creating new ventures. In all four cases, the selection of this option is equivalent to a combination of new routines and competences, as listed in Table 6.4. The ACV initiative was a novel innovation process (internalising external ideas) operationalised across Corporation A's businesses, while the corporation started to extend its competences on building networks with external entrepreneurs. The BCV initiative introduced a novel commercialisation process for the BRD division, while Corporation B developed new commercialisation and value generation competences. The CCV initiative enhanced the technological competence of Corporation C, while it introduced a new business model based on small, flexible projects instead of large and complex projects that the corporation was familiar with. The DCV initiatives introduced a novel approach to conducting business by collaboration with external partners and acquiring external resources, moving away from the in-house approach Corporation D was familiar with, while building an e-business technological area of competences for the corporation.

Viewing the initiation process of the involvement in CV activities from a contingency perspective illustrates the moderating role of internal and external variables in the formulation of a corporation's venturing strategy. Table 6.5 was created by adopting Fredrickson's (1986) proposed characteristics of the strategy formulation process. The main assumption of the contingency perspective is that strategy formulation is dependant upon organisational characteristics (i.e. structural dimensions of centralisation, formalisation and complexity) in an effort of the corporation to meet the need for environmental fitness. In the case of the four corporations, the external environment (technological, environmental, social and political) was radically changing in the late 1990s and early 2000s. The increased technological uncertainty and diffusion, the globalisation of competition, the disruption of market boundaries, the decrease in product life cycles, the change in buying habits, and the emergence of new markets with significant purchasing power,

Table 6.5: Venturing strategy initiation process: Characteristics[102]

Case	Process Initiation	Role of goals	Means/Ends relationship	Explanation of strategic action	Comprehensiveness in integrating decision
A	- Proactive pursuit of an opportunity - Initiated at the corporate strategy group, by the Chief Executive who took personal responsibility	- Organisation-wide - Introducing a change in corporation's existing innovation processes - Conceptualised in general terms	- Top management team's commitment - Allocation of corporate funds on annual basis - ACV unit identified as Chief Executive's initiative and personal choice	- Imposed by the Chief Executive as rational strategic choice - Incremental strategic move in the way innovation had been treated by the corporation - Complementing existing strategy	- Top down initiative - Presentation of CV initiative at the Board - No participation of other senior managers of the corporation's 12 core businesses
B	- Reaction to a problem - Initiated by the CEO of the R&D division and approved by the divisional board	- Division-wide - Intending value extraction - Conceptualised in general, strategic terms	- Commitment by division's CEO - Allocation of corporate funds on annual basis - Pressure on BCV unit to generate value	- Outcome of an internal audit - Incremental strategic move in the way IP had been treated by the corporation - Contributing to the existing strategy	- Top down initiative - Presentation of BCV initiative at the Board and rest of the R&D division - BCV unit was built on an internally identified need - CV champion's involvement
C	- Proactive pursuit of an opportunity - Initiated by senior sales manager - CFO took responsibility of CCV unit in 1997	- Division-wide - Intending changes in technical basis - Conceptualised in specific, financial and technical terms	- Political support by the CFO - 1997-1999: Certainty over allocation of corporate funds	- Internal process of political lobbying - CCV unit's ventures had the potential to divert existing technology strategy	- Perceived as a stand alone initiative - Awareness among top management team and divisional Board - Low level of integration at the bottom of the corporation
D	- Reactive pursuit of an externally developed opportunity - Initiated by Managing Director, who took responsibility of DCV unit	- Division-wide - Intending to internalise external thinking - Conceptualised in specific, financial terms	- Dependency on political support by Managing Director 1 - 2000: Certainty over allocation of corporate funds	- Intended rational process by Managing Director 1 - DCV unit's activities were a departure from existing strategy	- Awareness among top management team and divisional Board - Low level of integration across other core businesses

[102] Developed by adopting Fredrickson's (1986) strategy formulation process's characteristics

were among the discontinuities defining some novel competitive conditions for all established corporations, among which were the four corporations studied.

Examining Table 6.5 in detail, it can be concluded that in the cases of Corporations A and C the initiation process of the decision stimulus to be involved in CV activities was the result of a proactive, opportunity-identified behaviour. However, the main difference between the two cases is that in the case of Corporation A, the top management team initiated the process [Mintzberg's (1973) entrepreneurial strategy model], while in the case of Corporation C it was the entrepreneurial orientation (proactiveness, risk taking) of a middle level manager who did so. This can be explained by the structural differences of the two corporations, as Corporation A had a more centralised structure than Corporation C. This observation confirms Fredrickson's proposition that in highly centralised organisations top management teams initiate strategic decisions. On the other hand, the data indicate that the organisational culture in Corporation C was more open to entrepreneurial behaviour than in Corporation A, which was moving away from a public sector towards a commercial and competitive orientation. In Corporation A, the strategic decision to get involved in CV activities was initiated and taken by the newly appointed top management team. It can be argued that the political pressure on top management to deliver a distinctive and innovative growth strategy might have also contributed to the introduction of such a strategic action, which was novel for Corporation A.

In the cases of Corporations B and D, the initiation process was mainly a reactive response to a problem (Corporation B) and an external opportunity (Corporation D). In both cases the process was initiated by the top management teams. The main difference between these two cases lies in the degree of formalisation and complexity that characterise the two corporations. In the case of Corporation B, the formal monitoring processes applied within the BRD division revealed a problematic area and the strategic decision taken by the CEO to respond to this was by being involved in CV activities. In the case of Corporation D, the complexity (high vertical differentiation) characterising its organisational structure might have delayed the identification of the involvement in CV activities as a strategic action. The data indicate that for the individuals involved in the initiation process there were political motives to initiate the strategic action behind the involvement in CV activities. This observation reinforces Bower's (1970) argument that the motives and preferences of the individuals involved in the initiation process have a moderating role.

The decisions to be involved in CV activities served a purpose for the corporation. Table 6.5 outlines the spectrum of the goals (serving divisional versus organisational purposes) and their intentions to create positive future outcomes for the corporations (mainly in Corporations B, C and D). In Corporations C and D the goals of the decision to be involved in CV activities were conceptualised in specific financial terms (i.e. carrying out minority equity investments), while in the cases of Corporations A and B, the goals are conceptualised in more general and strategic terms, being associated with innovation, growth and value creation.

I conceptually treated the assigned intentionality and goal-directedness of the strategic decision to be involved in CV activities as equivalent to the decision's strategic intent (Hamel & Prahalad, 1989). The definition the interviewees used to describe CV was treated as the intent of the strategy process, while the assigned role to and objectives of the CV units were treated as the intent of the entrepreneurial sub-process. In all four corporations, the objectives of the CV units were similar: to assist in and facilitate the creation of new ventures, products and markets for the parent corporations. The means to achieve these objectives differed and these differences were evident in the way CV was perceived and approached, as mirrored by the way the interviewees defined CV. Table 6.6 provides a comparison between the definitions of CV and the objectives of the CV units in the four corporations studied.

Table 6.6: CV involvement: Conceptual relationship of definition and goals

Case	Definition of CV	Objectives of CV unit
A	- conceptualised as a form of innovation partnership with external parties	- to screen, identify and internalise externally developed ideas
B	- conceptualised as a value realisation and extraction mechanism	- to incubate and develop internally developed business ideas
C	- conceptualised as minority equity investments	- to carry out minority equity investments
D	- conceptualised as minority equity investments	- to carry out minority equity investments

It can be concluded that in the cases of Corporations C and D there is tautology between the intent of both the strategy and entrepreneurship processes. Manager Cm argues that Corporation C took a very *"fragmented"* approach towards CV, associating it only with the means of conducting minority equity investments and not considering any other features and aspects of it as an initiative. In the cases of the

Corporations A and B, the intent of the strategy process was of higher abstraction than that of the entrepreneurship process. The CV initiatives were associated with the introduction of new routines and capabilities, as well as the departure from the existing innovation practices and culture of the parent corporations. In both Corporations A and B, the CV initiatives were treated as contributors to the intended cultural change attempted by the top management teams.

The data also indicate that the goals assigned to the decision to be involved in CV activities are shaped by the subjective perceptions and interpretations of the individuals involved in the initiation processes. This observation can explain the diversity of definitions and business models used among corporations in conducting CV activities. In the four corporations examined here, the individuals who shaped the rationale of the CV involvement and of the CV units were the Chief Executive and Manager Ac (for Corporation A), Manager Bb and the CEO of the BRD division (for Corporation B), Manager Ca (for Corporation C) and Manager Dp (for Corporation D). The experiential knowledge each individual possessed with regards to each corporation's resources, inner workings and capabilities, and their interpretations of the corporations' competitive environment led to the identification of an opportunity, around which the involvement in CV activities was crafted. There was an environmental hype which would prompt or even force corporations to be involved in such activities as an outcome of a mimetic behaviour (DiMaggio & Powel, 1983). However, all of the corporations justified their decision to be involved in CV activities on the basis of an opportunity that CV activities would have allowed them to explore and exploit.

The experiences the Chief Executive and Manager Ac had in CV prior to joining Corporation A shaped in a deterministic manner the way the ACV initiative was conceptualised and assigned a strategic intent. Their experience was transformed in explicit knowledge of how CV can be implemented within a corporation. The explicit knowledge Manager Bb gained, through an internal audit he carried out, on the peculiarities, resources and capabilities of the BRD division shaped the rationale and way the BCV unit needed to be run, and what purpose it needed to serve. The explicit knowledge Manager Ca developed around network technologies allowed him to interpret the changes in the technological environment as a threat for Corporation

C. On the basis of this subjective interpretation the *"image"* of an opportunity exploited by CV (through the CCV initiative) emerged. In the case of Corporation D, Manager Dp developed tacit knowledge around CV and her interpretation of the best practices, successes and failures of other corporations on carrying out CV activities formed the rationale of the DCV initiative.

These observations support the call for a subjective perspective in studying entrepreneurial phenomena (Kor et al., 2007). Tacit and explicit, general and specialised knowledge possessed by the individuals involved in the initiation of the CV process, and which they have gained through industry, firm and routine specific experiences, has a moderating role on forming the intent (strategic and entrepreneurial) of the CV process. This kind of knowledge is subjective, reflecting preferences (i.e. internal vs. external CV activities), motives (i.e. political-personal, strategic-financial) and cognitive biases (i.e. development of a CV business model – adoption of an externally developed CV business model).

The data indicate that these reflections impact on the way the CV initiative is conceptualised with regards to its intent charter and what perceptions stakeholders (internal and external to the corporation) who are not involved in the CV initiation process form about CV. The example of Corporation C is illustrative: the clear financial intentions of the CCV unit created a perception of it as a *"goldmine"*, a *"money machine"*. In the case of Corporation D though the perceptions created were quite different: Manager Dv, who is an outsider to the initiation process of the DCV unit and of the involvement of the corporation in CV, perceives CV as *"just playing with money"*, while Manager Dp who was the champion of the initiative argues that CV is about *"an investment in a company that brought us a new insight"*. A measurement of the differences of perceptions around the CV initiatives might be on the ability of the latter to deliver its anticipated intent.

Harper's (2003) proposed role of a personal agent's beliefs in shaping entrepreneurial alertness may also contribute in understanding the role and impact of perceptions and formed expectations in the CV process. He distinguishes among locus of control belief[103], self-efficacy beliefs[104] (Bandura, 1977a) and other personal factors (i.e. prior knowledge and interests) as comprising constructs of an agent's personal beliefs. Building on the work of Rotter (1954) in social learning, Harper elaborates on the role of the locus of control beliefs construct as indicative of individuals' perceptions about the control that they or the environment have over the outcomes of an event, with studies in entrepreneurship indicating that entrepreneurs have a high sense of internal control (i.e. their behaviour controls the outcomes of an action). Bandura's (1997b) work in social learning proposes the construct of self efficacy to have a role in the entrepreneurial process because *"a strong sense of personal efficacy is vital for successful adaptation and change"* (Bandura, 1995; p. 34) providing a dynamic examination of the entrepreneurial behaviour's cognitive process. Harper (2003; p. 51) argues that the institutional and specific situational conditions form individuals' *"beliefs over their ability to exercise control over economic events in their lives"* and affect the alertness[105] to economic opportunities that these individuals exhibit. Industry, technology and economic specific conditions of the situations individuals face may have an impact on forming personal agency beliefs. Institutional conditions (cultural, social, educational, political, and economic context) are proposed by Harper to influence the nature of these beliefs.

Harper's model provides an illustration of the dynamics of how personal beliefs formed by corporate entrepreneurs can impact on their propensity to identify opportunities and being alert to changes in the macro-environmental and organisational context they face. The data indicate that Manager Ca's cognitive process could have been explained by Harper's proposed model. He noticed a threat for Corporation C based on his personal beliefs of what constituted a threat for the corporation and interpreted as a business opportunity. Manager Ca's strong belief in his ability to conduct CV activities and in the positive contribution of these

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103 *"Locus of control beliefs refer to causal beliefs about how outcomes are determined" ... "the core of the construct is ... the perception of contingency between actions and outcomes"* (Harper, 2003; p. 36)

104 *"Expectations of personal efficacy refer to the perceived ability to produce certain actions oneself"* (i.e. competence expectation) Harper (2003; p. 36)

105 Adopting Kirzner's (1983a) conceptualisation of entrepreneurship as alertness to opportunity and entrepreneurial discovery, Harper uses alertness as the key construct to unfold the entrepreneurial process

investments to Corporation C formed his perception on how these activities should be carried out. This alertness made him personally engaged and committed to the CV activities of the corporation and he took personal responsibility for them, exhibiting a highly entrepreneurial behaviour.

The justification process followed by all corporations, besides Corporation C, can be characterised as *"rational"*. Introduced by the top management teams of the corporations and having their commitment and political support, the CV initiatives were portrayed to enjoy certainty over the delivery of their goals. In the case of Corporation C, the justification method followed by Manager Ca was merely political, using his intra-organisational social network and its close relationship to the CFO of the corporation to promote the rationale and intent of the involvement of the latter in CV activities. Once the CCV initiative was recognised as a source of economic and technological value to the corporation, it started to enjoy higher levels of certainty over the corporation's financial commitment to the decision. However, in all four corporations there was no commitment by the top management team to the duration of the decision (in terms of its life cycle) and no consideration of the amount of time required for the CV process to deliver its anticipated outcomes, despite the warnings in the relevant literature's (Biggadike, 1979) of the lengthy time requirements for CV activities to deliver outcomes. In the case of Corporation D, the lack of duration of commitment to the DCV initiative by the top management team is perceived by Manager Dp as one of the main factors which prevented the fulfilment of the anticipated goals by the initiative.

Another characteristic of the justification process followed in the four corporations I studied was the level of association between the strategic decision to be involved in CV activities and the existing strategy. In the cases of Corporation A and B, the fact that the CV initiative was portrayed as a facilitator of the existing strategy helped to increase the rationality of the justification process. In the cases of Corporations C and D, the CV initiative was portrayed as an explorative action.

The last column of Table 6.5 provides a comparison of the four corporations with regard to their efforts to integrate the involvement in CV activities to the corporate strategy. The data indicate that in the cases of Corporations C and D there were low levels of awareness outside the top management teams about the initiation of the CV process, coupled with low levels of integration of the CV initiative with other core businesses across the organisational boundaries. These observations confirm the low levels of integration that the two CV initiatives achieved during their life cycles. On the other hand, in the case of Corporations A and B, the representation of the CV initiatives as top-down decisions and their close association with the existing corporate (in the case of Corporation A) and business (in the case of Corporation B) strategy, allowed for higher levels of integration.

In summary, there are three distinctive phases that comprise the initiation of the decision of a corporation to be involved in CV activities: (a) an ***exploration phase***, (b) a ***justification phase***, and (c) a ***configuration phase***, through which a stimulus (opportunity) is shaped into intent (decision). The evolutionary perspective allowed an examination of the variation of stimulus and to identify the conditions that enhance the stimulus, among which CV was traced. Cultural traits of experimentation and openness, and discontinuities in the external technological environment enhanced the variation process. Moreover, subjective interpretations of these internal and external conditions by the individuals involved in the exploration phase affect its outcomes. The length of the exploration phase that the corporations went through was influenced by its categorisation as intentional or autonomous. The hierarchical level of the individuals involved influenced the type of the exploration phase (intentional vs. accidental).

The utilisation of the constructs of *"internal and external selectors"* from the evolutionary perspective and the examination of the relationship between the means/goals of the decision, from a contingency perspective, allowed for a justification phase to be identified. During this phase, the intent of CV as conceptualised by a corporation takes the shape of a decision. The assignment of organisation-wide or individual unit-wide, specific or general goals at the decision to be involved in CV activities are indicative of their strategic and entrepreneurial intents, which can be traced to the way CV is defined by an organisation and the objectives which CV is expected to deliver. The level of commitment of the top management team in the decision to be involved in CV activities as exemplified by the allocation of resources and political support to the decision facilitates the justification phase. The way the decision is communicated and explained within and outside the organisational boundaries creates expectations and perceptions towards the CV process and activities. In all four corporations the language used to communicate the decision to be involved in CV activities was a description of these expectations and perceptions.

The emergence of a venturing intent in the corporation can provide a strategic and entrepreneurial *"vision"* which guides the way the decision to be involved in CV activities is facilitated. These *"visions"* provide a conceptual configuration of the level of integration, relatedness and embeddedness the CV is associated with the parent corporation. Moreover, the level of overlap between CV and other existing corporate activities and routines is configured, reinforcing further perceptions and expectations of anticipated outcomes and role CV is supposed to deliver once facilitated. In all four corporations, an approach towards CV was formed, a definition of CV was accepted as representative to describe the activities the corporation had decided to be involved in and a business model to facilitate these activities was decided, as outlined at Table 6.6. The conceptual and operational boundaries of the CV initiative were defined during this configuration phase.

6.3.2 "How are CV activities implemented within an organisational context?"

Once the decision has been made and legitimised within a corporation to conduct CV activities, the strategy and the entrepreneurship processes composing the CV process move towards their implementation phase. The initiation process of the decision of a corporation to be involved in CV activities produced an entrepreneurial and a strategic intent around the CV process, focusing and guiding the actions taken to implement the decision. The challenge at this stage of the CV process and the individuals involved in it is to deliver these intents within the organisational context of a corporation. The use of administrative and operational mechanisms to organise the opportunity involved in the CV process is critical. The co-existence of a pre-existing structural context with the strategic and entrepreneurial intent of the CV process requires the use of alignment and adjustment mechanisms to facilitate the relationship between the CV initiative and the parent corporation. However, while these actions are taken by the top management team, the CV initiative starts to behave as organisational entity and their managers to develop entrepreneurial behaviour. The sections that follow discuss in detail the features of the implementation phase of the CV process. Agency theory was additionally used to unfold the features of the relationship between the parent corporation and the CV initiative.

6.3.2.1 Creating a new organisational entity

The organisation of the CV process, as a tangible organisational design, was facilitated in all case studies through the establishment of a distinctive team or unit to conduct the CV activities. This is an implication of the methodological choice of the current study to focus on the examination of CV units, equivalent to Burgelman's (1984; 1985) conceptualisation of the *"New Venture Division"*. In all the cases, the business model employed to conduct the CV activities was aligned to the entrepreneurial and strategic intent of the decision of the corporation to be involved in CV activities. All four CV units had significant autonomy to identify and invest resources on business opportunities which met the entrepreneurial intent of the CV initiative. The units had the authority and the responsibility to incubate and develop these business opportunities into new ventures. The level of operational autonomy each unit enjoyed can be explained by the concentration of CV expertise the units contained. Considering the inability of the top management team to personify CV, the agent to whom they allocated the CV task (i.e. CV units) was expected to have operational autonomy, and to become even more autonomous as their CV expertise was growing, as in the case of the CCV unit.

The relevant literature (e.g. Hornsby et al., 1993) argues towards the positive effect autonomy, as work discretion, has on the performance of the CV units. This is confirmed by the current study. However, the data also indicated that autonomy can also cause negative effects when the autonomy the CV unit was translated into low levels of relatedness and embeddedness of the CV unit to the rest of the corporation. In the case of Corporation C, the CCV unit's investments after a certain point in the unit's life cycle lost their relevance to the parent corporation, while the unit continued to enjoy autonomy on its investments decisions. Other organisational units perceived this as elitist behaviour by the CCV unit, creating negative emotions (i.e.

scepticism) towards the latter. In the case of Corporation D, the autonomy of the DCV units, conceptualised as the lack of direct linkages and relationships of interdependency with other organisational units across the organisational structure, was perceived as a lack of embeddedness of the unit to the rest of the corporation. Eventually, the type of autonomy the DCV unit enjoyed did not allow for complementarities to develop with other units, restricting its integration and survivability, as a new and small initiative.

All four CV units had distinctive brand names to describe their operations, as well as to allow them to build an operational identity within and outside the organisational boundaries. The brand names of all the cases of the CV units I studied was a tool for the top management teams to communicate and to distinguish the intent of the CV initiative, and to create awareness around the new units within their corporations. The identity of the CV initiative can be conceptually treated as equivalent to the intended charter of an organisational unit (Galunic & Eisenhardt, 1996; Birkinshaw & Lingblad, 2005), illustrating the shared understanding of the organisational domain a unit has staked out for itself. From an evolutionary perspective, the identity of the CV units facilitated the process of drawing their organisational boundaries and domain of expertise. In the case of Corporation B, the brand name of the BCV unit was associated with the commercialisation and incubating processes it was introducing to such extent so after a certain period individuals within the corporation began to refer to these processes by using the brand name of the unit. In the case of Corporation A, the brand name of the ACV unit was worded to create cognitive associations between the intent of the unit and the adopted growth corporate strategy.

Outside the corporation, the brand name of each CV unit increased awareness among entrepreneurs, venture capital firms, business angels, universities, and across geographical markets. The development of a strong brand name within the highly competitive CV and VC markets was significant for the success of the CV units and their entrepreneurial intent, as part of their efforts to build the profile of a credible and reliable investor. In the cases of Corporations C and D, the brand names of the corporations were used to create the brand names of the CV units. The data indicate this increased the credibility of the CV units, as it was evident to potential entrepreneurs that large, financially sound corporations, and potentially significant clients for their ideas, were the fund provider behind the operations of the CV units. All the CV units had a network of relationships with parties outside the organisational boundaries and having a strong name facilitated these interactions, as these parties perceived these distinctive units as their point of reference with the corporations.

The teams of individuals which run the CV units share similar characteristics with regard to their size, their team dynamics and their team efficiency (McGrath et al., 1994). In all the cases the core teams of the CV units employed a small number of individuals. The data indicate that this allowed for an efficient and speedy decision making process, work discretion and accountability of actions to individuals, for better communication and objective specifications to emerge. The individuals in the CV teams were aware of their roles and responsibilities, allowing for complementarities, collaborative spirit and high levels of trust to emerge among them, while balancing individuals' skills, expertise and characteristics.

Another characteristic of these teams was the presence of a strong leader, who at the initiation process of the CV process was identified as the champion of the CV initiative. Their subjective interpretation of what CV is and of how to be conducted had a direct effect on the way the CV initiative was exemplified by each corporation. Managers Ac, Bb, Ca and Dp were the champions of the CV initiatives in the four corporations accordingly. All of them were corporate managers who, either because they were asked to exploit an opportunity or because they noticed an opportunity, crafted the entrepreneurial intent of the CV initiatives. Their interactions with the top management teams, of the divisions they were reporting to, were the main channels to feed into the latter the strategic intent of the CV initiative as a new routine in approaching innovation and business development.

Comparing the characteristics of the four CV units studied and their champions, there are many similarities among Corporations B, C and D. Their CV champions had a clear vision on how their CV units should be operating, high level of commitment and self-efficacy on the ability and competences of their units. All three of the champions self-identify themselves as the driving force of the units, as an evidence of their self-efficacy. Talking in the first person, they explained the rationale of decisions and actions they took to establish the units, to moderate their relationships with senior corporate managers, by being proactive, by taking calculated risks and feeling strong about their actions. Manager Bb argued that his passion for the BCV initiative had been transmitted to the rest of the BCV team. Manager Ca argued that the CCV unit was his opportunity, his *"thing"*. Manager Dp took pride of her involvement in designing the business model of the DCV unit. In the case of Manager Ac, the data did not indicate similar levels of self-efficacy. This can be explained by his role as an operational leader bringing into the initiative his CV experience.

Similarities can also be observed among the individuals comprising the CV teams, regarding their human capital and behaviour. With the exception of the ACV team, the other CV units employed individuals who had prior exposure to commercialisation processes and venturing. They were technologically sound individuals, who could identify business opportunities, were self-motivated, with a drive to success, risk-takers, prompt to work autonomously and comfortable to be working on the behalf of a large corporation. This last characteristic was of great significance, as in all three units external to the corporations individuals were recruited to join the CV teams. Managers Cp and Db were venture capitalists before joining the CCV and DCV units. They acknowledged that as outsiders to the corporations, they had to overcome cultural barriers. However, the team dynamics practices employed in these two units by Manager Ca and Dp facilitated a balanced management of the internally and externally recruited individuals.

The data also indicate that as the CV units evolved, they started to develop capabilities primarily related to their entrepreneurial intent (i.e. in developing new ventures), as well as in managing their relationships with the parent corporation and external parties. The creation of social networks within and outside the corporations (which enhanced the venturing intensity of the units and the level of alertness to business opportunities), the creation of incubation, commercialisation and venture development processes, the creation of highly entrepreneurial teams of individuals within the organisational boundaries, were among the capabilities the CV units developed. The data indicated that these capabilities were quite similar to capabilities possessed by VC firms, and it was inevitable that the individuals in the CV teams compared themselves to venture capitalists. This comparison was primarily present in Corporations C and D's CV units, which employed both corporate and external individuals with VC working experience. One of the outcomes of this comparison was to reinforce even further the identity and organisational boundaries of these teams.

Moreover, in the cases of the CV units of Corporations B and C, the data indicate that the two units had started to develop a social identity as organisational entities within the organisational context (Beyer *et al.*, 2000). Having two strong champions to lead them, both units had managed to develop a group identity, they had a brand name to refer to, they had developed competencies around the CV process and had progressively developed their own distinctive group culture (Beyer & Niño, 2001). The team members started to identify themselves as members of the CV team. During the interviews, quite frequently the CV managers would identify themselves by using the first plural person, differentiating them from other corporate units and managers, implying an element of group superiority. This ethnocentrism (Beyer & Niño, 2001) among the CV managers for their team can be argued that was perceived by the non-venturing managers as a disputing action against the pre-existing organisational status quo.

It can be concluded, that following the initiation process of the corporation's decision to be involved in CV activities, a ***process of social identification*** of the CV unit commences. The development of organisational boundaries is reinforced by the emergence of capabilities, team proficiency, operational identity and of exchange relationships, with parties internal and external to the corporation. The existence of a strong founder/leader/champion impacts positively on the sharp definition of the organisational boundaries of the CV units as distinctive organisational entities. A strong leadership crystallised the intent of the CV unit and facilitated the interaction of the unit with the top management team. In the cases of Corporations A and D, this was not the case due to the lack of a strong leader (Corporation A) and the non emergence of strong operational identity and exchange relationships with stakeholders within and outside the corporation. In the cases of the Corporations B and C, the leadership skills of Managers Bb and Ca contributed positively in transforming the CV units into distinctive organisational entities. When their parent corporations decided to withdraw from the CV involvement, the BCV and CCV units easily immigrated outside the organisational boundaries of the corporations into the venture capital market. The strong capabilities and exchange relationships they had developed with outside stakeholders allowed them to be viable players in the new industrial context they entered. On the other hand, the parent corporations faced a cost by loosing their indirect relationships with external parties.

6.3.2.2 Managing the new organisational entity

From an evolutionary perspective, the structural context of an organisation impacts the decision-action premises of managers (Bower, 1970). From a contingency perspective, the organisational design is amended to fit the decision of the top management team to be involved in CV activities. From an agency theory perspective, the top management team employs management and control mechanisms to manage its relationship with the agent (i.e. the CV unit) in order to increase its efficiency and minimise agency costs. Table 6.7 outlines how each corporation chose to manage the CV unit and its activities.

All four CV units, at the time of their establishment, were structurally positioned as part of a division within the existing organisational structure. Their structural position in the organisational chart remained the same, unless the corporation went through a re-organisation phase. The case of Corporation A is illustrative: the ACV unit moved in 2001 from the corporate centre to the ACT subsidiary of the Business Development division, following an organisational restructuring decision by the Chief Executive. In the cases of Corporations B and D, the CV units remained in the same structural position throughout their life span, while their suspension occurred at the same time as the corporation was going through an organisational restructuring of its host division. It can be concluded that the decision to be involved in CV activities did not cause changes to the existing organisational structure of the parent corporation. This can be explained by the low transformational potential all four CV initiatives had (see Table 6.2) and by their relative small size in terms of resources.

Table 6.7: Implementation phase of CV process: Control and management mechanisms

Case	Reporting	Budgeting	Measurement / Rewards system	Interaction between middle and corporate managers
A	- 1997-2001: ACV unit reported directly to the Chief Executive - 2001- : ACV unit reported directly to the ACT unit's Managing Director - Informal and formal procedures	- 1997-2001: ACV unit's annual operational budget allocated by R&D budget - 2002 - : Core businesses covered ACV unit's operational cost - Venture development capital allocated by each core business	- ACV unit's performance criteria: Number of ideas screened and extent of social network - No specified rewards system for ACV unit's personnel – ACV unit's personnel were internally promoted	- Chief Executive met frequently ACV unit's Managing Director, supervising the operations of the ACV unit
B	- 2000-2003: BCV unit reported directly to the BRD division and CEO - Informal and formal procedures	- BCV unit's operational budget and seed capital to incubate ventures allocated by the BRD division's CEO on an annual basis - External partners and venture capitalists contributed venture capital to exit the ventures	- BCV unit's performance criteria: number of ventures incubated and spun out - No specified rewards system for BCV unit's personnel – BCV unit's personnel gained intangible rewards (skills, recognition)	- Close relationship between Manager Bb and BRD division's CEO, negotiating the budget and strategic intent of BCV unit
C	- 1995-1997: CCV unit reported directly to the CFO and the CMN division's Board - 1997-2001: CCV unit reported directly to the CFO - Informal and formal procedures	- 1995-1997: *Ad hoc* informal allocation of funds to Manager Ca by the CFO - 1997-2001: Annual budget agreed and approved by the CFO	- CCV unit's performance criteria: financial performance of ventures - Distinctive, venture capitalist's firm alike, rewards system for CCV unit's personnel	- Close relationship between Manager Ca and the CFO, providing the CCV unit with political support and access to financial resources
D	- DCV unit was reporting directly to the MD1 and the DIW division's board and Exec. Vice President - Formal procedures	- Operational budget and venture fund allocated by the DIW Unit's Board and the MD1	- DCV unit's performance criteria: number of ideas screened and deals number of pilot technologies - Distinctive, venture capitalist's firm alike, rewards system for DCV unit's personnel	- Direct but infrequent communication between Manager Dp and MD1, but sufficient for political support - Direct and frequent communication between Manager Dp and DIW unit's Exec. Vice President on budgeting issues

The data also indicate that the CV units, by being implanted into existing organisational design, needed to comply with the pre-existing reporting channels. All four CV units and their champions or managing directors had direct reporting relationships with the senior managers of the divisions within which they were positioned. This allowed for immediate communication and interaction with them. The managing directors were reporting on the outcomes of the entrepreneurial process (i.e. number of ideas screened, number of deals conducted) and the use of the input resources (i.e. amount of operational budget, amount of investments conducted) of the CV units. In the case of Corporation C, it was evident that the reporting was also used to feed in the top management team with information on the advantages of the technologies Corporation C had an interest in. Manager Ca argued that the *"consultation"* he was providing to the top management team led to a significant change in the divisional technology strategy. The reporting of the CV units followed the frequency of the financial reporting procedures of the corporations, while its communication was through formal and informal means. The data indicate that the reporting procedures employed in the four cases of CV units studied allowed the top management teams to gain access to the actions and outcomes of the CV units.

However, the reporting processes were quite formal and created information asymmetry between the parent corporations and their CV units. The top management teams did not have access to information relating to the day to day operations of the units, their exchange relationships with various external parties. Rather, they were predominantly informed about the positive outcomes of their entrepreneurial processes. In the case of Corporation C, it is evident that the top management team did not have knowledge of many of the activities of the CCV unit because of the operational autonomy it was allowed. Table 6.7 indicates that with the exception of Corporation A, in the other cases the interaction between the CV units and the top management teams was limited to negotiations around the budget and the political support the units enjoyed. Low levels of interactions in planning of strategic initiatives, according March (1991) does not permit for exploration of alternatives around the strategic context of these initiatives to emerge. This is supported by the cases of Corporations A, B and D. In the case of Corporation C, the interactions between Manager Ca and the top management team (the CFO and other senior corporate managers) were more frequent allowing for three occasions of iteration in the planning process to occur (in 1995, in 1997 and in 1999) reviewing the organisation and planning of the CCV team, and its strategic content. It can be argued that this CCV unit was more of explorative in nature than that of the other corporations.

Another way for the top management teams to monitor the activities of the CV units was through the budgeting system they employed to allocate financial resources to them. In all the cases, senior corporate managers such as the CFO or the CEO of the division authorised the amount of financial capital for the operation of the units and the conduct of CV activities. In the cases of Corporations B, C and D, there was distinction between operational and venturing budget (Vancil & Lorange, 1977), while the ACV unit managed only an operational budget. The manager working for the CV units considered the budgeting systems in place as suitable for the effective conduct of CV activities, as it provided them with access to finance, without following strict administrative corporate routines. Manager Ca was able to secure finance to conduct CV investments on an *ad hoc* basis for the first 3-4 years of the CCV team's operations. The existence of a committed budget for the operations of the CV units and its positive impact on the operations of the CV units confirms the relevant literature (Chesbrough, 2002; Stevenson & Gumpert, 1985).

The data also illustrate that changes in the budgeting systems occurred as the CV units evolved. In the cases of Corporations B and C, their top management teams restricted the access of the units to financial capital after 2001, forcing their champions to identify external investors to join the CV funds. The lack of slack resources enhanced the units' creativity and proactiveness in securing resources. Managers Ca and Bb, driven by determination to secure the survivability of the units they championed, capitalised on their entrepreneurial behaviour and skills in order to secure resources. However, in the cases of Corporations B, C and D, the lack of slack resources (Burgelman, 1983c) from the parent corporation led to the spin out or suspension of the CV units. The BCV and the CCV, capitalising on their capabilities and on their significant exchange relationships with external parties, managed to diversify to the VC industry.

Besides the importance of monitoring mechanisms, agency theory highlights the importance of bonding mechanisms in minimising the agency costs emerging when conducting CV activities. As argued by Hornsby *et al.* (2002), one factor that fosters the entrepreneurial behaviour of middle-level managers is the appropriate use of rewards. The increased levels of risk involved in new ventures *"appears to require a reward potential which will make the risk worth taking"* (Block & Ornati, 1987; p. 44). Rewards can have a twofold role for middle managers: as compensation for the high risk and uncertainty involved in CV investments, as well as a performance incentive to foster commitment and further motivation to carry on venturing activities (Block & Ornati, 1987). The lack of rewards for CV managers may result in perceived inequity, as an outcome of the disparity between the role and seniority compensation of other units' managers (Block & Ornati, 1987). Block and Ornati therefore argue that in order for a rewards system to be effective, it must recognise the variable and changing motivation of internal entrepreneurs, as well as the changing needs of the new venture as it develops.

Brazeal (1993; p. 78) argues that CV activities must be rewarded via monetary and non-monetary incentives, with regards to a goal-setting procedure based on both group and individual outcomes, but often *"venture managers typically demand equity in the venture and are disinterested in other kinds of incentives offered to managers in traditional roles. Because equity in the venture may generate substantial monetary rewards, managers in more traditional roles often feel cheated"*. Elaborating on this point, Sykes (1992) argues that *"two compensation concepts apply to venturing within the corporation: equity and equality"* with the concept of equity relating to performance, and equality assuming equal distribution of equity. Compensation of CV activities and venture personnel within a corporate environment is a potential area of conflict and tension with regards to equity and equality.

The data indicate that there are similarities between the rewards systems used in Corporations A and B (internal CV activities) and Corporations C and D (external CV activities). In the first group, the CV teams' personnel was rewarded with intangible non-monetary incentives, while in the second group, monetary incentives were used. This difference can be explained by the internal vs. external character each CV initiative had. In the second group, a significant proportion of the CV teams' personnel had worked in the past as venture capitalists imposed the adoption of a VC similar remuneration system to attract these individuals. In the case of Corporation C, the existence of a distinctive remuneration system was the cause of significant tensions between the CCV team and other organisational units. The latter developed feelings of envy towards the CCV unit's personnel due to their significant gains the latter enjoyed. In the case of Corporation B, Manager Bb argued that the absence of monetary incentives was intentional, as his perception was that such rewards would work as disincentives of the entrepreneurial process.

6.3.2.3 Working on a relationship: Alignments, adjustments and conflicts

The approach taken by each corporation to organise and manage their CV units is a reflection of the relationship formed between the units and their parent corporations. From an agency theory perspective, the delegation of the task to conduct CV activities by the parent corporation to the CV team is defined by a ***"relational contract"*** which defines the characteristics of the relationship between the two entities. Table 6.8 outlines some of the characteristics of the task the CV units were delegated to conduct and the features of their contracts[106] with the parent corporation. Even though in all cases the parent corporations were involved in entrepreneurial activities, the data indicate that in Corporations A and B the relational contract between the corporation and the CV units were behaviour based. In the cases of Corporations C and D, the CV units were compensated with outcome-based contracts. This categorisation is further supported by the existence of a very distinctive remuneration system employed in the cases of the CCV and the DCV units to reward the performance of their venturing managers. In the cases of the ACV and the BCV units such rewards systems are absent, as their personnel were compensated with more intangible and non-monetary rewards (commercialisation skills, internal promotions, intra-organisational recognition, experience). Another explanation to

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[106] It needs to be acknowledged that during the initiation phase of the four CV units I studied the *"contract"* between the two entities was not formal or of legal nature. The contract remained informal for the rest of their life cycles. It was only in the case of Corporations B and C that the contract had legal significance. For the BCV unit the contract became formal following its spin out, while for the CCV unit after 1999 and its formal establishment.

justify the differences between the contract preferences might be the fact the Corporations A and B organised their CV activities internally, aiming at outcomes with higher uncertainty (i.e. change of corporate culture) than in the cases of Corporations C and D.

While these were the contracts governing the relationship between the parent corporation and the CV unit, from an agency theory perspective the focus is on determining whether this choice of contract was the more efficient one. Table 6.8 outlines the risk preferences and goal conflicts between the two entities, and the levels of programmability and measurability of the task to conduct CV activities. In the cases of Corporations B and C, after a certain point, the parent corporations became more risk averse while their CV units continued to take high risks by investing in business opportunities which had low outcome measurability. According to agency theory, in the case of Corporation B this behaviour should have been followed by an amendment of the contract from *"behaviour"* to *"outcome"* based contract. However, the parent-corporation became more inclined to pass the risk to the agent (CV unit). In the cases of Corporations A, C and D, the contract reflected the risk preferences and evolution of the risk aversion of the agent and the principal. This is illustrated from the case of Corporation A, where the behaviour-based contract was sufficient to express the similar risk preferences of the two entities. In the cases of Corporations A and D there was no goal conflict between the parent corporations and the CV units.

In the cases of Corporations B and C, the conflict of interest between the two entities affected the CV process. The critical moment of this conflict of interest occurred when the parent corporations became more risk-averse in comparison to their risk preferences at the initiation phase of the CV process. At the same time the BCV and the CCV units developed a more risk-taking behaviour, as by that time they had managed to develop significant capabilities, exchange relationships with external parties and defined organisational boundaries, which allowed them to pursue their strategic intent and self-interests. Eventually, the goal conflict between the two entities led to the spin out of the agent. In the case of Corporation C, the behaviour of the CCV unit was perceived as *"free-riding"* by the other organisational units. It was evident to them that there was a significant goal conflict between the two entities,

Table 6.8: CV process and the relationship between CV Unit and Parent Corporation[107]

Case	Type of relational contract	Contract features	Task characteristics	Contract intended / actual duration
A	Behaviour based: ACV unit was rewarded on the basis of executing its business model	- ***Risk preferences***: similar preferences - ***Goals conflict***: ACV unit was restricted to pursue investments in business opportunities, outside Corporation A's interest	- ***High programmability***: ACV initiative's behaviour was specified by the Chief Executive - ***Low outcomes measurability***: Number of ideas screened and incubated – no measurement of unit's contribution to corporation's financial performance and cultural change	Long term / at least 6 year
B	Behaviour based: BCV unit was rewarded on the basis of executing its business model	- ***Risk preferences***: initially similar preferences / after 2001, the BCV unit took slightly higher risk by spinning business ventures within the BRD division - ***Goals conflict***: initially there was no goal conflict / after 2002 Corporation B amended its goals (withdrawal from in-house incubation process while the BCV unit wanted to continue its activities)	- ***Relatively low programmability***: BCV initiative's business mode determined and amended by Manager Bb - ***Low outcomes measurability***: Investing in early stage technologies required long terms approach to market valuation	No specification / 6 years
C	Outcome based: CCV unit was rewarded on the basis of the ventures created	- ***Risk preferences***: Initially Corporation C and Manager Ca had similar risk preferences / after 1997 Manager Ca and the CCV team undertook more risky investments than Corporation C would have preferred / In 2001 Corporation C became risk averse - ***Goals conflict***: the main conflict occurred in 2000-2001 when Corporation C was sceptical over the involvement in CV activities and the CCV team wanted to continue its operations	- ***Extremely low programmability***: CCV initiative's behaviour was determined solely by Manager Ca - 1995-2000: ***Relatively high outcomes measurability*** / CCV unit's outcomes were easily measured on the basis of ROI and market capitalisation value of new ventures - 2001***: Relatively low outcomes measurability***: CCV unit's outcomes not easily valued, requiring long term approach to market valuation	No specification / 3 years
D	Outcome based: DCV unit was rewarded on the basis of the ventures created	- ***Risk preferences***: initially similar preferences / after 12 months Corporation D became more risk averse - ***Goals conflict***: the DCV unit tailored its operations to Corporation D's interests	- ***Relatively high programmability***: DCV initiative's behaviour was determined by the business plan submitted by Manager Dp to MD1 - ***Low outcomes measurability***: Investing in e-business models and technologies required long term approach to market valuation	5-7 years / 18 months

[107] Adopted from Eisenhardt (1989a)

even though the top management team persisted in their decision to be involved in CV activities (Garud & Van de Ven, 1992).

Another area that created ambiguity in defining the relationship between the CV unit and the parent corporation was the ability of the latter to measure with certainty and objectivity the outcomes of conducting CV activities (outcomes measurability) and the knowledge of the means/ends relationship (programmability) of the decision to be involved in CV activities by delegating them to a CV unit (Eisenhardt, 1989a; Ouichi, 1979). In Table 6.8 the task measurability and programmability are evaluated for each CV unit. In the cases of the ACV and the DCV units, the programmability of conducting CV activities was quite high, as in both cases the business model of conducting the CV had been decided at the initiation process of the CV process. In the case of the ACV unit, the business model has been used previously by the Chief Executive and Manager Ac, while in the case of the DCV unit, Manager Dp carried out secondary research on existing VC and CV business models and developed the unit's business model at its business plan. In the cases of the Corporations B and C, the programmability of conducting CV activities was quite low, as with no prior experience, Managers Ca and Bb were amending and determining the business model of the CCV and the BCV units retrospectively.

The outcome measurability of conducting CV activities was evaluated on the basis of how easy it was for each parent corporation to measure the outcomes of the contract delegated to each CV unit. The data indicate that even though in all cases there was a measurement system of performance in place (Table 6.7), it was not sufficient to capture all outcomes of the intended goals the units were delegated to fulfil. The cases of the ACV and the BCV units are illustrative: even though both CV initiatives aimed to support and facilitate a cultural change within their operational domain, there were no measurements employed to measure such outcomes. In the cases of Corporations C and D, their CV units had specific financial and strategic targets to achieve. For the financial targets it was difficult to measure their fulfilment as the macroeconomic climate in 2001-2002 negatively affected the new ventures. On the other hand, there was no formal measurement of the strategic outcomes the two units delivered.

A last point in the relationship between the two entities was the time commitment of each towards the relationship. In all cases there was ambiguity over how long the involvement in CV activities would last. The data indicate that from the CV unit's perspective there was an expectation that the parent corporations were taking a long term approach towards the involvement in CV activities, and consequently towards their relationship. The case of Corporation D is illustrative: as Manager Dp argued, the business plan she composed was based on the assumption that the activities of the unit would have lasted for a minimum of between five to seven years. However, the DCV unit was suspended within 18 months. The parent-corporation's ambiguity over the duration of the agency relationship with the CV unit, in combination with the emergence of self-interest from CV unit, can be argued that, increases the occurrence of free-riding behaviour by the latter. This proposition is suggested by the cases of the BCV and the CCV units.

Eisenhardt (1989a; p. 61) argues that the heart of the agent-principal relationship is a trade-off between: (a) the cost of measuring behaviour and (b) the cost of measuring outcomes and transferring risk to the agent. The selection over a behavioural or an outcome-based contract was influenced by the nature of the CV activities, as internal of external. It he case of external CV activities (Corporations C and D) the selection of the contract was based on the risk preferences and the perceptions of the task measurability of the parent corporations. Supported by the fact that external personnel joined the CV teams, the agent-principal relationship was more evident and required clear definition through an outcome-based contract. Eisenhardt (1989a; p. 60) proposes that in the case of an outcome-based contract, the agent is expected to behave according to the interest of the principal. Consequently, the choice of such a contract might act as a safety net for the principal, compromising on the low outcome measurability CV activities exhibit.

In the case of internal CV activities (Corporations A and B), a different relational contract was produced. Managers Bb and Ac argued that setting up the CV units and conducting CV activities was part of their corporate role and responsibility. Manager Bb was passionate about establishing the BCV unit and for him rewards through remuneration systems were of no importance, as this was his job. Manager Bh argued that even though Corporation B had not clarified the nature of the relational contract of the BCV unit, he had accepted his role as a corporate manager, rather than an agent. This observation leads to the argument that in the case of internal CV activities, the contractual relationship between the two entities becomes an issue when the CV unit and its personnel start to develop self-interest. Prior to this critical moment, the CV unit behaves as another organisational entity. The development of self-interest is argued to be an outcome of the self-identification process a CV unit might go through during its life span.

There were certain features of the relationship between the two entities (i.e. duration) which were ambiguous, creating further uncertainty for the CV units' champions and personnel. Moreover, even though the risk preference of the parent corporations changed as in the cases of Corporations C and D, there was no amendment mechanism employed to abandon the outcome-based contract and move towards a behaviour-based contract. On the contrary, progressively the transfer of risk to the CV unit led in the termination of the contract, with CCV unit spinning out and DCV unit being suspended.

The relationship between the parent-corporation and the CV unit also defined the level of dependency of the units to the corporation. These dependency areas were mainly associated with the inputs of parent corporation to the CV process: (a) type of resources (financial, social, human capital), and (b) services and political support. All CV units had a group of internal and external stakeholders, to whom the CV units relied on to a certain degree. As the CV process evolved it appears that the importance and level of dependency on each stakeholder is amended. For example, while at their initial stages of existence all CV units were completely dependent on the parent corporations for consultancy services, this area of dependency was lifted when the CV units started to develop their own capabilities. In the case of Corporation B, the BCV unit was dependent upon the BRD division's scientists for identifying business opportunities and incubating them.

Another area of dependency was with regards to the outcomes of the CV process (i.e. new ventures) which required support from within the parent corporation in order to survive, as in the case of the ACV unit. In the cases of the CCV and the DCV units, the ventures created were not dependent upon the parent corporation in order to survive, but the entrepreneurs might also have been attracted to the two units due to the association of the latter to the two parent corporations, as argued by Managers Ca and Dp. This was among the main benefits the CV units enjoyed while being associated with the parent corporations. The CV units enjoyed credibility and financial soundness by representing the large corporations among entrepreneurs and venture capitalists.

Table 6.9 provides a summary of the relatedness areas between the CV initiatives and their parent-corporations, and how this relatedness was perceived within the organisational boundaries. From an evolutionary perspective, according to the level of strategic and operational relatedness the CV initiatives exhibits, appropriate efficiency and control mechanisms need to be employed to manage its relationship to the parent corporation (Burgelman, 1984). Marx and Lechner (2005) propose the importance of the social context (formal and informal social relationships) in affecting the survivability rates of the strategic initiatives. I conceptualised as elements of the social context the level of positional and cultural relatedness of the CV unit to the rest of the corporation. Even though Marx and Lechner (2005) use the constructs of cognitive, relational, structural and positional embeddedness to conceptualise the social context, I was interested to see the characteristics of these formal and informal social relationships between the CV units and the parent corporation. Cultural relatedness was conceptualised as equivalent to Marx and Lechner's (2005) [108] relational and cognitive embeddedness constructs, while positional relatedness was treated as equivalent to the positional embeddedness construct.

Examining Table 6.9, it can be concluded that each CV unit achieved a level of relatedness to the rest of their corporation, which evolved as both the CV units and their parent corporations evolved. When the strategic relatedness decreased, the positional relatedness of the CV unit was amended. This supports the contingency

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[108] "*Relational embeddedness focuses on assets rooted in the quality of relationships, such as the level of trust and friendship ... Positional embeddedness refers to the position a particular unit occupies in the network, independent of the characteristics of its partner (Gulati & Gargiulo, 1999). And finally, cognitive embeddedness refers to similarity in the mental representations, interpretations, mental models, and worldviews shared by the focal group with the other actors in organisation (Nahapier & Ghosal, 1998).*" Marx & Lechner (2005, p. 138)

Table 6.9: Venturing initiative and the parent corporation: Evolution of relatedness

Case	Strategic relatedness	Operational relatedness[109]	Positional relatedness	Cultural relatedness
A	- 1996: Very high - ACV initiative identified among the means to implement the corporate growth strategy and to generate a cultural change - 2001: Relatively high - ACV unit had the political support of Chief Executive as his initiative	- Prior experience in CV - Low cost basis in setting up the ACV team (3 employees) - Designed to complement existing innovation capabilities	- 1997: ACV team is part of corporate strategy centre - 2001: ACV team moves away to IP subsidiary	- ACV unit facilitated induced cultural change
B	- 1999: Very high - BCV initiative identified as the facilitator of the BRD division's strategic target to generate value and create a cultural change - 2002: Ambiguous – BRD divisions' top management team became sceptical over the long term requirements of the BCV unit to deliver economic value	- No prior corporate experience in CV - Low cost basis in setting up the ACV team (4 employees) - Designed to introduce commercial capabilities and extract value from existing IP capabilities	- 2000: BCV unit part of the BRD division - 2003: BCV unit spun out to continue as a VC firm	- BCV unit developed distinctive cultural traits from the rest of the corporation, related though with the intent cultural change from the CEO of the BRD division
C	- 1995: Very high - CCV initiative identified as a maverick to the existing technology strategy of Corporation C - 1997: Very high - CCV unit was formally established - 2001: Ambiguous - Corporation C's top management team became more risk averse and focused on the core businesses	- No prior corporate experience in CV - Low cost basis in setting up the CCV team (3 employees in 1996) - Designed to challenge existing innovation capabilities and provoke competition among innovation routines	- 1995: CCV team part of the CMN division but operating autonomously - 1997: CCV unit operates as autonomous business entity besides its typical reporting to the CMN/CSR division - 2001: CCV unit spun out as a VC firm	- 1995: Corporate culture facilitated the emergence and adoption of the CCV unit as corporate activity - 1997: CCV unit had moved away from the existing corporate culture
D	- 2000: Ambiguous - DCV initiative was identified as a facilitator of the e-business strategy of Corporation D, but of low relevance to corporate strategy - 2002: Not important	- No prior corporate experience in CV - Low cost basis in setting up the DCV team (6 employees) - Designed to introduce and potentially integrate e-business related capabilities	- 2000: DCV unit part of DIW unit (experimental division) - 2002: DIW unit merged with another corporate unit, and DCV unit is suspended	- DCV unit was culturally distant from the main stream Innovation schemes culture within the corporation

[109] At the time of the CV initiative's initiation

perspective according to which the organisational design needs to reflects changes in the strategy. However, in the cases of the BCV and the CCV units, with the highest levels of social identification, the amendment of the relationship between the units and their parent corporation reflected the mutual interest of both. It is difficult from the collected data to argue whether the self-interested behaviour of the CV units caused the evolution of their positional and strategic relatedness to the parent corporations. Moreover, the absence of an alignment mechanism regarding the goals of the two entities interests led to the termination of their CV.

Burgelman (1984) argues that the level of the strategic importance determines the control mechanisms over the CV unit. In the case of strategic ambiguity over the CV activities, substantive interaction between middle and corporate levels of management, and a measurement and reward systems capable to deal with outcome uncertainty need to be employed. Comparing Tables 6.9 and 6.7 it can be concluded that there was no employment of an alignment mechanism between these three variables. In the case of Corporation D, the DCV initiative is characterised by strategic ambiguity. However, there is minimal interaction between the middle and top management team managers, restricting the capacity of senior managers to realise the strategic intent and context of the initiative and to evaluate it on the basis of more strategic measures, besides its financial outcomes. This observation supports Burgleman's (1984; p. 158) proposed significance of *"substantive interaction between different levels of management"* in the strategy context determination process of autonomous behaviour. Moreover, the data indicate that in the cases of amendment of the strategic relatedness of the CV initiative to the corporation (Corporations B and C) there was no amendment mechanism to reflect this change in the measurement and reward system.

The levels of operational and cultural relatedness were examined as possible contributors to the choices each parent corporation took to efficiently manage their relationship to the CV unit. The data indicate the ACV and the BCV initiatives were operationally and culturally more relevant to their parent corporations, than the other two CV initiatives of the current study. While in all the cases, the CV units required new (or a new combination of existing) capabilities, the cost for acquiring them was calculated as relatively low. In the cases of Corporations A and B, the introduction of new capabilities by the CV initiative was perceived as complementary to the capabilities currently employed by the parent corporations. On the contrary, in the cases of Corporations C and D, the newly introduced capabilities were partially related to the corporate capabilities, allowing areas of negative synergies and scepticisms to emerge. The level of cultural relatedness of the CV initiatives to the established cultural traits of the parent corporation was also significant. In all four cases, the existing corporate culture was characterised by openness to innovation and experimentation, welcoming the engagement in entrepreneurial activities. All interviews argued that the corporate culture did not obstruct the CV initiatives but on the contrary provided a comfortable environment to flourish their own, more entrepreneurial cultural traits.

In order to obtain their new capabilities, to enhance their relatedness to their parent corporations and to minimise their incompetence costs, the CV units employed efficiency mechanisms as outlined at Table 6.10. The efficiency of the relationship between the two entities was conceptualised to be composed of the communication, learning dissemination, cultural and recruitment mechanisms employed to achieve capabilities and work flows integration from one entity to the other, and allow the emergence of adequate mutual adjustments (Burgelman, 1984). The data indicate that the structural position and the positional relatedness of the CV units to the parent corporation impacted on the type of the communication channels between the two entities. In all the cases, most of the formal communication was carried out through the reporting structure and procedures, while most of the informal communication was carried out because of the proactiveness and the intra-organisational networking capabilities of the CV units' personnel. The communication with the top management aimed mainly to report on the CV units' activities, and in the case of Corporation C to *"consult"* the former on the unit's strategic intent. However, the data indicated that even though all CV units followed the formal reporting and communication channels to inform the top management teams of their strategic intent, the top management teams did not use this knowledge in determining and championing it. As Manager Am argued, even though the ACV unit had communicated to the top management a review of the innovation strategy and the strategic intent of the ACV initiative, this was not used as the top management

Table 6.10: Venturing strategy implementation process: Efficiency mechanisms

Case	Communication mechanisms	Learning dissemination mechanisms	Cultural mechanisms	Recruitment mechanisms
A	- Content: To identify innovation needs and feedback on identified business opportunities - Formal communication between ACV unit and Managing Directors of core businesses - Informal / proactive intra-organisational networking - Barriers: Hierarchical and perceptual	- Rotation of ACV unit's personnel within the corporation - Collaboration between ACV unit's personnel and venture champions in developing a venture - No incorporation of ACV unit's knowledge in the corporate strategic planning review in 2001	- ACV unit used as symbol of induced corporate cultural change, as extrovert, innovative and entrepreneurial initiative - ACV unit's culture is closely related to corporate culture	- Internal corporate managers composed the ACV team
B	- Content: Identification of internal business opportunities - Informal / proactive intra-organisational network established by Manager Bb within the BRD division - Barriers: Initially perceptual but minimal	- Development of explicit knowledge on CV within the BCV team - Interaction with and involvement in BCV unit of operational managers disseminated occurred knowledge - Manager Bb sat in the board of other CV initiatives	- BCV unit used as a symbol of corporation's entrepreneurial and commercialisation outlook - BCV unit's cultural traits more innovative and entrepreneurial than the corporation's - Use of cultural forms to integrate BCV unit's culture	- Internal corporate managers, with business development and commercialisation experience, composed the BCV team
C	- Content: To reduce uncertainty and to provide feedback on CCV unit's ventures (technology acquisition and potential) - Until 1997: Primarily informal and interpersonal communication / then became formal - Barriers: Perceptual – CCV unit was perceived as a threat by other units	- Learning developed into explicit knowledge in CV by learning-by-doing practices within the CCV team - Absence of learning dissemination mechanisms but generic tacit knowledge on CV developed by the top management team	- 1997-1999: CCV unit used as symbol of financial success and innovative outlook - CCV unit's culture was very distinctive from corporate one and its members became ethnocentric towards the CCV team	- Mixture of corporate and external (with venture capitalists' experience) managers composed the CCV team
D	- Content: To provide feedback on DCV unit's venture acquisitions - Formal: with top management team – informal: with the DIW unit – no communication across the divisional boundaries -Barriers: Hierarchical (no direct operational linkages) and perceptual (no strategic linkages) with rest of corporation	- Experiential learning occurred within the DCV unit - Absence of learning dissemination mechanisms and no development of knowledge at the corporate level	- DCV unit used as a symbol of the e-business interest the corporation was taking - DCV unit's culture was distinctive from the corporate	- Mixture of corporate and external (with venture capitalists' experience) managers composed the DCV team

preferred to use an external consulting firm to carry out the corporation's strategic review.

Besides the communication with the top management teams, the CV units developed significant communication channels with internal stakeholders in order to enhance the levels of awareness and acceptance of the CV initiatives within the organisational boundaries. Employing their interpersonal skills and intra-organisational networking capabilities, the CV unit's champions and senior managers were trying to minimise perceptual barriers and negative emotions towards the CV initiatives and to communicate the various areas of relatedness and synergies between the new initiative and other existing organisational units. In the cases of Corporations A and B, this communication mechanism was vital as the inputs and outputs of the CV units' entrepreneurial process were dependant upon internal stakeholders for resources.

Within all four CV units significant learning occurred and explicit knowledge was developed with regard to the entrepreneurial process. The lack of previous experience in conducting CV activities was prevailed over, by a learning-by-doing approach. This is evident in the cases of the BCV and the CCV unit, from which team members developed significant knowledge, routines and competences around the CV process by experimenting and incorporating best practices in formalising the specific procedures followed by each unit in conducting CV activities. These routines and competences appear to be realised, exercised and expressed only within the CV teams and units. Only in the case of Corporation A, where the ACV unit was associated with the whole corporation, the innovation process and new competences introduced by the ACV unit are exercised across the whole corporation. In other cases, there was awareness outside the CV units and within the corporations that new routines and processes are exercised, but these routines were not adopted by the rest of the corporation. The dissemination of such knowledge within the CV teams was supported by training and cultural familiarisation processes. In the case of the ACV team, every two years a new member would join the team and trained by the most senior manger. The new members were therefore socialised into the CV teams, adopting their cultural traits, behaviour, and capitalising on the learning dissemination mechanisms employed within the teams.

Another mechanism the CV units employed to minimise their incompetence and training costs (Hendry, 2002) was the recruitment of personnel joining the CV teams. In the cases of the CCV and the DCV units, the increased incompetence cost emerging from the lack of previous CV experience was also handled by recruiting external personnel with specialised knowledge in such activities. This practice allowed the units to develop capabilities in dealing effectively with their external stakeholders. In the cases of the ACV and the BCV unit, the recruitment of corporate personnel with commercialisation knowledge allowed for efficient intra-organisational networking between the CV unit and the parent corporation to emerge.

From the parent-corporations' perspective, the data indicate that there was absence of (formal or informal) learning dissemination mechanisms between the CV teams and the parent corporation (top management team, other organisational units). This contributed to the inability of the parent corporation to develop explicit knowledge in conducting CV activities and in being involved in entrepreneurial activities. Manager Bc, involved in the BRS division's CV activities denied acquiring any knowledge or learning from the BCV units' personnel and from the unit's evolution. The only learning he gained was mainly related to its failures. The four corporations were perceived by the majority of the interviewees to have developed a level of tacit but generic knowledge about conducting CV activities. One significant characteristic of this knowledge was that it was associated with a specific and small number of individuals, and once these individuals had left the corporation or moved within the corporation, the knowledge evaporated.

From a cognitive perspective, the data indicate that the four CV units were portrayed by their parent corporations as symbols of the innovation and entrepreneurial image projected, within and outside their organisational boundaries. In the case of Corporation D, Manager Dt argues that the initiation of the DCV unit and the DIW initiative were an outcome of the pressure the corporation was facing to be involved in CV activities towards isomorphism. Moreover, within the organisational boundaries, the DCV unit was politically and culturally used as a symbol of the innovative posture of the Managing Director who sponsored it. The cultural traits of each CV unit were quite distinctive in relation to the rest of the parent corporations. These cultural traits did not manage to create a significant change in the existing organisational culture, due to the lack of learning dissemination and limited interaction between the CV units and the rest of the corporation.

In summary, the limited adjustment of the organisational context (structural, strategic and social) to incorporate the CV initiative restricted the ability of the CV initiatives to integrate their capabilities to the rest of the corporation. Moreover, the limited interaction between the top management team and other senior corporate managers did not allow for the strategic context determination process of the CV initiatives to be assisted and supported. This study contributes to Lorange's (1980) observation of the need to align control and management systems to the explorative and exploitive strategic intent of a corporation. Conducting CV activities for the first time involves a higher level of exploration than exploitation for a corporation, while the rest of the organisational units and initiatives can be tailored towards an exploitation mode of management. The data indicate that the lack of understanding of these differences and of not allowing for an exploration phase for the CV initiative to develop capabilities and competencies and exploit them can contribute negatively to the survivability of the initiative. Moreover, the lack of alignment between the control and efficiency mechanisms according to the exploration and exploitation intent of the CV initiative creates further areas of conflicts between the parent corporation and the CV unit.

6.3.3 "What are the consequences for the CV team and the parent corporation from the involvement in CV activities?"

From an evolutionary perspective the phases of the variation, selection and retention of an initiative is a continuous cycle. The ultimate selection of CV initiatives was based on the outcomes of the CV process. However, based on these outcomes, the selection criteria (internal and external) of the CV initiatives changed. Table 6.11 outlines these changes and how they affected the long term and eventual survivability of the CV initiatives. In all cases, the changes in the internal selection criteria led to the elimination of the CV involvement, while part of the new routines and competences introduced by the CV units were retained by the parent corporation. In the cases of corporations A and D, the CV activity was closed and the CV teams were dissolved, while their members who remained within the corporation were moved to other positions in the organisation. In the cases of Corporations B and C, the CV initiatives were suspended but the two units spun out to become autonomous business entities, maintaining a business relationship with their parent corporations.

Change in the external environment also contributed to a change of the selection criteria. In all cases, the financial performance of the CV units, and especially the ones of the BCV and the CCV units, were highly affected by the economic slow down during 2001-2003. All four corporations possessed slack resources at the initiation of their involvement in CV activities. This advantage was lost when the economic climate deteriorated, forcing all four corporations to became more parsimonious in the way they managed their resources. The newly formed internal criteria were aligned to the external environmental conditions, eliminating the appetite of each corporation to experimentation, pressurising them to focus on their core businesses.

Table 6.11: Evolution in a CV initiative's selection criteria

Cases	Changes in selection criteria	Conditions enhancing selection criteria change	Outcomes of changes in selection criteria
A	- Unwillingness to maintain a venturing activity of low performance - Divestment of costly units and rationalisation of corporate activities	- Change of top management team (the champion of the ACV unit and chairman of the corporation resigned in 2005) - ACV unit did not meet business expectations	- ACV unit was suspended in 2005 - AI Scheme was maintained, as it had already achieved retention through integration and incorporated in core corporate routines
B	- Unwillingness to continue the experimental innovation scheme of the BRD division - BRD division: Shift of priority in delivering services to rest of the corporation's core businesses	- 2001-2003: Macroeconomic slow down affecting the performance of the BCV unit's ventures - Lack of resources	- BCV unit spun out to evolve into a new organisational entity and form a commercial relationship with Corporation B
C	- Shift of technological and financial strategy of the corporation affecting negatively the technological experimentation initiatives	- 2000-2001: Macroeconomic slow down affected negatively the performance of the CCV unit's ventures - 2001: CFO (main political supporter of CCV unit) resigns	- CCV unit spun out to evolve into a new organisational entity and form a commercial relationship with Corporation C
D	- Strategic shift to the core business context - Divestment of non-directly related units to the core business context	- Resignation of Managing Director of e-business initiatives (main sponsor of the DCV unit)	- DCV unit was suspended, while the whole e-business initiative was abandoned -DI scheme continued to exist

The termination of the CV units in all four cases was caused both by the inability of the CV process to produce financially sound outcomes and by the non-determination of the CV initiatives' strategic context. The CV process produced significant outcomes for the CV units and the individuals involved directly in them, but these outcomes were not realised by the rest of the corporation. Table 6.12 outlines and compares the outcomes from the involvement in CV activities for both the parent corporation and the CV unit. By comparing the two areas of outputs of the CV process, it can be argued that the CV units managed to acquire more intangible outputs in comparison to the parent corporations. This difference can be explained by the inability of the efficiency mechanisms used in each case to allow for dissemination of learning and for interaction between the CV units and the rest of the corporation to occur.

Another interpretation of the inability of the CV initiatives to deliver their anticipated outcomes and to survive might be the presence of negative spillovers during the CV process. The data indicate that such outcomes might undermine the potential of the CV process. This was evident especially in the cases of Corporations A, B and C. The creation of a distinctive CV team, the governance system overseeing it, and the outcomes of CV activities (financial success or failure) are sources of negative emotions (envy, mistrust, creation of a culture of greed) within the parent corporation. On account of these emotions, CV activities generate negative behaviours (competition over resources and access to them, resistance of communication and collaboration, uncertainly) towards the CV unit, the CV managers and CV activities, by other corporate units and managers. These negative emotions and behaviours generate costs at two levels of analysis: (a) adverse direct effects on the CV process and (b) indirect adverse effects on other organisational processes (especially innovation and learning processes).

Table 6.12: Inputs and outcomes of the CV process

Case	Parent corporation's input in the CV process	Outcomes of the CV process for the CV units	CV unit's contribution to the parent corporation as outcome of the CV process
A	- Financial and human capital - Reputation - Technical expertise - Technical facilities	- Explicit knowledge in identifying business opportunities - Development of innovation process (internalising externally developed innovative ideas) - Social capital (associations with universities and entrepreneurs) - Access to external innovation - Positive reputation - 550 business ideas forwarded to internal core businesses	-Social capital (associations with universities and entrepreneurs) - Access to external innovation - Positive reputation - Development of 70 business plans of potential ventures
B	- Financial and human capital - Technical facilities - Intellectual capital	- Explicit knowledge in incubating business opportunities - Development of CV capabilities - Social capital (within and outside the corporation) - Creation of positive reputation - Creation of nine ventures	- Change of commercialisation and exploitation of research mindset - Financial gains - Creation of positive reputation
C	- Financial and human capital - Reputation	- Explicit knowledge in conducting CV activities - Development of CV capabilities - Significant financial gains - Creation of positive reputation - Development of social capital	- Significant financial gains - Acquisition of networks related technologies - Decrease of operational cost by acquiring networks technologies - Feeding the top management team with technological trends and new concepts of business models - Creation of positive reputation
D	- Financial and human capital - Reputation	- Explicit knowledge in conducting CV activities - Development of CV capabilities - Creation of positive reputation - Development of social capital - Carried out six CV deals	- Development of six ventures - Creation of positive reputation

Among these negative emotions, corporate envy was the most significant, especially in the case of Corporation C which experienced the highest level of perceived envy. Previous work on entrepreneurship and envy indicates that envy acts as an obstacle to entrepreneurship within an economic system (Choi, 1993). Kuratko *et. al.* (2005) signal that the outcomes from the middle managers' entrepreneurial behaviour can be potentially positive or negative at both individual and organisational level. However, they limit their discussion to positive behavioural outcomes and do not develop the issue of negative spillovers. Considering the nature of corporate envy being experienced at an individual level and at an aggregated group level, there was need to distinguish between two levels of analysis (individual – group/unit) (Klein & Kozlowski, 2000). The level of perceived envy was formulated considering two issues: (a) the frequency of the construct of envy and jealousy in the narratives of each case-corporation (as a measurement of aggregated perceived envy), and (b) the perceived level of envy, as experienced by the informants of the occurrence of such emotions within the corporation regarding the establishment of the CV team/unit (as a measurement of individually perceived envy).

The emotion of envy is the outcome of a comparative process, in which the "enviers" compare their well-being to the one of relevant others (Adams, 1963). The economics and sociology literature on the emotion of envy (Elster, 1998; Salovey & Robin, 1984) indicates that initially the emotion is experienced and expressed at an individual level, and then through organisational conditions and contexts is formed and facilitated at an aggregated group level. In Corporation C, all four interviewees referred to the emergence of envy around the CV activities. In Corporations A and B, the construct of envy was mentioned following a prompt question. In all three cases, the informants were aware that within the corporation there were *"enviers"* of the CV managers' roles, jobs and rewards. The *"enviees"* were from within the CV team. The *"enviers"* were located at different divisions of the corporation. The CV team's personnel are a self-relevant group (Salovey & Robin, 1984) to which the "enviers" carry out a comparison regarding job roles and responsibilities, financial gains and status, demonstrating their shortcomings. Four types of corporate envy may be hypothesised according to who (individual vs. group) envies whom (individual vs. group). The current study utilised data which illustrate the cases of corporate envy at a group level targeted at either the CV team or the individuals within it. The comparison was carried out on the basis of the monetary and non-monetary benefits that the CV managers appeared to be enjoying. The data indicate that the rewards the CV managers received, in the form of relatively significant financial bonuses and options in the new ventures, were the main attractors of envy.

Inequity theory is central in understanding envy and its causes, and to identify the basis of the comparison that a manager carries out with another manager regarding their well-being (Adams, 1963). Moreover, perceived fairness and its variations are the core concepts in the organisational justice literature (Gilliland & Chan, 2001). The data indicate that the perceptions of non-venturing corporate managers towards equity and equality in the context of CV, as well as towards innovation within a corporation, affect the nature and degree of the comparison. Any perceived violation of this fairness is expressed through negative emotions, such as envy towards the actors who are perceived to violate the organisational status quo. By examining the cases of Corporations A, B and C, it can be argued that perceptions of equity and equality within a corporation are shaped on the basis of corporate policies regarding income distribution within the organisation. Pre-existing practices followed by a corporation regarding its remuneration system shaped the status quo of perceived corporate hierarchies. Perceptions were created according to which the higher in the hierarchy employees are placed, the higher the rewards they should enjoy. However, such perceptions neglected, as in the case of Corporation A, the high levels of risk involved at these positions. Moreover, industry standards regarding remuneration policies impacted on what was perceived to be favourable remuneration policy. The VC industry rewarded its employees with a different remuneration system than that of a corporation. National standards of remuneration policy appear also to have an impact on what was perceived as a generous remuneration policy.

Moreover, as a representation of a new routine towards innovation and new business development within the organisational context, the CV initiative may face competition from pre-existing routines (Aldrich & Ruef, 2006; Birkinshaw & Lingblad, 2005). The CCV team and its approach to innovation was perceived by other corporate teams and units involved in innovation processes as a challenge and a threat. This threat was externalised and expressed as a behaviour which questioned the legitimacy of the CV approach towards innovation. The "Not Invented Here" syndrome was identified by the informants as critical in triggering further envy within a large corporation. Merriefield (1993) argues that the existence of the *"Non Invented Here"* syndrome at the lower management levels can defeat the commitment of the top management to renewal. Flam (2002) argues that the experience of emotions of anxiety and uncertainty by corporate managers has structural and action consequences for the corporation. In the case of Corporation C, the occurrence of the *"Non Invented Here"* syndrome may be conceptualised as the consequence of the anxieties and uncertainty the corporate venture team and its investments were introducing to the existing corporate innovation process. Moreover, the newly acquired technologies through the operation of the CV team replaced the current technologies of the corporation. The latter were internally developed and the middle level managers who had developed them were emotionally attached to them. When the new technologies replaced the old ones, these middle level managers faced further uncertainty about their job status, while a significant number of them was forced to leave the corporation.

Sykes (1992) argues that equity and perceived equality are two conflicting powers within a large diversified corporation that may lead to tension between the relationships of the CV managers and managers of other units. Moreover, the data indicate that organisational conditions related to the distinctiveness of the remuneration system and the governance structure employed for the CV team enhanced the levels of perceived envy. On the other hand, as indicated by Corporations A and B, the higher the level of association and intra-organisational networking between the CV team and other corporate units and teams, the lower the levels of perceived envy created around the CV process.

The individuals pursuing these changes (i.e. introducing new routines) may be perceived as the actors of such a violation. In a study on innovation and economic behaviour, Mui (1995; pp. 314-315) argues that in the context of an organisation, when a person introduces changes (defined by Mui as innovations) *"that improves his relative status, those whose relative status are affected adversely (the followers) by such changes will suffer from envy towards the innovator"*. This conceptualisation relates innovation to negative emotions such as envy, and the consequences of sabotage and retaliation that might be caused due to the drop in the followers' utility function. Mui's study suggests that the followers and innovator's propensities for envy may substantially complicate their strategic interactions related to innovation, and the experienced envy of the followers might lead to sabotage of innovation.

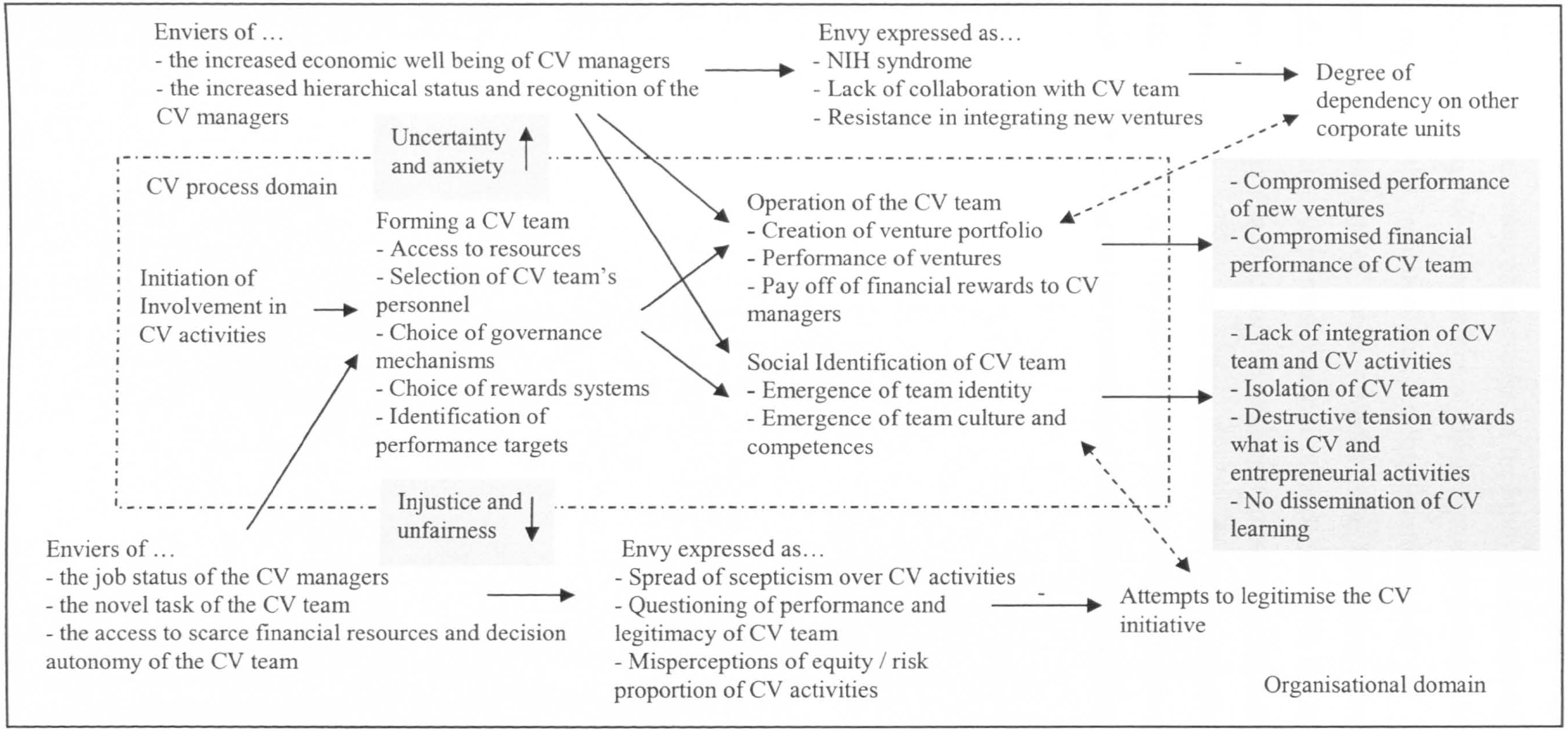
The data indicate that the envy from the non-venturing managers towards the CV team personnel was expressed as follows: (a) as lack of co-operation and collaboration from the non-venturing manager, (b) as resistance to integrate the acquired technologies by the ventures of the CV team, and (c) as scepticism and reservations towards the role of the CV unit. The creation of a climate of misperceptions towards the risk involved in the CV activities and their relatedness to the corporation generated a series of direct and indirect costs for the CV team and for the corporation overall. The efforts by the non-venturing managers to undermine the CV initiative had a negative effect on the performance of the latter, compromising the outcomes of the CV process. It can be argued that, a negative perception towards the CV unit is generated when the rest of the organisation is unaware of these sabotaging activities and their negative impact on the units. This misperception of the actual financial performance of the unit may lead to further scepticism towards its vitality. The main drawback of such a scenario is the increasing distance between divisions regarding communication and cooperation, forcing the CV unit into isolation. Moreover, the emerging scepticism towards the role and importance towards the CV unit/team leads to unwillingness to co-operate with it.

Envy itself does not have a direct impact on the corporation, but an indirect adverse effect on organisational process instead. It triggers further scepticism and critique towards the *"imposed"* need by the top management to change towards a more entrepreneurial management style. CV, as part of this newly introduced managerial direction, becomes a source of tension. Its managers become the front-line employees of such an internal organisational change. High levels of perceived envy around the CV process negatively affect its acceptance and vitality within the corporation. The destructive tension between the existing routines and the new one introduced by the CV initiatives causes further tensions, and undermines the significance of variations of routines around the corporate innovation process. The *"sabotaging behaviour"* developed around the CV process is expressed as lack of political support and as doubt over its outcomes. The outcome of this behaviour is to negatively affect the legitimacy of the CV initiative, isolating the CV unit and minimising its integration to the rest of the corporation. This might also explain the lack of dissemination of learning from the CV team to the rest of the corporation.

In relation to positive outcomes regarding the occurrence of corporate envy towards the CV initiative, the data support that in the long term, corporate envy may result in corporate rivalry and healthy competition with managers of other divisions that become open to innovation. Manager Ct argues that there is an indirect relationship between envy and innovation, which presupposes that envy is experienced and expressed as competitive spirit to achieve something better than the "enviee"'s possessions. The occurring competition triggers innovative behaviour and entrepreneurial spirit, but without utilising pre-existing knowledge on how to do so.

In summary, the micro-processes composing the occurrence of the negative emotion of envy around the CV process, and its moderating role in it are illustrated at Figure 6.4. The proposed framework introduces three relationships that appear to interfere in this mechanism: the relationship of equity and equality between the corporation and the CV team, the relationship of equity and equality between the corporation and other core corporate units, and the relationship of equity and equality between the CV unit and other core corporate units. The moderation of corporate envy around the CV process appears to exist in the effective management of these three relationships maintaining balance of interest and fairness for all three parties involved.

Figure 6.4: Negative emotions around the CV process[110]



[110] Developed by the author

6.4 CONCLUSION

The cross-case analysis of the empirical findings allowed drawing conclusions in respect to the three research questions of the study. Acknowledging the idiosyncratic nature of each case of corporations studied, common patterns of behaviour emerges with regards to the initiation and the implementation of CV activities within the organisational context of large corporations. Emerging themes related to the significance of subjective interpretations of opportunity in the initiation phase of the CV process, to the dynamics of the relationship between the parent -corporation and CV unit, and to the emergence of emotions (positive and negative) as the CV process unfolds were identified. The next chapter concludes the thesis and identifies future research areas building on the contribution and limitations of this study.

7. Chapter 7: Concluding the Thesis

7.1 Introduction

The aim of this study has been to explore and explain how CV activities arise within, and are implemented by large corporations, and what their consequences are for CV units and corporations. Acknowledging the nature of CV activities as a firm phenomenon (Covin & Miles, 2007), the organisational context of large corporations became the empirical setting of this study. The review of the relevant literature indicated that there is limited empirical focus on the dynamics of CV process. This study contributes to this topic by examining the initiation, the implementation and the outcomes of CV activities within the organisational context of large corporations. The review also indicated that the existing empirical literature provides a theoretically fragmented examination of the CV process. This study overcame this limitation by engaging in a dialogue with three theoretical perspectives. The thesis therefore contributed to the call for a more holistic and integrated approach in examining the CV process as a multifaceted sequence of decisions and actions. The development of a conceptual framework of *a priori* constructs and their presumed relationships guided the enquiry.

The empirical study was based on findings from the cases of four corporations, involving interviews with 18 managers engaged directly and indirectly in the CV process. This methodological approach was in alignment with the call for a more inductive approach in studying such a highly idiosyncratic process. Emerging constructs and relationships were revealed during the fieldwork and the data analysis process as an outcome of the inductive methodology followed. This, in turn, enabled the study to reveal insights into the dynamics of the CV process not previously mentioned in the relevant literature.

The aim of this chapter is to summarise the findings of the empirical enquiry and to outline the theoretical contribution of the study. The learning obtained while conducting the study is reflected in this chapter. The chapter concludes by acknowledging the limitations of the study and identifying future research areas in the CV field.

7.2 Overview of Findings

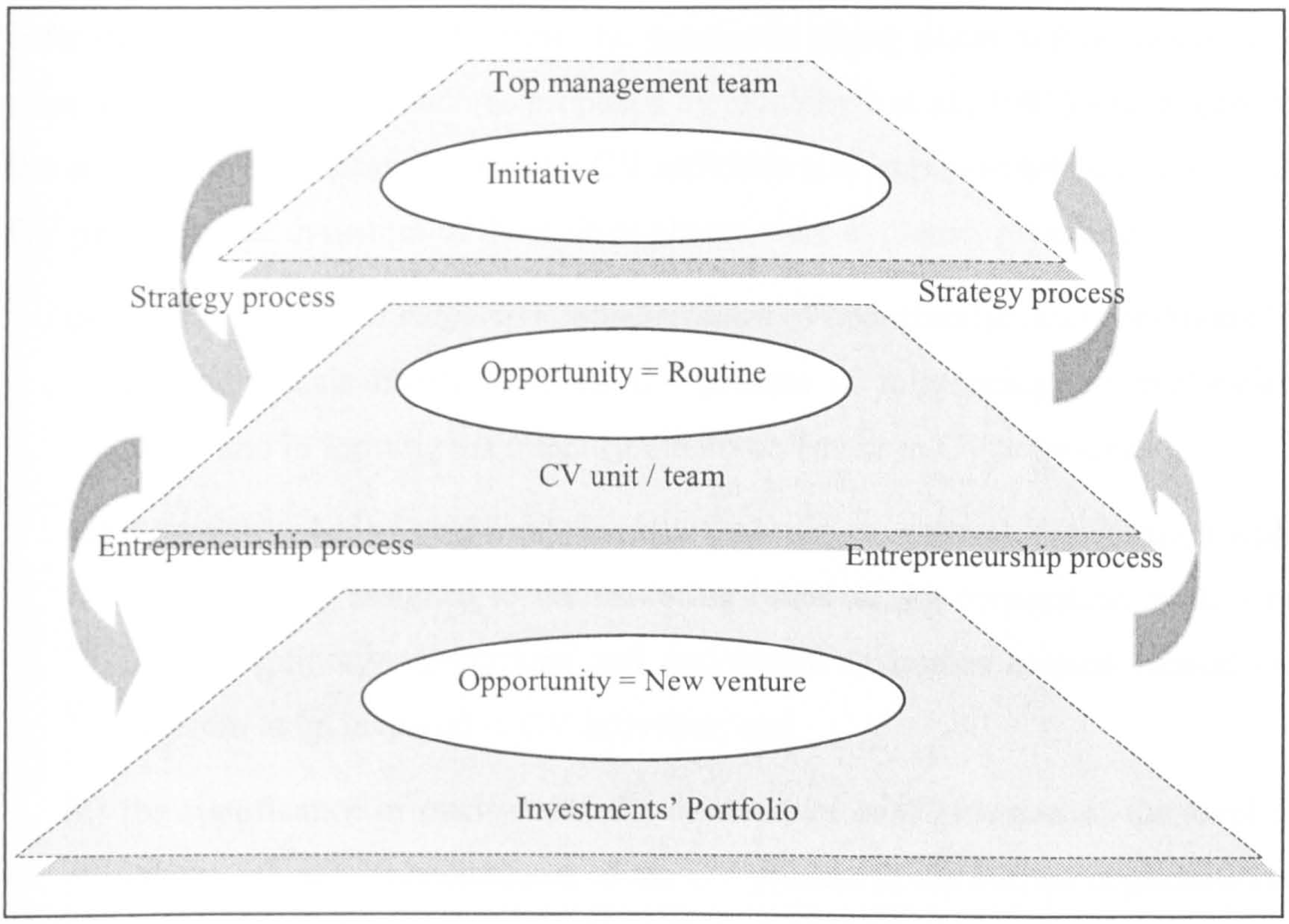
7.2.1 CV as a strategy and entrepreneurship process

This study proposes the co-existence of a strategy and an entrepreneurship sub-process to explain the dynamics of the CV process. Contributing to Burgelman's (1983a; 1983c) and Venkataraman's et al. (1992) work, the study elaborated on the dynamics of the interaction and co-existence of the two sub-processes, for both internal and external CV activities. It is argued that the two sub-processes run across three levels of analysis for the CV process: the venture portfolio, the CV team/unit and the top management level (see Figure 7.1). The study advances from examining the CV process in the context of venture creation (Venkataraman et al., 1992) to reaching a higher level of abstraction by proposing the conceptualisation of CV as an new routine and as a new initiative (Birkinshaw, 1997).

The entrepreneurial sub-process involves the identification and exploitation of a multifaceted opportunity (taking the form of a venture, a routine and an initiative) across the three levels of analysis of the CV process. At the lower level, the entrepreneurial process involves the identification and exploitation of a new business opportunity. At the CV team/unit level, the entrepreneurial process involves the identification of new, business-development routines, and the formation and exploitation of capabilities around these routines. At the top management team, the entrepreneurial process involves the identification of CV as an alternative initiative for innovation and business development. The strategy sub-process involves the formation and implementation interplay between decisions and actions which form and organise a strategic context around CV as an organisational initiative and routine.

This study highlighted the intermediating role that the CV team/unit has in moderating the level of the interaction between the strategy and the entrepreneurship sub-process and in allowing the strategic use of CV by a corporation. The need to focus on the CV unit as a level of analysis has already been proposed by prior research in the field (e.g. Birkinshaw & Hill, 2003). It is at this meso-organisational level where the two sub-processes meet and the entrepreneurship process can release more abstract outcomes (i.e. emergence of capabilities and routines) besides the creation of new ventures. The CV team/unit can be the organisational context to facilitate a venturing strategy and enhance entrepreneurial behaviour.

Figure 7.5: CV process: Co-existence and interplay of strategy and entrepreneurship



The study indicated that the co-existence of the two sub-processes is observed at both internal and external CV activities, thereby extending Burgelman's work in internal CV activities. The study proposes that the degree of interaction between the two processes moderates the types of outcomes of the CV process (i.e. strategic outcomes besides the creation of new ventures). Burgelman (1983c) conceptualised the involvement in CV activities as equivalent to autonomous behaviour, arguing that such behaviour may lead to the definition of a new strategic context which could replace the current strategic context (content and process) of a corporation. This study indicates that the level of embeddedness of the CV process in the current organisational context has a moderating role in the strategic context definition process. The higher the level of embeddedness (and integration) of the CV process at its initiation phase, the lower the possibilities for a new strategic context to emerge as an outcome of the involvement of a corporation in CV activities.

7.2.2 Initiation phase of the CV process

At the initiation phase of a corporation's involvement in CV activities, the existence of ***exploration***, ***justification*** and ***configuration*** phases were observed through which a stimulus (opportunity) was transformed into venturing intent (decision). The study indicated that these phases describe the processes taking place before, during and after the "*precipitating event*" (as proposed by Hornsby's et al., 1993) which leads to the action of a corporation to conduct CV activities (i.e. implementation phase of the CV process). The dynamics of these three phases were explored, revealing:

(a) the importance of ***subjective interpretation*** of opportunities and conditions by the individuals involved in the CV process in influencing the exploration phase and in forming the intent of the involvement in CV activities;

(b) the significance of ***goal intentionality*** (specific vs. general, organisation-wide vs. unit-wide) assigned to the venturing intent of the corporation in shaping the perceptions, expectations and anticipated outcomes created around the decision to be involved in CV activities; and

(c) the significance of clarity over the ***conceptual configuration*** of the level of integration and embeddedness of the CV process to the current organisational context in defining the operational boundaries of and expectation from the CV initiative.

7.2.3 Implementation phase of the CV process

At the implementation phase of the CV process, the study focused on the role of the CV team/unit in the CV process. It revealed the dynamic relationship between the unit and the parent-corporation and its impact on the CV process. The study also elaborated on the role of control and alignment mechanisms to manage effectively this relationship.

A significant contribution of this study has been the identification of the process through which the CV team/unit becomes a distinctive organisational entity. In detail, the study showed that following the decision of a corporation to be involved in CV activities, a ***social identification*** process takes place for the CV team. Strong leadership, the emergence of team-based cultural traits and capabilities, operational autonomy, team efficiency and the creation of exchange relationships with internal and external parties made a positive contribution to the social identification process of the CV unit. The outcomes of this process are the reinforcement of the organisational boundaries of the CV unit as an organisational entity and the visual representation of the CV initiative within the organisation. The emergence of the CV unit as a strong organisational unit was identified as increasing the levels of ***intra-organisational competition*** between pre-existing organisational entities and the CV unit, causing costs for the corporation.

Contrary to existing literature (e.g. Kuratko et al., 2004) which argues for the positive impact of work discretion (operational autonomy) in the CV process, this study identified that after a certain point work discretion could generate negative outcomes for the corporation. This occurs when the CV unit's autonomy is equivalent to low levels of relatedness to the rest of the corporation. These negative outcomes might explain the high levels of intra-organisational competition as an outcome of the emergence of the CV unit as a distinctive organisational entity. The study indicated that high levels of intra-organisational competition between the CV team and other units restrict the strategic implementation of CV as an initiative, and the institutionalisation of entrepreneurial behaviour.

The study also clarified the characteristics of the relationship between the CV team/unit and the parent-corporation, as defined by a *"relational contract"*, indicating the ***risk, goals and time commitment preferences*** of each party. The study showed that:

(a) changes in any of these three constructs from any of the parties affect their relationship. While agency theory proposes the existence of ***alignment mechanisms*** to incorporate any changes of preferences between the two parties and to amend the relational contract, the study showed that in the absence of these mechanisms the relationship is negatively affected and will ultimately cease;

(b) the *"relational contract"* between the CV team/unit and the parent corporation is an exemplification of the ***level of dependency*** of the former to the latter, as a moderator of the performance of the CV process

The management of this *"relational contract"* through the employment of ***control mechanisms*** was identified as a major moderator of the implementation phase of the CV process. The study examined the reporting, budgeting and reward mechanisms, and the level of interaction between the top-management team and middle-level managers employed to control the CV team/unit. The study showed that:

(a) ***pre-existing control mechanisms*** (budgeting, reporting and rewards systems) are more likely to be used to cover the governance requirements of the CV unit rather than to create new mechanisms adjusted to the operational needs of the unit;

(b) the employment of ***differentiated rewards mechanisms*** to compensate CV managers creates tensions between the CV unit and the parent-corporation, because it is perceived as a violation of pre-existing managerial perceptions regarding equity and equality within the organisation;

(c) ***areas of potential conflict*** between the CV unit and the parent-corporation emerge when the configuration of control mechanisms to govern the CV team/unit is not aligned to the level of perceived relatedness of the venturing initiative to the corporation

The study also highlighted the importance of ***efficiency mechanisms*** in achieving integration and exploitation of the strategic and entrepreneurial intent of the CV process at the macro-organisational level (i.e. creating entrepreneurial culture, new strategic intent). In detail, the study showed that:

(a) the existence of both ***formal and informal communication mechanisms*** between the CV unit and the rest of the corporation, across vertical and horizontal organisational hierarchies, enhances the efficiency of the CV process;

(b) the absence of ***learning dissemination mechanisms*** of the knowledge created within the CV teams to the rest of the corporation undermines the efficiency of the CV process in realising strategic outcomes;

(c) the ***recruitment of internal corporate managers*** to be involved in the CV teams increases the work-flow and interaction between the CV unit and the rest of the corporation, enhancing the efficiency of the CV process; and

(d) the absence of learning dissemination mechanisms and low levels of interaction between the CV team/unit and the rest of the corporation, have a negative effect on the emergence of ***entrepreneurial cultural traits*** within the organisation

Looking at the dynamics between the initiation and the implementation phases of the CV process, the study identifies the significance of the perceptions created within the organisational context about the level of relatedness and intentionality of the CV activities in determining the explorative or exploitive intent of the CV process. The study contributes to the work of Lorange (1980) and March (1991, by arguing that there needs to be better appreciation of such intent in organising the CV team/unit. Conducting CV activities for the first time involves a higher level of exploration than of exploitation for a corporation. The study indicated that the lack of alignment between the control and efficiency mechanisms according to the exploration and exploitation intent of the CV initiative creates conflicts between the parent corporation and the CV unit, and jeopardises the CV process. Moreover, the study indicated that corporations need to develop mechanisms that balance and align the simultaneous co-existence of both explorative and exploitive initiatives to achieve flexibility and renewal.

Considering the dynamics of the implementation phase of the CV process, the study also showed that limited adjustment of the organisational context (structural, strategic and social) to incorporate the CV initiative restricted the ability of the CV units to release their capabilities to the rest of the corporation. Moreover, limited interaction between the top management team and other senior corporate managers prevent the initiation of the strategic context determination process of a CV initiative.

7.2.4 Outcomes of the CV process

A major finding of the study is the identification of ***negative outcomes*** realised as the CV process evolves. In detail, the study explained how negative emotions such as envy emerge around the CV process and the CV team, and what costs such emotions might have for the involvement of a corporation in CV activities. Drawing from the inequity and organisational justice theory, the study:

(a) unfolds the construct of envy experienced at individual or group level as a drop in the *"envier's"* utility. Influenced by the sociology literature, envy is conceptualised to involve a ***social comparison*** of the possessions of others and to be expressed through dissonance mechanisms; and

(b) proposes a conceptual model identifying the ***causes and consequences of envy on the CV process***. The CV process, as a change agent, can be perceived by non-venturing corporate managers as a disruption to a corporation's pre-existing status of roles and distribution of income, and as a threat to other initiatives

The establishment of distinctive rewards and financial governance systems for the CV unit, enhanced by the emergence of a strong organisational identify for the CV unit are proposed to contribute positively to the occurrence of envy around the CV process. On the other hand, efficiency mechanisms which would allow integration and intra-organisational complementarities between the CV unit and the rest of the corporation are proposed to prevent the emergence of envy around the CV process, towards its outcomes and the people involved in it.

The study also draws attention to the negative impact emotions such as envy may have of the CV process in: (a) undermining the outcomes of the CV process and (b) undermining the legitimatisation process of the CV initiative. The combined outcome of these two processes is proposed to negatively affect the survivability rates of CV initiatives. Moreover, the study proposes that the emerging costs from the occurrence of envy around the CV process have an adverse indirect effect on learning and innovation processes at the organisational level.

7.3 THEORETICAL CONTRIBUTION

This study focused on the dynamics of the CV process and the mechanisms that define the structure of the CV phenomenon. It was benefited from the adoption of a triangulated theoretical perspective to the CV process and it has advanced our knowledge in CV and in organisational theory.

From an evolutionary theory perspective the study contributes to the intra-organisational ecology of organisational routines literature. The study examined the ecology of routines which initially might not interact in any meaningful way with other routines (i.e. conducting CV activities as a stand-alone activity exclusively by one organisational team/unit) but progressively interact through competition or compatibility. It was found that no interaction, in the sense of exclusivity, of a new routine with other routines contributes positively to the definition of organisational boundaries, but after a certain point no interaction undermines the survivability of the routine.

Burgelman's (1991) notion of intra-organisational routines is consistent with the findings of the study. However, the distinction between variation, selection and retention in the CV process was difficult to be drawn. There was a clear overlap between the variation and the selection processes. The identification of the CV process at three organisational levels (venture portfolio, CV unit, and top management team), the emergence of capabilities of different abstraction levels across these three levels and the direct competition or complementarities of the CV initiative to other organisational activities make the distinction difficult.

The study found that selection and retention last for a certain amount of time, which depends on the speed with which the selection criteria change, following external and internal discontinuities to the organisation's activities, and not just the performance of the routine. If the decision to be involved in CV activities is treated as equivalent to the selection of the new routine, the withdrawal from CV activities is not only dependent on the performance of the venturing activity but also on the amendment of the strategic, technological or financial strategy of the corporation. These findings support the role of structural inertia (Hannan & Freeman, 1977) in explaining organisational change. The study indicated that the absence of organisational learning and the minimal adjustment of the structural context to the involvement of the corporation in CV activities enhanced structural inertia. In turn this prevented the transformational potential of CV to the corporation's strategy.

The role of inertia in the CV process challenges the rational approach of contingency theory in the CV field. This study showed that the CV process and its outcomes are not a sequence of direct, one-to-one connections between organisational characteristics and environmental conditions that lead to positive performance. On the contrary, it was found that a configuration of organisational mechanisms and characteristics form appropriate complementarities and interdependencies to determine fitness. Moreover, the study showed that the lack of alignment mechanisms of these configurations to the evolving external and internal discontinuities prevent the determination of fitness in the long term.

From an agency theory perspective this study demonstrates the agency relationship between the parent-corporation, as the principal, and the CV team/unit, as the agent. The study unfolded the characteristics of the *"relational contract"* between the two parties and illustrated the agency behaviour of the two parties. It was found that the emergence of the CV unit as a strong organisational entity and the development of capabilities not shared by the rest of the corporation reinforced agency behaviour by the unit. Building on the work of Jones and Butler (1991), this study displayed the moderating role of control and bonding mechanisms in managing the agency relationship and the necessity for their alignment when the risk, goal and time preferences of each party are amended. The study contributes to a more dynamic view of the agency relationship acknowledging the need to align the relational contract and its governance mechanisms according to the explorative or exploitive intent of an agent's task. It was also found that there is a significant relationship between the life-span of the agency relationship (i.e. length of commitment of each party to the contract) and the life-span of the task (i.e. required length for the task to deliver outcomes). Differences between these two periods create costs for both parties and jeopardise the task of conducting CV activities.

The study also contributes to the behavioural view of entrepreneurship by identifying the moderating role of emotions (both positive and negative) (Cardon et al., 2005) and of subjective interpretations of opportunities (Harper, 2003) in studying corporate entrepreneurship processes. The study indicated that entrepreneurial efforts, such as CV, behave as change agents within an organisational context. The study showed that positive emotions such as passion contribute positively in driving and facilitating this change, while the rest of the corporation might have a negative emotional reaction to the CV process. Moreover, the study indicated that attention at a subjective view to the CV process might provide a powerful explanation of its highly complex and idiosyncratic nature.

7.4 MANAGERIAL IMPLICATIONS

The findings of this study have several implications for corporate and venturing management of large corporations. Considering the importance of the relationship between the parent corporation and the CV team, this study draws attention to the use of appropriate control and efficiency mechanisms to manage the CV process. The existing CV literature advises corporate management to be cautious in using control mechanisms such as the financial and remuneration governance structure in setting up a CV unit. This study suggests that corporate management should consider the use of reporting procedures and high levels of interactivity between the top management and the CV team when deciding on the governance structure of the team. The study indicated that the selection of the control mechanisms (reporting, budgeting, rewards systems) need to be guided by the objective of allowing sufficient redirection, dissemination and interaction of skills, knowledge and information between the CV unit and the top management.

The study also suggests to corporate management that the management of the CV unit should not solely aim at monitoring the CV process, but also at the creation of bonds between the CV initiative and the rest of the corporation. For the CV process to release positive strategic, financial and cultural outcomes for the corporation, it needs to achieve strategic, operational, positional and cultural relatedness to the rest of the corporation across the hierarchical organisational structure. The study indicated that the absence of relatedness of the CV unit in any of these areas to the other organisational units has a negative effect on the CV process and threatens the survivability of the CV initiative.

High levels of relatedness can be achieved by the consideration and utilisation of efficiency mechanisms. The study proposes the use of communication, learning dissemination, cultural and recruitment mechanisms which could make a positive contribution to the efficient management of the CV process and CV initiative. Prior research in the field has neglected the importance of such mechanisms. In this study it was shown that the CV team/unit possesses knowledge and capabilities of which the rest of the corporation is ignorant. This creates misperceptions with regard to the outcomes of the CV process and the way they are evaluated. Acknowledging the existence of non-financial, non-intangible outcomes which are beyond the creation of new ventures will allow the evaluation of CV as a process through innovation, cultural and strategic measurements. In turn this would allow for the development of a long term approach towards CV.

Corporate management also needs to be clear about the appropriateness and suitability of CV for the corporation, as well as of the capabilities and skills required to conduct effectively CV activities. This will allow clarity over the exploitative or explorative intent of the CV initiative. The study showed that false perceptions towards the nature of the CV intent created misperceptions within the corporation around the intentions and anticipated outcomes of the CV process. Clarity over the nature of the CV intent would allow corporate management to select the appropriate configuration of control and efficiency mechanisms to manage the CV process.

The study also indicated the significant role of the CV team and its champion in managing the relationship with the parent-corporation (top management team and other organisational units). Informal intra-organisational networking and utilisation of efficiency mechanisms can contribute positively to the achievement of high levels of relatedness between the venture portfolio and the CV unit to the rest of the corporation. While the emergence of a strong organisational identify by the CV unit benefits its attempt to build capabilities and skills, the champion and its members need to be aware that this might create negative emotions and behaviour towards them by other units. The study suggests that there needs to be appreciation by the CV team that they operate within a corporate environment and that they should not create false perceptions regarding their identity and behave as venture capitalists. Such behaviour might create false assumptions within the CV team of their status and remuneration in the corporation. Moreover, the venturing management needs to have clarity over the objective and business model of the involvement in CV activities.

7.5 REFLECTIONS, LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Studying a process from a retrospective comparative approach is suggested by the relevant literature (Chakravarthy & White, 2002; p. 201) as a powerful design to *"link outcomes with precursor actions and decisions"*. This methodological choice was tested in the fieldwork of the study, revealing the difficulties in gaining access to the empirical setting and the outcome biases in selecting CV units to participate in the sample.

The first limitation was tolerated through my attendance at practitioners' conferences in CV, held prior to my entry to the fieldwork. The study benefited from the opportunity I had as a junior researcher to attend these conferences, to meet CV practitioners and to introduce my research to them. Besides the significant contribution of these informal meetings to the conceptual sharpening of this study's research questions, I had the opportunity to gain access to the CV setting of several corporations. My experience from the fieldwork phase of this study indicated that CV practitioners who have the tendency to participate in such conferences would be inclined to share their experiences with academic researchers. Issues of confidentiality are of high importance in conducting research in the field of CV, as the involvement of a corporation in CV activities might be of high political significance for the involved managers and for the parent-corporations' shareholders and competitors. My experience indicated that data related to the financial aspects of a deal are not revealed during an interview because of confidentiality concerns. This observation is of high significance when a researcher attempts to study the CV activities of a corporation in real time. I approached the four corporations and their CV managers in summer 2003 to research their CV initiatives between 1996 and 2003. This retrospective approach allowed the managers to refer to CV activities which had occurred in the past and had been publicised in the media. Consequently, the interviewees were reflective and critical of these activities, and unbiased from anticipated success-driven outcomes of the CV processes during the interview.

However, it is acknowledged that this retrospective approach to the empirical setting might have restricted the access to the CV phenomenon. This criticism is of significance when considering that each retrospective study of a process takes a biased point of view (Chakravarthy & White, 2002). For example, the empirical sample of this study has neglected corporations which had been involved in CV activities but their involvement was very short and of no outcome to the corporation. Studying such cases of CV process would have elaborated further on the conditions of their discontinuity. This study tried to overcome this limitation by providing three different theoretical *"points of view"* in analysing and interpreting the data.

The study could have benefited further if action or longitudinal research was conducted. If an action research approach, as equivalent to real time research, was adopted other types of data could have been collected, such as board meeting observations related to the initiation phase of the CV process. This would have allowed for a better insight in the decision making process involved. However, gaining such access to the empirical setting would have been difficult considering the confidentiality involved prior to launching a CV initiative and limited information academic researchers face in knowing which corporations are about to be engaged in CV activities. Moreover, I would have not been suitable, as an action researcher, to conduct such research due to lack of training and skills required working in such a corporate environment. However, real time research can be used by researchers who are employed by corporations involved in CV activities. Tukiainen's (2004) doctoral dissertation on Nokia's venturing activities is an excellent example of action research in the CV field undertaken by a Nokia's employee. Burgelman's longitudinal work on internal CV activities of one corporation has also revealed the benefits of this research design. This option might not be feasible in view of the time requirements in conducting a doctoral research programme. Moreover, in 2003 when the fieldwork of this study was conducted most of the large British corporations had withdrawn from CV, signalling that the third CV wave was drawing to a close. However, the benefits of longitudinal research need to be acknowledged in guiding future research projects in the CV field.

A longitudinal research design would have incorporated issues of time in unfolding the dynamics of the CV process. The discussion above indicated that the timing of entry to the fieldwork of this study contributed positively in gaining access into the research setting. The evolution of the CV units of the four corporations studied indicated that historically the nature of the CV activities and the way they were approached by the corporations evolves. This underlines the time dependency of the phenomenon and the need by the researchers in the CV field to acknowledge the time context of their empirical studies. The time dependency of the CV phenomenon has implications for the sampling rationale used to categorise CV activities and accordingly form sampling criteria (i.e. research only external CV activities). For example, in this study the retrospective methodology allowed me to identify the evolution of the CCV unit of Corporation C from an internal activity targeting external investments in 1997 to an external activity in 2001. If I had conducted the fieldwork in 1997 I would have had a different view in the nature of the CV activities adopted by this corporation, in comparison to what happened to the unit in 2001. Consequently, it is argued that the time frame of the empirical study and the chronological phase of the CV process under investigation need to be acknowledged and incorporated into the interpretation of the data.

Several limitations of the current study need to be considered and addressed in future research. My research has been explorative in nature, utilising inductive methodological tools to develop theory regarding the CV process. It was not the intention of this study to fully test the proposed findings to the population of large corporations conducting CV activities.

In particular, the empirical context of this study has been the CV context of four British corporations, from different industries, which became involved in CV activities during the late 1990s and early 2000s. While this approach allowed an in depth study the CV process, reaching analytic generalisation (Yin, 1994), it raises questions about the scientific generalisation of the findings to other organisations, of other industries, of other geographical markets and at different chronological time. Some of these concerns emerge from the use of a small number of case studies to explore the CV process. Questions are also raised over the over-dependency of the empirical study on qualitative data. Therefore, it is proposed that the findings of this study should be further tested in larger scale samples of corporation, across industries and geographic countries. Evidence from other comparative studies in the CV field across industries and geographic markets (e.g. Campbell et al., 2003; Birkinshaw & Hill, 2005) have revealed their scientific generalisation potential.

The selection of the four corporations and their CV units suited the theoretical sampling of the study. In turn this has allowed me to develop rich accounts of the venturing process and the mechanisms defining it. The findings of this thesis require to be considered on its theoretical grounds. For example, a core assumption of this study has been the exclusive focus on CV activities conducted through a focused and formal approach of a corporation towards CV (Birkinshaw, 1997). However, CV activities can be organised in more informal and unfocused ways which do not require the existence of a distinctive CV unit. Future research might reveal new insights into the organisation of this CV process. Burgelman (1984a; 1985) provides a list of nine possible organisational designs through which CV activities may be exemplified. The current study has focused primarily on the *New Venture Division* design.

This study also proposes the importance of subjective interpretations of opportunities, of emotions and of negative outcomes in the evolution of the CV process. The study identifies the relationship between the parent-corporation and the CV team as the necessary relationship in defining the structure of the CV phenomenon. This study took the first steps in unfolding the moderating and mediating role of these constructs in understanding the CV process. Future research is required to further unfold their role.

The subjective interpretation of opportunities by the agent in association with his/her self-efficacy and locus-of-control need to be further examined in the context of the CV activities. This will enhance our understanding of the cognitive process that leads to the conceptualisation of CV as an alternative variation to value creation for a corporation. There is limited research to indicate how some corporate managers at the operational, middle and even senior level start to consider CV as a variation and identify it as an opportunity of a new routine for the corporation. The prior literature identifies experience in CV activities and an encouraging corporate environment (e.g. Kuratko et al., 2004) as contributors but there has been insufficient examination of the cognitive process followed by these managers and how this process might influence how CV is finally conceptualised and approached by a corporation. It is interesting to examine whether the idiosyncratic character of corporate entrepreneurial phenomena such as CV is associated with the subjective cognitive process of these corporate managers. The findings of this study indicated that the cognitive process of crystallising the approach towards CV continues to occur even if the corporation has been involved in CV activities. Experiential learning drawn from the way CV has been implemented in the organisational context is used to refine and revise the approach towards CV. Further research is required to replicate the dynamic role of experiential learning in the way CV is approached and implemented by large corporations. The implications of this stream of research will be significant for the role of training and mentoring corporate managers in involved in CV activities.

This study unfolded the processes occurring before, during and after the "*precipitating event*" that leads to the decision to be involved in CV activities. Further research is required in unfolding when and how this decisions starts to be treated as strategic. Covin and Miles's (2007) work on the strategic use of CV can be used as the starting point in decoding what the strategic use of CV means to corporations, and how its use might fluctuate from being strategic and tactical. This study proposes that the CV process holds both entrepreneurial and strategic potential. However, the empirical findings of this study indicate that corporations do not fully capitalise of the second potential, by anticipating strategic outcomes solely from the ventures and not from the CV process itself.

The importance of emotions was also revealed by this study. Building on the work of Cardon et al. (2005) further research is required to understand the moderating role of both negative and positive emotions in the CV process. The study focused primarily on the occurrence and consequences of negative emotions on the CV process, illustrating how corporate envy is perceived and expressed by non-venturing managers. This can be perceived as a one sided approach to examining an emotion, which involves at least two entities. Moreover, it is crucial to further clarify the possible mediating effect that pre-existing organisational culture might have in the emergence and expression of corporate envy. A longitudinal research design could also benefit the further refinement of the proposed model of perceived envy around the CV process, examining the fluctuation of envy as the corporation gains more experience with CV activities. Further research is also required to examine the occurrence and contribution of the emotion of passion in the CV process.

Finally, while the majority of the CV literature deals with the positive outcomes of the CV process, this study displayed the existence of negative outcomes and spillovers which occur during the initiation and the implementation of a corporation in CV activities. Kuratko *et. al.* (2005) indicate that the outcomes from the middle-managers' entrepreneurial behaviour can be potentially positive or negative at both individual and organisational level. Further research is required to enhance our knowledge of the character and significance of these negative outcomes on the conditions which produce them, their influence on the managerial behaviour within the CV team and across the organisation, and the mechanisms that can manage them effectively. The role of prior experience in CV activities in managing the occurrence of negative outcomes needs to be examined further.

Overall, even though empirical and theoretical research in the CV field has advanced significantly in resent decades, to explain the CV phenomenon remains a challenge for researchers. Partially, this might be related to the polymorphic exemplifications of CV by large corporations. There are various financial and business models used by corporations to conduct CV activities and create new ventures. The construction of typologies to describe CV has been influenced by this plurality and occasionally has reflected the trends of each CV wave (i.e. the emergence of the CV capital typology of CV activities in the late 1990s). Even though these typologies have assisted in organising our knowledge around these CV models, they have neglected CV activities which do not fit into these categories. On at least two occasions during the fieldwork of this study, the interviewees referred to activities which did not fit into the definition of CV (as used by main stream researchers of the field) as *"CV activities"*, or they were carrying out activities which met the academically constructed definition of CV but did not refer to them as *"CV activities"*. The use of abstracted definitions and typologies to describe the CV phenomenon appears to have constrained our access to the reality and complexity of the CV phenomenon. The thesis concludes with a call for a more grounded approach in defining and researching CV.

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9. APPENDICES

Appendix 9.1: Sample of letter to informants

Dear XX

I am a researcher in the Hunter Centre for Entrepreneurship at the University of Strathclyde working under the supervision of Professor Colin Mason on a study of the way that large companies manage their corporate venturing activities. The central issue in this study is the impact of corporate venturing activities on company performance and strategy.

I have identified through media searches and conversations with key informants that your company has been involved in corporate venturing activities. I would therefore be grateful for the opportunity to meet with you, or one of your colleagues, for one to two hours to discuss your company's experience of corporate venturing. Accessing your company's experience and knowledge will make a significant contribution to the success of my study which will be written-up as my PhD thesis.

I will follow-up this letter in a few days time with a phone call to your secretary to check that you are willing to participate in my study and, if so, to arrange a mutually convenient time and venue to meet. Let me emphasise that the information that you provide will be used for academic rather than commercial purposes. I am prepared to write up the details of your company in an anonymised fashion if necessary.

I look forward to the opportunity to meet with you.

Yours sincerely, Marina Biniari

Appendix 9.2: Interview Guide

Interview Section	Main question	Prompts
What are we talking about?	- What do you perceive as corporate venturing?	- Distinction between internal and external CV set of organisational actions would you position the set of actions related to CV
	- Which has been the experience of this corporation on corporate venturing?	- When did it start being interested in CV - When did it start being involved in CV - Possible sectors of investments
	- Why was the corporation initially involved into CV activities?	- Entrepreneurial activity, financial investment?
	- Through the years, how has the corporation approached CV?	- Formal – informal - Direct – indirect - examples of cases - portfolio of investee companies - character of approach towards them (i.e. financial, strategic etc., sole action or part of an overall set of actions)
Initiation of CV	- How is the idea for the corporate venturing activity initiated?	- people involved - justification process - intentions - formation of selection criteria of investee company - expectations at this initial stage of formation - From your experience can you recall any cases where a different initiation process was followed?
	- If we could use the example of ONE CV activity for illustration reasons, can you recall the main objectives of it and how it was initiated?	- What kind of Investee Company you were collaborating with? - How can you describe the expectations of the corporation towards this CV activity? - Were there any performance expectations set?
Implementation of CV	- Once the corporate venturing activity has been agreed to go ahead how is it administrated?	Generate story telling on issues regarding organisational structure and culture, resources and people involved by referring to them as a clarification to the phrase "managed internally"
	1.1 How is it related to the rest of the organisational structure?	- Why? - Is it the case for all CVs?
	1.2 Through the years can you identify any changes in the way(s) CV activities have been related to the organisational structure?	
	2.1 Could you explain me the role of people involved in the CV activities?	- Degree of autonomy - Tasks – responsibilities
	2.2 How are the CV activities staffed?	- Selection criteria (qualifications, experience, skills and possibly entrepreneurial behaviour) coming from different departments - HR policy through the years
	2.3 How a corporation like this one motivates these managers to work for CV activities?	- Bonus system and evaluation criteria
	3.1. How are the CV activities financed?	- Why this funding system of the CV activities has been preferred in comparison to other ones? - Through the years can you identify any change in the funding system of CV? Why do you believe this happens? - Are there any other resources involved?

	3.2. Are there any financial performance criteria set?	- How would you characterise the expected returns of a CV fund in comparison to other investments?
	4.1 Do you see corporate venturing fitting into the corporate culture of the corporation?	- Is that a feeling spread across divisions or different level of managers? - Through the years do you think that any change regarding how CV is perceived by the corporation has taken place?
	4.2 How would you characterise the overall culture within the corporation regarding CV?	- Organisational culture and to refer to issues as competitiveness, innovation and risk taking
	5. If we attempt to refer back to the example of the CV activity we used an illustration a few questions before, can you talk me through how it was handled regarding organisational structure, people, and resources?	
Outcome of CV	- Which was the outcome of the example of the CV example that we just referred to regarding financial performance strategic impact	- Outcome - Gaps between expectations and outcome - Areas of Gaps
	- How would you characterise the impact of CV activities that the corporation has been involved in 1. on the company's financial performance? 2. on the company's strategic objectives? 3. on the company's image? 4. on the company's culture?	- What is success / failure - areas of performance measurement - restricted by any constrains
	- Do you think that this outcome has affected the corporation's attitude towards CV?	- Why? - How?
	- What if anything has the corporation learnt from the involvement in CV activities?	- What has been learnt and in which areas - How has this knowledge being utilised?
	- In the hypothetical situation where the corporation had not been involved into CV activities, what do you think it would have been different for the corporation?	- Or what the corporation would be missing?
	- In the big debate whether CV is a financial investment or a strategic decision, where would you have position the corporation regarding its CV experience?	
	- Through the years can you identify any change in the way corporate strategy is formed and implemented and the way the CV activities of the corporations have performed?	- If yes, how would you characterise this change? - If No, why do you believe this is happening?
Establishment of rapport	Closing the interview and establish rapport for future contact in the case of clarification of	