PART II

ENTREPRENEURSHIP LITERATURE

REVIEW SECTION

Chapter 3: Entrepreneurship theory

3.1 Introduction

Good science begins with good definitions (Bygrave & Hofer, 1991: 13). Prevailing definitions of entrepreneurship have made it a clear target for scientific research by academics and practitioners alike. Such research has refined the understanding of entrepreneurship and its related constructs and concepts, thus facilitating better communication of research recommendations to policy makers. (Carton, Hofer & Meeks, 1998: 2).

The review of entrepreneurship literature indicates that there are two types of definitions: dictionary definitions and operational definitions. In a dictionary definition sense, the word *entrepreneur* derives from the French verb *entreprendre* and the German word *unternehmen,* both of which translate to 'undertake' (Carton et al., 1998: 3; Jennings, 1994: 11). This dictionary definition of entrepreneurship may be adequate for general communication but not for research and policy formulation. Operational definitions, on the other hand, specify characteristics of physical objects (e.g. a machine tool) or highly abstract objects (e.g. achievement motivation) and how such characteristics are to be observed, and are therefore more useful in research (Cooper & Schindler, 2003: 45).

This chapter presents a literature review of the approaches to defining entrepreneurship in the operational sense, and covers some of the concepts that are frequently used and are considered useful in describing the notion of entrepreneurship. Chief among such concepts is the 'innovation' construct; hence an interrelationship between innovation and entrepreneurship is accorded a dedicated section. The chapter ends with a synthesis of the most relevant and useful entrepreneurship concepts for promoting entrepreneurial activity in existing organisations, which is the subject of Chapter 4.

3.2 Entrepreneurship definition

Whereas there are numerous operational definitions of entrepreneurship in literature, in a broad sense there are two plausible approaches to defining it operationally: (i) the *psychological approach* and (ii) the *behavioural approach*.

The *psychological (or sociological) approach* is: to ask the question who the entrepreneurs are; to observe them; and then to define entrepreneurship inductively based on their *characteristics* as persons and on what they do as entrepreneurs (Carton et al., 1998: 7). This approach is also referred to as the 'trait approach', and it tries to establish a causal link between the characteristics and the actions of entrepreneurs.

Past empirical research and literature cite the following characteristics of entrepreneurs, among others: the *need for independence*; *locus of control*; *propensity for taking risk*; c*reativity and innovation* (Dollinger, 2003; Nieman & Bennett, 2002).These characteristics have to do with the individual's mindset and include self-confidence, persistence, passion, and the desire to achieve (UCT GEM Report, 2001: 7). According to the UCT GEM report (2001: 7), these characteristics are dependent on the business opportunity, the society and the individual's background; entrepreneurs are not necessarily born with these characteristics, but can acquire them through life experiences.

The psychological approach often raises questions such as: Are entrepreneurs made or born; Is there a gene for running a successful business; Is it about nurture or nature? Answers to these questions abound in the literature, including: 'You don't need a "name" to succeed'; 'Entrepreneurialism is a classless thing'; 'Entrepreneurs come from different backgrounds and have different qualities'; 'It is one thing to have the determination to succeed; you also need the technical backup as well'; 'The psychology is only part of the process; you also need the skills and the environment' (Smith, 2000: 48).

The psychological approach is useful in bringing to the fore the pertinent point that entrepreneurial abilities can be directly developed by education, training, and experience. These interventions result in the accumulation of the entrepreneurial competencies, knowledge and skills required to carry out all or part of the entrepreneurial process (Block & MacMillan, 1995: 7; Smith, 2000: 48).

The training intervention component of the present study, reported herein in Chapter 7, finds its theoretical underpinnings in the psychological approach of defining entrepreneurship.

The *second* approach, the behavioural approach, is: to ask what the entrepreneurial activity is, and then to define entrepreneurs as those who engage in such an activity. This approach focuses on the entrepreneurial process and not on the characteristics of the entrepreneur (Carton et al., 1998). Following the entrepreneurial process approach, Bygrave and Hofer (1991: 14) define entrepreneurship as involving 'actions associated with the perceiving of opportunities and the creation of organisations to pursue them'. For Nieman, Hough and Nieuwenhuizen (2003:9), entrepreneurship is about the actions of people who perceive opportunities in the market, take risks, gather or combine resources, and establish and grow organisations to meet such market needs for a profit as reward.

Early pioneers in the discipline of entrepreneurship appear to have looked at what entrepreneurs did as opposed to what traits they possessed. Richard Cantillon (1755) and Jean-Baptiste Say (1803; 1815; 1816; 1839) viewed entrepreneurship from the perspective of the related fields of Economics and Business Management (Nieman et al., 2003). Cantillon highlighted the role of an entrepreneur as taking risks such as the uncertainty of buying goods at certain prices and selling them at uncertain prices, and bringing about equilibrium of supply and demand. Say broadened Cantillon's definition to include the concept of combining factors of production.

More than a century later, Kirzner (1973; 1992; 1997) agreed with Cantillon's 'equilibrating' thesis of entrepreneurship, and provided the perspective that entrepreneurship is the process by which markets are brought from a state of disequilibrium toward a state of equilibrium through the opportunistic actions of individuals. From this perspective, entrepreneurial actions are equilibrating actions entailing the reallocation of resources and the introduction of new information into the marketplace, thus moving the market closer to equilibrium (Smith & Di Gregorio, 2002).

A contrasting but complementary school of entrepreneurship, based on the work of Schumpeter (1934; 1942), focuses instead on actions that move markets away from, rather than towards, equilibrium (Di Gregorio, 2005: 216). This school of entrepreneurship adopts a process approach, emphasising innovative actions that generate and disseminate new economic and business knowledge. Schumpeter (1939), considered to be the modern father of entrepreneurship, explained economic growth through entrepreneurship. He claimed that there were ratchet effects in innovation, such that entrepreneurial-driven spurts of economic activity led to progressively higher levels of income. Schumpeter (1934) insisted that *innovation* was the key driver of 'development', and that innovation involved discontinuous punctuated changes in the economic environment, which were brought about by a variety of things, such as sudden discoveries of new factors or supplies, but in particular entrepreneurial innovation. Schumpeter (1934: 74) asserted that one is an entrepreneur only when one actually 'carries out new combinations', and loses that status as soon as the establishment phase is complete and when one settles down to run one's business routinely.

Thus, the Kirznerian equilibrating actions and the Schumpeterian disequilibrating actions are distinct and yet mutually dependent parts of the same entrepreneurial process. At equilibrium, an entrepreneur could still undertake ground-breaking actions that move the market away from equilibrium. But these disequilibrating actions occur with much less frequency than equilibrating ones, and opportunities

to undertake them may not be available to all firms or entrepreneurs. Furthermore, it is unclear from existing research whether opportunities to undertake disequilibrating actions are greatest when equilibrium or disequilibrium conditions exist (Smith & Di Gregorio, 2002).

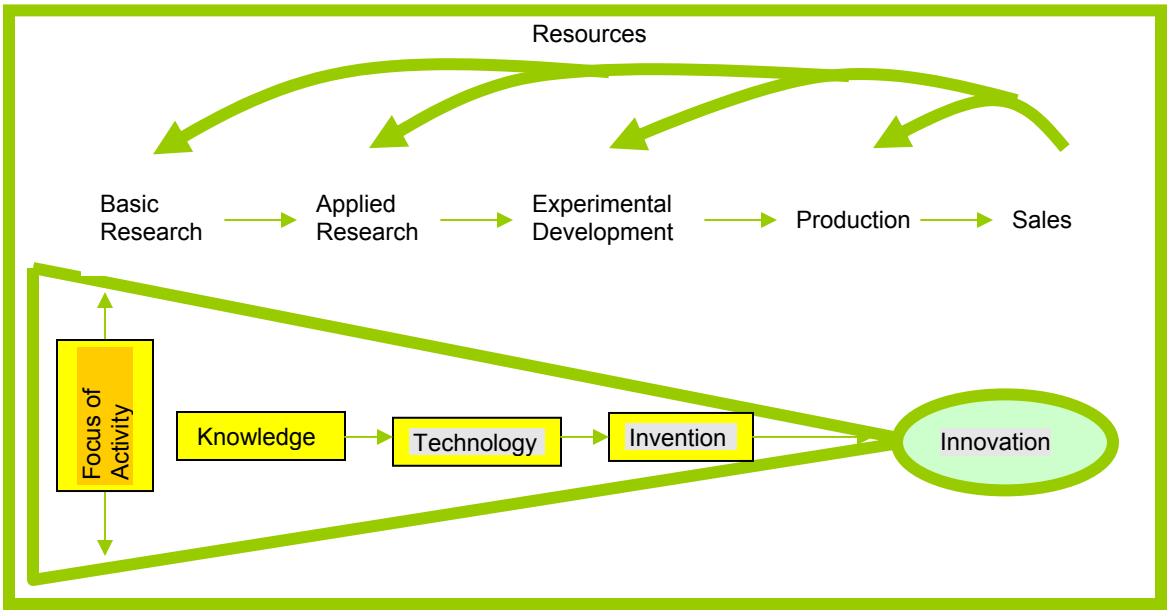
It is noteworthy that a Markinor survey, sponsored by the 'experimental DFI' of the present study to assess the competitiveness of the financial sector in financing development, found that the DFI was 'doing business as usual' and consequently losing market share to the more innovative commercial banks (Markinor, 2005). This finding contributed to the choice of the experimental DFI, and the new venture creation results of the experimental intervention are reported in Chapter 7 hereunder.

3.3 The innovation process and entrepreneurship

As can be seen from the above literature review, innovation is a critically important component of entrepreneurship. The innovation process comprises a series of distinct and apparently sequential phases in the realisation and transformation of new knowledge into new products and processes. Broadly, the phases can be named as '*pure research*' and '*applied research*'. Alternatively, they can be named as 'science' and 'technology' or as 'knowledge' and 'products'. This categorisation is useful in establishing a linkage between *knowledge generation* and *socio-economic implications*.

This phased conception of the innovation process is supported by Von Braun (1997), who recorded the emergence of a frequent notion of the process of innovation that combines the individual phases mentioned above into a mental model summarised in the cycle shown in Figure 3.1 below:

Figure 3.1: Simple model of the innovation process



Source: Adapted from Von Braun (1997: 20)

In this simple innovation model, *creativity* may be substituted for *knowledge*, whereas *technology* and *invention* may be lumped together as *invention.*

The process of innovation is not always as sequential as it may appear to be in the above model. It is indeed iterative, and Drucker (1985) concurs that innovation can also be induced by, inter alia, external market forces, and innovation in turn may produce new knowledge, and thus cause a backward iteration that is depicted by the backward looping arrows in Figure 3.1.

3.3.1 Creativity and innovation

The early phase in the innovation process involves *creativity,* or knowledge generation or basic research, as it is referred to in the above 'simple innovation model'. Creativity is a dynamic whole-brain activity that involves conscious and subconscious mental processing in both generating an idea and making something happen as a result. Essentially, creativity has the features of newness, novelty, surprise, uniqueness and utility. 'Creativity is seen as higher order thinking or divination' (Lumsdaine & Binks, 2003: 23). It is expressed in the

quality of ideas and theoretical solutions and is therefore a necessary condition for inventions and innovation (Lumsdaine & Binks, 2003: 24-25).

Luecke (2003: xi) posits that many see innovation as a process that begins with two creative acts: idea generation and opportunity recognition. In the first, a person develops an insight about something new. Idea generation sometimes takes the form of a technical insight with no apparent commercial application. Opportunity recognition occurs when value to the customer is perceived from the initial idea. Once the opportunity is recognised and a financial feasibility is proved, the next phase of the process is idea development, followed by a long and bumpy road toward the commercialisation of the innovation. Commercialisation is where the idea, converted into an innovation, is finally tested by the customer.

In the context of entrepreneurship, it is creativity that leads to entirely new products. It originates in an individual's mind, whereas innovation involves a team and subsequently a wider organisation. One of the key differences between creativity and innovation is the timing. Creativity constitutes the ideas that are often needed before product or service development, whereas innovation is the process that converts such ideas into products and services. Innovation takes place much later in the entrepreneurial process and it builds on creativity. Creativity is thinking about something, whereas innovation is doing something about it.

3.3.2 Invention and innovation

Schumpeter (1934) distinguished invention from entrepreneurial innovation. He hypothesised that the latter involved not only figuring out how to use inventions, but also involved introducing new means of production, new products, and new forms of organisation. In his view, innovation takes just as much skill and daring as does the process of invention.

Invention is similar to discovering something new. It is often associated with something that is unknown at the time of their development, something that is *unknowable* (Christensen, 2003: 165). Christensen argues that most managers learn about innovation in a sustaining technology context. Such innovations are, by definition, targeted at known markets in which customer needs are understood. This implies that the innovation process that follows discovery is a collaborative effort between suppliers and customers. They discover the product that meets customer needs together. The strategies and plans that managers formulate for confronting such discoveries, or disruptive technologies, must therefore be plans for learning and discovery, rather than plans for development and execution (Christensen, 2003: 166).

Christensen's views above appear to portray invention as something mysterious and which cannot be planned for before hand. Planning begins only after the invention has been made. A contrary view is the view that associates invention with research. Drucker (1985: 34) argued that by 1914, the time World War I broke out, invention had become a systematic, purposeful activity, which is planned and organised with high predictability of the results. Drucker goes on to advise that something similar now has to be done with respect to innovation. Entrepreneurs have to learn to practice systematic innovation

3.3.3 Change and innovation

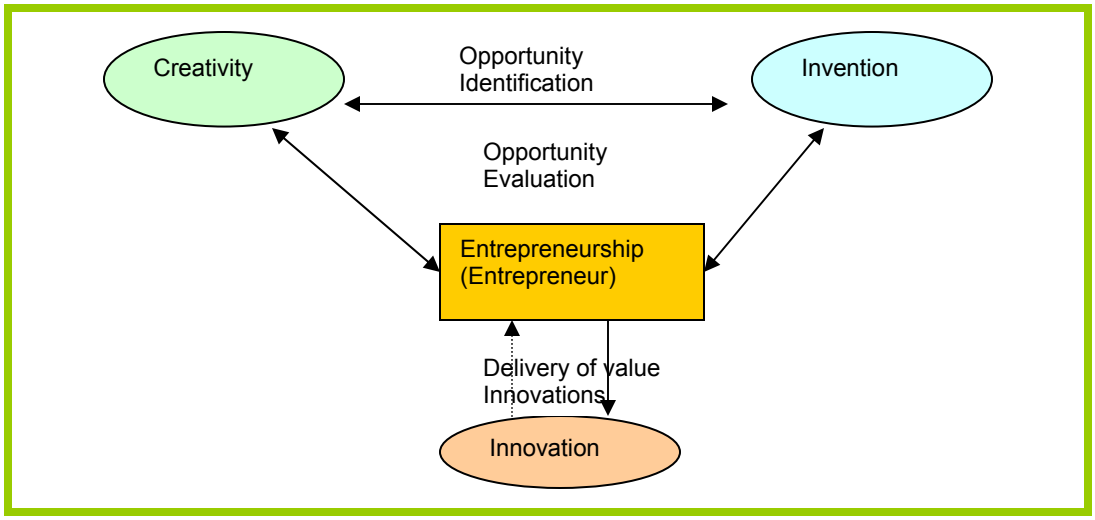
The 'new and different' is, however, motivated by change. The purposeful and organised search for such change and the systematic analysis of the opportunities presented by it constitute 'systematic innovation' (Drucker, 1985: 31). While Drucker (1985: 98-110) postulates that the discipline of innovation, which he refers to as the knowledge base of entrepreneurship, is a diagnostic discipline for identifying entrepreneurial opportunities, entrepreneurs do not only respond to change. They in fact cause and enable change (Di Gregorio, 2005). They unite all means of production (e.g. labour, capital and land) through innovative processes (Say, 1803 to 1832, in Nieman et al., 2003).

Therefore, entrepreneurs seek or attempt to cause market changes, applying innovation while taking risks. Within this process, ideas are identified and converted into opportunities to create a change in the marketplace.

3.3.4 Entrepreneurship and creativity, invention and innovation

As depicted in Figure 3.2 below, at the centre of the innovation process is the entrepreneur.

Figure 3.2 The process of entrepreneurial innovation



Source: Adapted from Wickham (2001: 222)

In this diagram, Wickam's (2001: 222) lines directly connecting creativity with innovation, and also those directly connecting invention with innovation, have been removed to emphasise the centrality of entrepreneurship and the entrepreneur in the delivery of innovation. The intention is, however, not to under-emphasise the backward iteration of the model, which indeed exists.

Therefore*, innovation* is an integral later part of the entrepreneurial process. It is the ultimate 'tool' and means by which entrepreneurs exploit change as an opportunity for a different business or service (Drucker, 1985). For Wickham (2001: 57), innovation lies at the heart of entrepreneurship, yet to believe in innovation, and to realise it, it is imperative to see a future that will be different

from the present. Entrepreneurs see that desired future and have the necessary motivation to achieve it.

In economics, innovation is seen as the act that endows resources with a new capacity to create wealth. Whatever changes the wealth-producing potential of already existing resources constitutes innovation. Therefore, innovation does not have to be technical, neither does it need to be a 'new thing' altogether, nor does it have to be based on scientific and technological discovery. In other words, innovation can be expressed as an economic or social phenomenon rather than a technical term. However, successful entrepreneurs, motivated by money, power, curiosity or desire for fame and recognition, try to create value and to make a contribution. They are not content simply to improve or modify on what already exists. They try 'new combinations' of existing resources.

3.4 Conclusion

The literature review of entrepreneurship in this chapter serves the following purposes: it lays the basis for a more focused discussion of the phenomenon of entrepreneurship within established organisations (Corporate Entrepreneurship); it identifies distinctive individual characteristics that should be targeted to foster CE; it establishes an interrelationship between an individual and the environmental context where entrepreneurial activity occurs; and it focuses due attention on the activities of the entrepreneur, rather than unduly on the traits of the entrepreneur.

The identified individual characteristics of potential entrepreneurial behaviour that should be borne in mind for the purposes of the present study are: risk-taking propensity; desire for autonomy; need for achievement; goal orientation; and locus of control. The purpose served by the identification of these individual characteristics is to target interventions such as coaching, training and development, while avoiding mismatches between individual motives and organisational needs.

It is also noted from the literature that entrepreneurs are not necessarily born with entrepreneurial characteristics, but that such characteristics can be acquired through life experiences and focused learning. Thus, entrepreneurial abilities can be directly developed by education, training, and experience. The result of such education and training is the accumulation of the entrepreneurial competencies, knowledge and skills required to carry out all or part of the entrepreneurial process (Block & MacMillan, 1995; Smith, 2000).

The training intervention component of this present study, reported in Chapter 7, is based on the theoretical underpinnings of the entrepreneurship theory, particularly: the theory that entrepreneurship can be nurtured; that entrepreneurial actions are associated with the perceiving of opportunities and the creation of organisations to pursue them; and that innovation lies at the heart of entrepreneurship and is seen as the act that endows resources with a new capacity to create wealth or change a socio-economic order for the better.

Unless opportunities and events are perceived and acted upon by members of the organisation, the individual characteristics, whether latent or developed, are worthless. It is for this reason that the behavioural approach to entrepreneurship is useful, in its focus on what entrepreneurs do within established organisations. The next chapter will further develop this argument by looking at the contextual factors within which such actions occur.

Chapter 4: Corporate Entrepreneurship

4.1 Introduction

The challenge faced by established corporations today is harnessing the energy of achievement-motivated employees who yearn to create new products, services and processes. Corporations are faced with the dilemma of needing to have order and control while allowing creative employees to think and act 'outside the box' of control and structure.

The following sections of this chapter review the literature on the various aspects of the notion of corporate entrepreneurship, thereby attempting to define the practice of entrepreneurship within corporations operationally. Corporate entrepreneurship theories are discussed first in order to establish a conceptual framework within which the various manifestations and dimensions of corporate entrepreneurship can be discussed and understood. The chapter ends with a synthesis of the corporate entrepreneurship constructs and relates them to the empirical study section of the thesis.

4.2 The Corporate Entrepreneurship construct

In defining entrepreneurship, Schumpeter (1934) did not limit his notion of the 'pursuit for a discontinuous opportunity' to new ventures only, he also allowed for entrepreneurship to exist within established organisations. Gartner (1989) disagreed and defined entrepreneurship as the creation of new organisations, thus excluding many of the activities commonly associated with corporate entrepreneurship, such as championing and creation of supportive structures and cultures to foster innovation. Other authors, such as Pinchot (1985) perceive corporate entrepreneurship as an extension of individual entrepreneurship within the context of existing organisations, that is: intrapreneurship. Still others approach corporate entrepreneurship from an organisational perspective and are concerned with the organisational and environmental factors that influence the

entrepreneurial process (Covin & Covin, 1990; Zahra, 1991; Russell & Russell, 1992; Zahra & Covin, 1995).

Bygrave (1995) excluded intrapreneurship from his definition of entrepreneurship. His exclusion was based on the assumption that a typical entrepreneur 'risks all his personal cash-flow, some or all of his personal capital, and his career in starting a new venture, which would not be viable without him'. Bygrave's exclusion assumes that corporate entrepreneurs do not risk *personal* cash-flow or *personal* capital, nor do they place their careers at risk. Carton et al. (1998) dispute this exclusion by asserting that these entrepreneurs also do risk *personal* cash-flow streams by placing their personal careers or jobs at risk should the corporate ventures or innovations they promote fail.

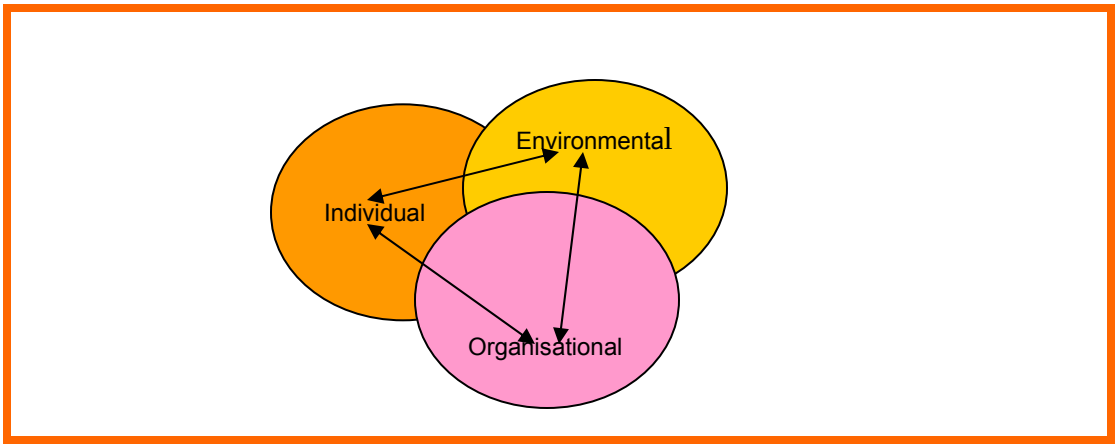
As indicated in the previous chapter, it is documented in the literature that an integral part of the entrepreneurial process is innovation. As such, in literature, corporate entrepreneurship and innovation concepts are used interchangeably. Covin (1999) states that innovation, broadly defined, is the single most common theme underlying all forms of corporate entrepreneurship. Covin (1999) goes further and defines corporate entrepreneurship as the presence of innovation, and adds competitive superiority to his definition. Schindehutte et al. (2000) mention several authors who link the process of 'organisational renewal' with 'innovation' (Miller & Friesen, 1985; Burgelman, 1984; Kanter, 1983; Naman & Slevin, 1993; Miller, 1990; Zahra & Covin, 1995). For Russell (1999), fostering entrepreneurial behaviours and practices assumes prime importance in the grand strategies of many firms where innovation is perceived as key in establishing and maintaining competitive advantage and initiating corporate renewal. Barrett, Balloun and Weinstein (2000) posit that corporate entrepreneurship is an organisational process that encourages and practises the utilisation of innovation, constructive risk-taking, and pursuit of new opportunities.

In modern times, the entrepreneurial function is widely exercised through strategic management, corporate planning, research and marketing structures

within corporations. Strategic management can therefore be a process that deals with the entrepreneurial work of the organisation and with organisational renewal and growth (Morris & Kuratko, 2002: 153). Senior management in large corporations has become increasingly aware of the need for entrepreneurial thinking, such as the infusion of organisations with innovative behaviours (Ginsberg & Hay, 1994; Schindehutte et al., 2000). Morris and Kuratko (2002) refer to this infusion as corporate entrepreneurship, while Pinchot (1985) uses the term intrapreneurship. Simon et al. (1999) call it a managerial approach that will stimulate innovation and re-energise employees.

A review of these and other definitions indicates that entrepreneurship in established organisations is a multi-dimensional phenomenon that incorporates individual, organisational and environmental elements, and is defined by the innovative nature of the actions performed. Figure 4.1 portrays a conceptual interactive relationship between individual, organisational/internal and environmental/external factors in corporate entrepreneurship.

Figure 4.1: Interactive relationship of CE contextual factors

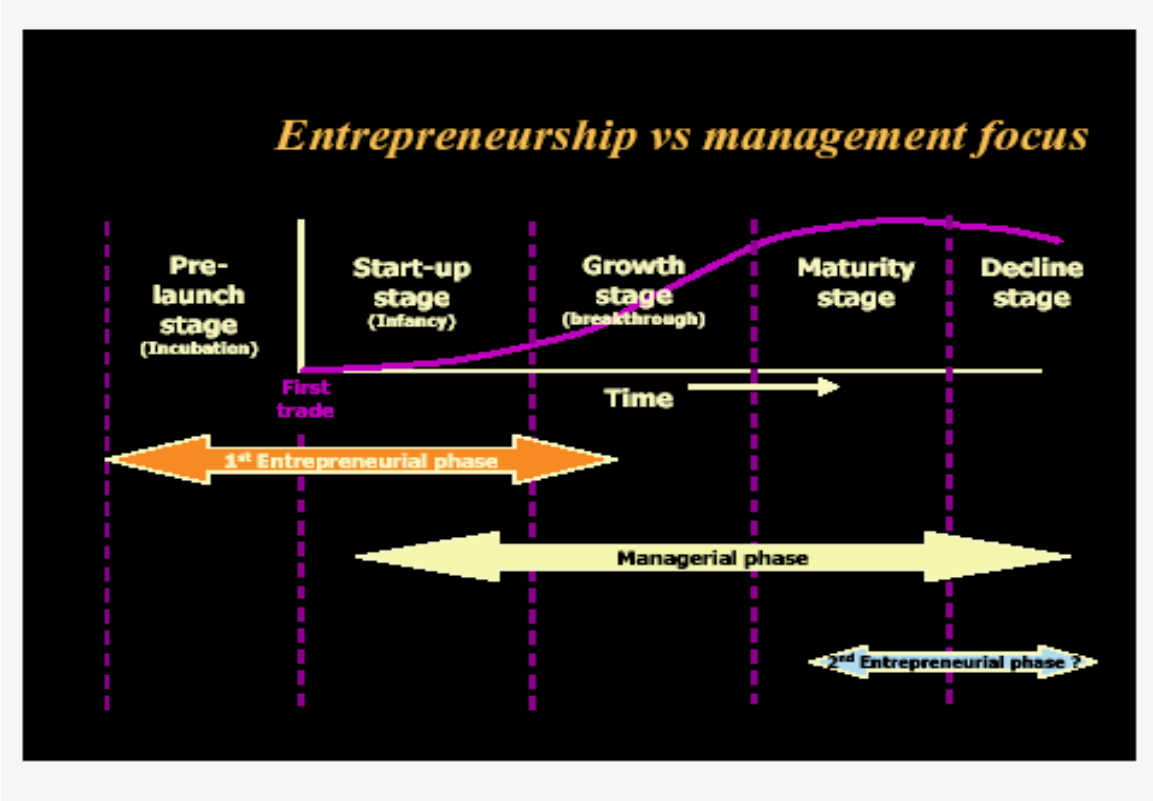


Source: Adonisi (2003)

A literature review of the individual factors is contained in the previous chapter. This chapter focuses on the organisational/internal factors and their interactive relationship with the individual factors in facilitating corporate entrepreneurship. The environmental/external factors are not dealt with in the present study.

It is further posited, as depicted in Figure 4.2, that a transition occurs at some point from entrepreneurship to general management as the organisation evolves and the actions change. Pursuing a 'discontinuous opportunity' constitutes entrepreneurship, whereas incremental changes that routinely occur in organisations constitute general management (Carton et al., 1998).

Figure 4.2: Transition from entrepreneurship to general management



Source: University of Pretoria M.Phil.-Entrepreneurship lecture notes (2005)

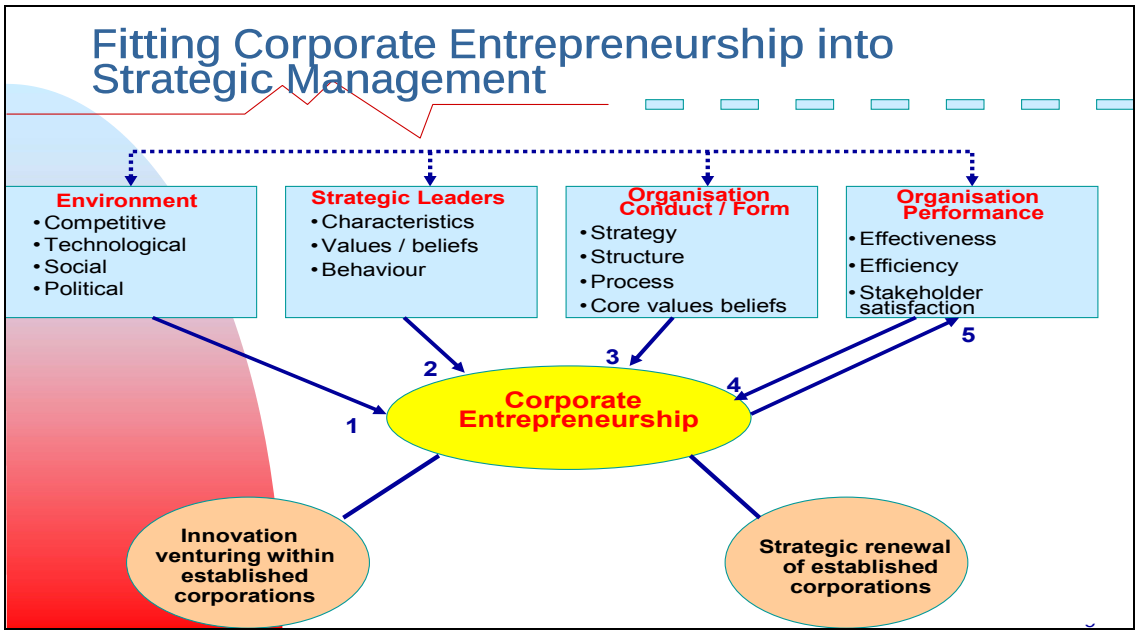
4.3 Corporate entrepreneurship conceptual models

The discussion in the preceding section alludes to the existence of corporate entrepreneurship antecedents and outcomes. The following sections give an overview of key contemporary corporate entrepreneurship conceptual theories and models. The emphasis of the discussion is on the nature of interrelationships between the individual and organisational antecedents, as well as on the outcomes of the entrepreneurial process.

4.3.1 Guth and Ginsberg CE model

In their definition of the CE construct, Guth and Ginsberg (1990: 5) posit that corporate entrepreneurship encompasses two types of phenomenon and the processes that surround them: the birth of new businesses within existing organisations (i.e. internal innovations or ventures); and the transformation of organisations through renewal. These authors' conceptual model depicts CE from a strategic management perspective, as shown in Figure 4.3.

Figure 4.3: A strategic management perspective model of CE



Source: Guth and Ginsberg (1990: 5-15).

The model by Guth and Ginsberg (1990) treats the following factors as antecedents of CE: environment, such as competition or technology; strategic leadership posture, such as values and behaviours; organisational form, such as structure and processes; and organisational performance, such as efficiency and job satisfaction.

The key weakness of the model is that it resembles a flow chart, and therefore depicts a sequential relationship between the CE factors and corporate

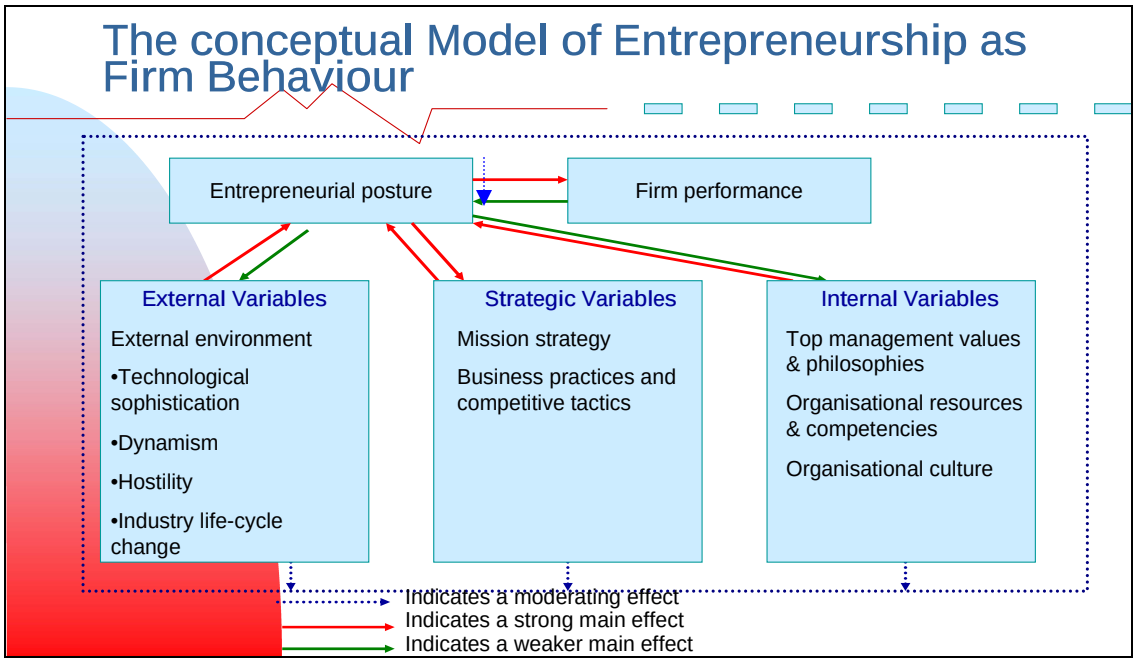
entrepreneurship. Except for the relationship between CE and organisational performance, possible feedback loops and interrelationships between the CE factors on the one hand, and between corporate entrepreneurship and the CE factors on the other, are not depicted.

4.3.2 Covin and Slevin CE model

According to Covin and Slevin (1991), CE involves extending the firm's domain of competencies and corresponding opportunity set through internally generated new combinations of resources. These authors developed a model, as illustrated in figure 4.4, which seems to improve on that of Guth and Ginsberg (1990) in at least two ways: by depicting feedback loops between CE factors and corporate entrepreneurship; and by not being too specific about the type of corporate entrepreneurship – reference is only made to entrepreneurial posture.

The key feature of the model is the recognition that entrepreneurial orientation influences the external environment and the internal variables, albeit to a weaker extent. Conversely, organisational performance has a weaker effect on entrepreneurial orientation. Significantly, it also highlights the acknowledgement that the three CE factors – environment, strategic variables and internal variables – have a moderating effect on the relationship between entrepreneurial orientation and organisational performance.

Figure 4.4: Firm-level behaviour model of CE



Source: Covin and Slevin (1991: 7-26).

Zahra (1991; 1993) criticised the reference in Covin and Slevin's (1990) model to the entrepreneurial posture construct without defining it. Zahra's criticisms and improvements of the model are incorporated in his own model, which is discussed next.

4.3.3 Zahra CE model

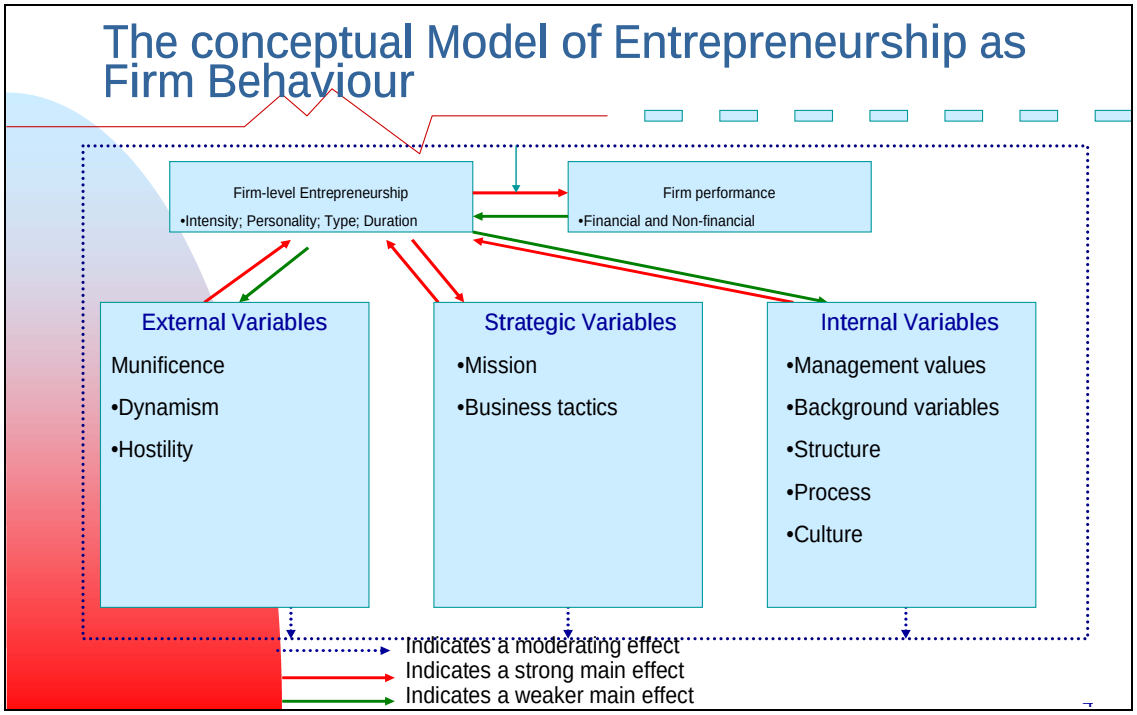
Zahra (1995: 227; 1996: 1715) sees corporate entrepreneurship as the combination of all the firm's efforts on innovation, renewal and venturing. Innovation involves creating and introducing new products, organisational processes and systems; venturing encompasses expanding existing operations or entering into new markets; and renewal entails revitalising the organisation's business model.

Zahra (1993) essentially revises Covin and Slevin's (1990) model in that he merges the technological environmental factor with the dynamism environmental

factor; he adds a new construct called 'munificence' to draw attention to a related construct of opportunity seeking; and he defines entrepreneurial behaviour more clearly, by differentiating between constructs such as 'intensity of behaviour', 'formality of entrepreneurial activities', 'types of entrepreneurial behaviour' and 'duration of such efforts'.

Zahra (1993) also recognises the possibility that different kinds of entrepreneurial posture may influence different dimensions of performance differently and at different times. Regarding the locus of entrepreneurship, he argues that CE occurs at multiple levels within an organisation.

Figure 4.5: Revised firm-level behaviour model of CE



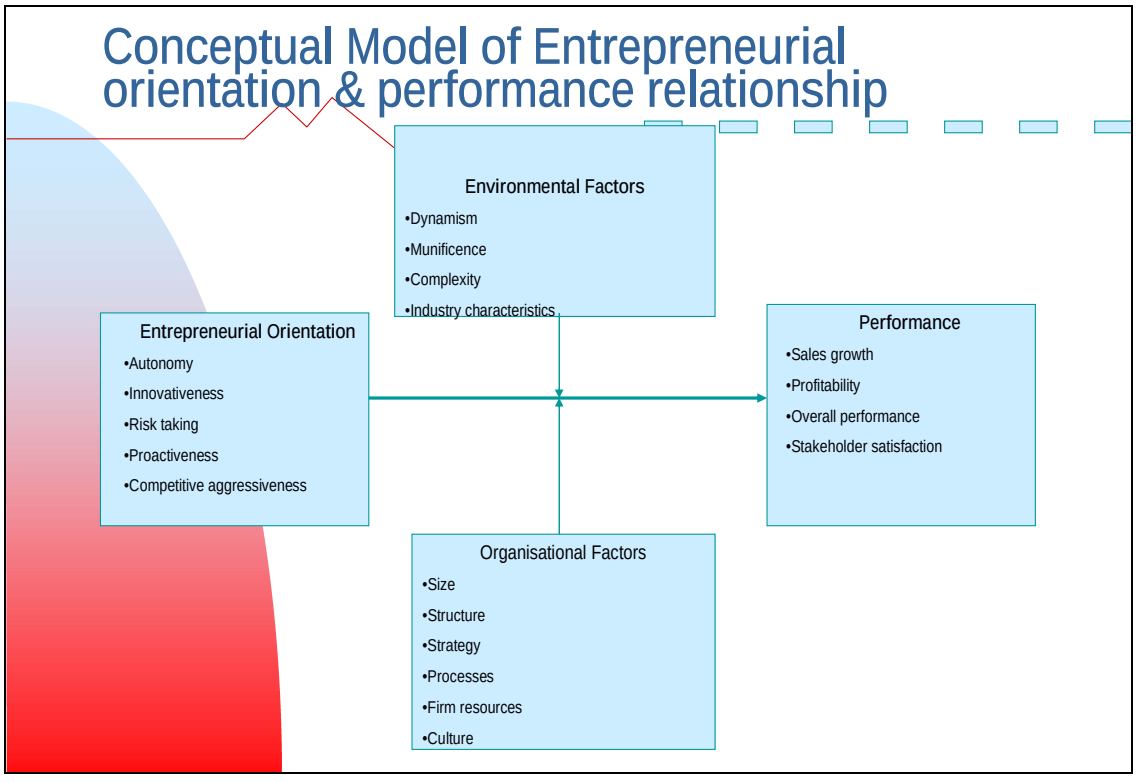
Source: Zahra (1993)

The present study and research instrument take account of all Zahra's (1993) internal variables.

4.3.4 Lumpkin and Dess CE model

As depicted in Figure 4.6, Lumpkin and Dess (1996) present an alternative CE model which describes entrepreneurial orientation in terms of five dimensions: autonomy; innovativeness; risk taking; proactiveness; and competitive aggressiveness. According to Lumpkin and Dess (1996), entrepreneurial orientation refers to the processes, practices and decision-making activities that lead to entering new markets with existing or new goods and services. In this context, a new entry is the idea that underlies the concept of CE (Adonisi, 2003: 47). Key dimensions that characterise entrepreneurial orientation include a propensity to act autonomously, and a willingness to innovate and take opportunities (Lumpkin & Dess, 1996).

Figure 4.6: Entrepreneurial orientation and performance model of CE



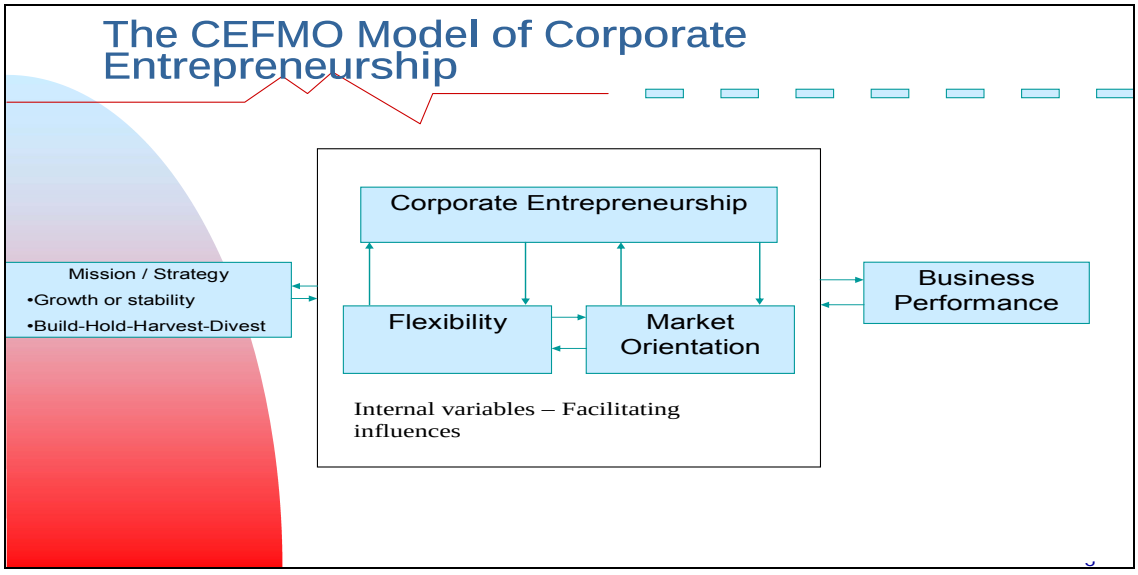
Source: Lumpkin and Dess (1996)

4.3.5 Barrett and Weinstein CE model

Barrett and Weinstein (1998) designed their CE model in an effort to explicate the strategy of an organisation with respect to CE, flexibility, market orientation and business performance. In their model they recognise the reciprocal influences that exist between strategy, internal facilitating variables and business performance.

Market orientation is envisaged as the direct linkage between marketing and corporate entrepreneurship and as the basis for a sustainable competitive advantage (Barrett & Weinstein, 1997). Market orientation requires that an organisation be able to process information quickly, and this in turn presupposes that there is a high level of flexibility with the organisation. Flexible organisations create more autonomy for employees (Adonisi, 2003). Barrett and Weinstein's (1998) dynamic model is shown in Figure 4.7.

Figure 4.7: CEFMO model of CE



Source: Barrett and Weinstein (1998)

4.3.6 Several other integrative CE models

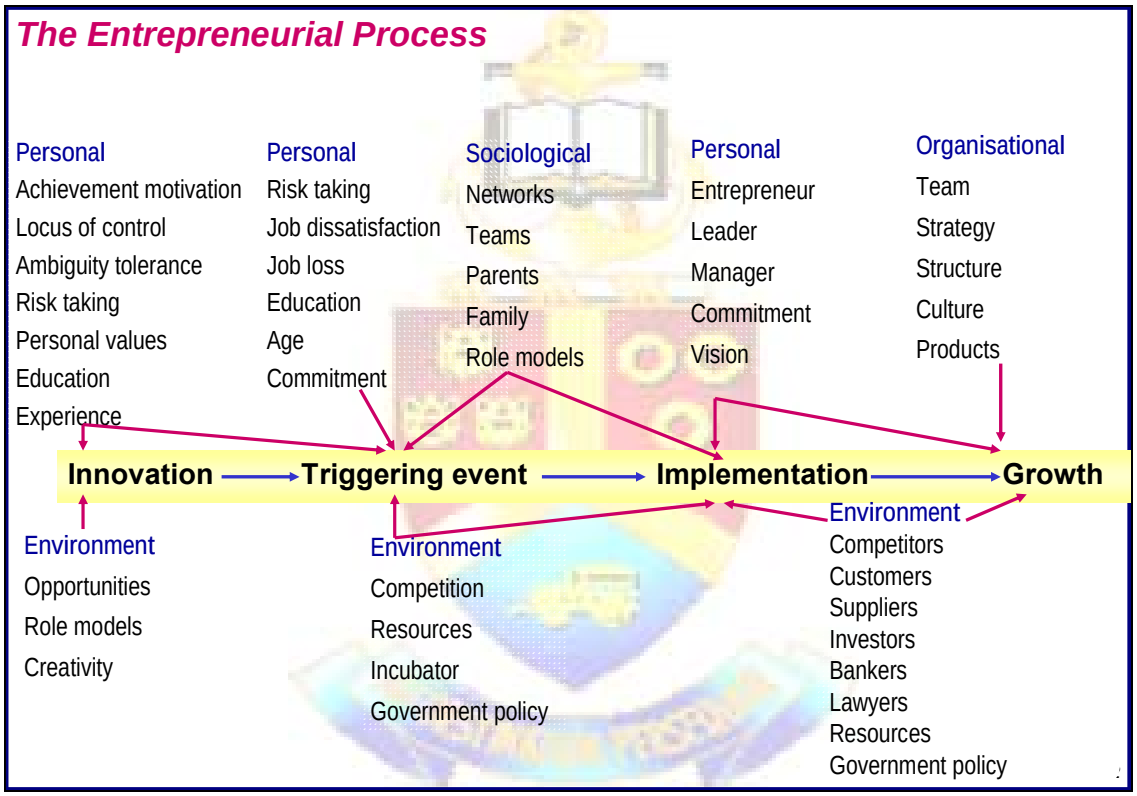
Discussed together in this section are the more integrative contemporary models of CE. These models all confirm that corporate entrepreneurship is a single phenomenon with multiple components. They indicate that there are mainly individual, organisational and environmental factors that are related to CE behaviour (Covin & Slevin, 1991; Hornsby et al., 1993; Morris, Lewis & Saxon, 1994).

On the subject of individual factors, it is argued that the propensity to act entrepreneurially is a function of motivation (McClelland, 1976), which in turn is a function of the individual's innate personality and the environmental and organisational context in which that action occurs.

Regarding the organisational factors, there is general support in the literature for the view that CE is a function of the organisational context (for instance, Morris & Kuratko, 2002). Organisational context has been defined as a set of administrative and social arrangements that shape the behaviour of individuals in the organisation over which top management have some control. Organisational factors such as management support, reward systems, organisational structures and bureaucracies, resource/time availability, and freedom to act, all influence and shape the behaviour of people who work in that organisation.

Taking into account all these factors, the following four models present a summarised picture of an integrated approach to corporate entrepreneurship.

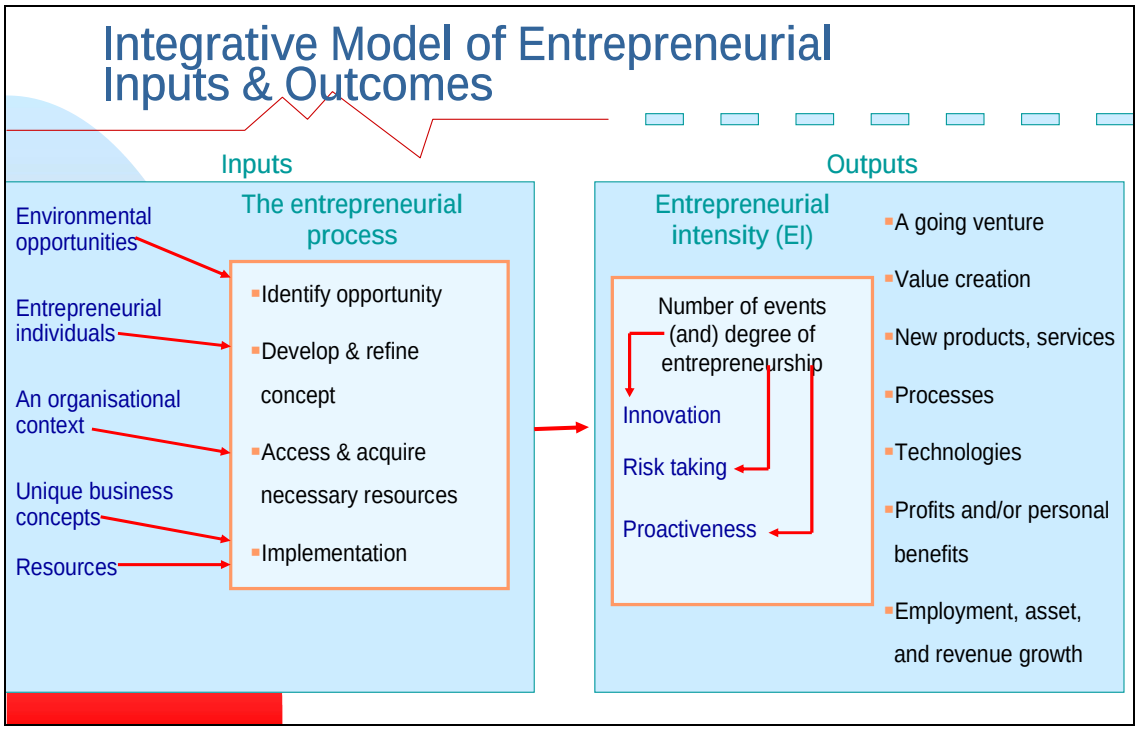
Figure 4.8: Entrepreneurial process model of CE



Source: Hisrich and Peters (2002: 39)

In Figure 4.8, Hisrich and Peters (2002: 39) present a process model of CE and suggest that CE: can be broken down into steps and stages; is a logical progression of events through an innovation life cycle; and can be applied to any organisational context, depending on the environmental context within which an entrepreneurial event occurs. The model identifies personal, sociological, organisational and environmental or external factors that trigger or moderate an entrepreneurial activity.

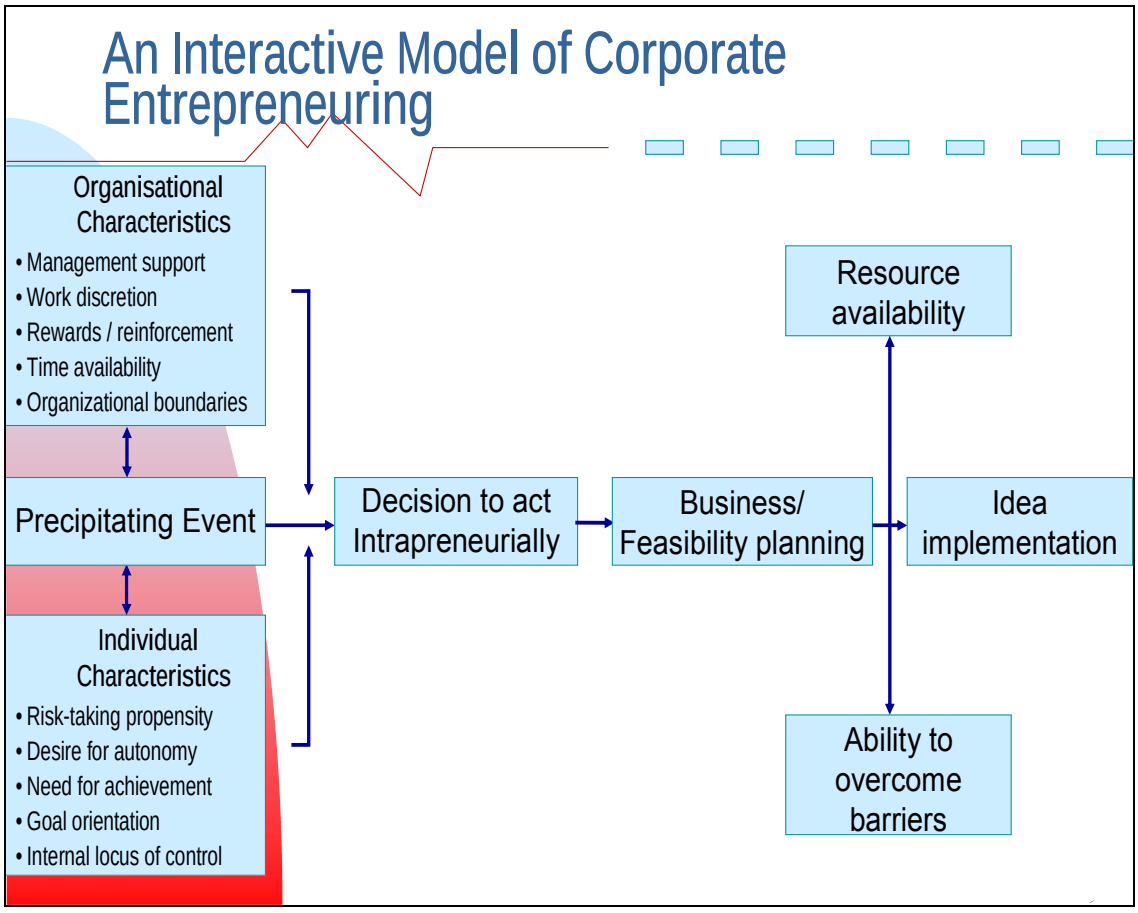
Figure 4.9: Input-outcome integrative model of CE



Source: Morris et al. (1994: 21-31).

Figure 4.9 presents a different model that is built around the concepts of inputs to, and outcomes from, the entrepreneurial process. The inputs component focuses on five sub-components that contribute to the entrepreneurial process itself, for example the environmental opportunities such as technological developments; the organisational factors; and the individual entrepreneurs who identify and pursue such opportunities. The outcomes component focuses firstly on the indicators of the level of 'entrepreneurial intensity', such as the incidence of risk taking, innovation and proactiveness, and secondly on the types of outcome of the entrepreneurial activity, for example successful ventures, new products and benefits or profits.

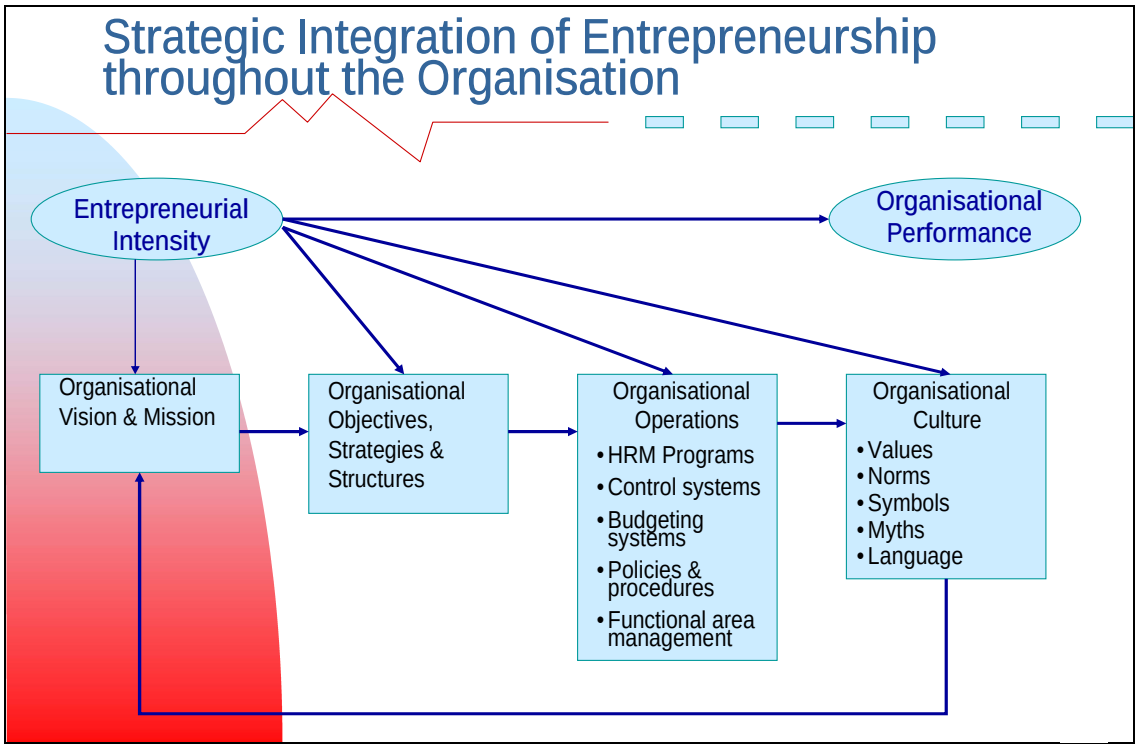
Figure 4.10: Precipitating event integrative model of CE



Source: Hornsby et al. (1993: 31)

The corporate entrepreneurship model presented in Figure 4.10 focuses on the integration of organisational factors and individual characteristics that are ignited by a precipitating event. This precipitated interactive integration then leads to what appears to be a sequential process, albeit moderated by resources and barriers at the implementation stage of the process (Morris & Kuratko, 2002).

Figure 4.11: Strategic integration model of CE



Source: Morris and Kuratko (2002: 34, adapted from Covin and Slevin, 1991: 7-26).

The next model, depicted in Figure 4.11, presents a strategic integration framework that approaches entrepreneurship as an overall orientation within an organisation, as contrasted with merely viewing entrepreneurship as a discrete activity, event or behaviour (Morris & Kuratko 2002: 33). Corroborating the other models, this strategic integration model posits that the entrepreneurial orientation or intensity is an integral component of an organisation's vision and mission and has a direct positive influence on organisational performance. According to Morris and Kuratko (2002: 34), the main feature of this integrative model is the provision for considerable management intervention and thus the reduction of the perception that corporate entrepreneurship is serendipitous or mysterious.

4.3.7 Relationship between CE and corporate performance

To conclude the overview discussion of the corporate entrepreneurship conceptual models above: the literature in general documents an increasing body of knowledge to support the proposition that corporate entrepreneurship has a generally positive effect on corporate renewal and corporate performance, mostly financial performance (Fombrun & Ginsberg, 1990; Covin & Covin, 1990; Jennings & Seaman, 1992; Zahra & Covin, 1995; Pearce II et al., 1997; Goosen, de Coning & Smit, 2002). There is general support for the view that higher levels of profitability result from entrepreneurially driven creation and introduction of new products and technologies (Devinney & Lengnick-Hall, 1992; in Goosen et al., 2002: 21). Morris and Sexton (1996) found that there is reason to believe that the level of entrepreneurial intensity may positively affect performance outcomes in a company and that this strengthens over time (Morris & Sexton, 1996: 8; 11), since research and development costs are defrayed over time.

Van der Post (1997: 75) suggests that financial performance is an all-encompassing indicator of the outcomes of 'system dynamics in an organisation'. In support of this view, Zahra and Covin (1995:15) argue that the relationship between performance and corporate entrepreneurship exists for two reasons. Firstly, innovation can be a source of strong positive market reputation and thus competitive advantage for an organisation. *Sustained* innovation sets an organisation apart from its rivals, and therefore makes it profitable. Secondly, entrepreneurial organisations are *agile, flexible and quick* to respond to lucrative opportunities. Davila, Epstein and Shelton (2006: 3) agree that, in the long run, the only reliable security for any company is the ability to innovate better and longer than competitors. Not only does corporate entrepreneurship constitute a weapon in competitive markets for established organisations to enhance their performance, it also contributes to their survival and growth.

Davila et al. (2006: 2) also posit that innovation has proven itself as an important source for redefining philanthropy and government under the umbrella of social

entrepreneurship. Zahra (1993) refers to this as 'munificence'. Dees (1998) defines social entrepreneurship as a combination of the passion of a social mission with the image of a business-like discipline, innovation and determination. In addition to innovative for-profit ventures, social entrepreneurship can include social-purpose business ventures, such as for-profit community banks (Dees, 1998). The best-known examples of social entrepreneurial ventures are Grameen Bank's micro-credit schemes, which offer a chance for low-income individuals to start or grow their businesses. These schemes have dramatically changed the standard of living of thousands of people who were denied access to loan finance by commercial banks' high interest rates, thus trapping them in poverty (Davila, 2006: 2).

4.4 Corporate entrepreneurship manifestations

To decipher a set of key drivers and inhibitors of corporate entrepreneurship from the corporate entrepreneurship literature and models presented above, it is useful to first examine the many forms in which entrepreneurship manifests itself in various organisations that have practised it**.** Jennings (1994: 185-193) suggests three perspectives for describing corporate entrepreneurship forms or types: the departmental innovation; corporate venturing; and intrapreneurship. These and other perspectives are discussed next.

4.4.1 Departmental innovation

The first perspective describes what Jennings refers to as *organisational innovation*. The outcomes of organisational innovation that are most related to corporate entrepreneurship are technological and administrative innovations. They occur internally and are controlled by the organisation's management. Schollhammer (1982) also refers to this type of corporate entrepreneurship as administrative (traditional research-based) innovation. This research-based innovation is akin to what can be described as 'basic research' in Von Braun's (1997) model discussed in Chapter 3. In established corporations, it is often

referred to as 'research and development' (R&D), and is a departmental activity primarily focused on creativity or new knowledge generation.

Jennings (1994: 185) supports other previously cited researchers who have identified *individual*, *organisational* and *environmental* variables that influence the quality and quantity of outcomes of the organisational innovation (or corporate entrepreneurship). Individual variables include values, roles and personalities of the organisational leadership; organisational variables include specialisation, size and administrative intensity; and environmental variables include market stability and the number of resources available to support the organisation.

The main criticism of this perspective is that it is too inwardly focused and underplays the power of partnerships. For example, instead of the usual R&D unit testing new products, an organisation could try outsourcing innovation testing to its customers. Microsoft has successfully relied on this technique in the past (Davila et al., 2006: 102). Incremental innovation, as opposed to radical innovation, would thrive under the organisational or administrative innovation model.

4.4.2 Corporate venturing

The second perspective suggested by Jennings (1994: 187) is the notion of *corporate venturing*. Covin (1999) refers to this as the phenomenon in which an established organisation enters a new business. Corporate venturing describes the manner in which corporations engage in internal ventures to take advantage of new business opportunities that arise from time to time. Simon et al. (1999) call it the creation of semi-autonomous structures, known as internal corporate ventures, to enter new emerging areas to which they cannot apply the established company's typical procedures for introducing products. Schollhammer (1982) calls it the incubative type of innovation and suggests that it entails the creation of semi-autonomous units that presumably have different innovation strategies, structures, reward systems and the like from the 'parent' company. Bloch and MacMillan (1995: 13) call corporate venturing 'internally

generated new businesses'. According to these authors (1995: 14), a project is a venture when it: involves an activity *new* to the organisation; is initiated or conducted *internally*; involves a significantly *high risk* of failure or large losses; is characterised by *uncertainty*; will be *managed separately* at some time; and is undertaken *to increase sales, profit, productivity, or quality*.

The key success factors for corporate ventures are: the level of autonomy and freedom to act by the operational-level staff; the ability of middle-level management to conceptualise the strategic implications of the new corporate venture initiatives; and the capacity of top-level management to allow viable entrepreneurial activities to change the corporate strategy (Jennings, 1994: 88).

The corporate venturing model of innovation is inspired by the theory of entrepreneurship in start-ups. It facilitates radical innovation in an existing organisation, while not hindering incremental innovation. Some organisations have tried to insulate the venturing function by moving it to a separate structure (or even a separate location) to accord an innovation the status of a start-up even if it is part of a larger organisation (Davila et al., 2006: 112).

Insulation allows and encourages the venture teams to break the rules and, most importantly, protects them from organisational 'antibodies' (Davila et al., 2006: 112). Such a separate structure can be successful because different types of innovation require different types of systems, resources and culture. However, separation may result in isolation from all aspects of the organisation, good or bad, rather than insulation from only the bad elements. For example, separation may cause the main company's employees to be suspicious of the separate venturing unit and not to promote it to clients. This will result in a higher likelihood that the innovations coming out of the separate venturing unit will not be an integral part of the culture and that organisational antibodies will arise to challenge the innovation once it is introduced in the marketplace.

4.4.3 Intrapreneurship

The third and last perspective on corporate entrepreneurship suggested by Jennings (1994: 190) focuses on *intrapreneurship*, or how entrepreneurs function within large corporations. Intrapreneurship is a term popularised by Pinchot (1985) and is better described by Covin (1999) as the phenomenon in which individuals champion new product ideas within a corporate context. The challenges that such internal entrepreneurs face have to do with corporate culture, size and bureaucracy.

4.4.4 Corporate or firm-level entrepreneurship

Entrepreneurship by established organisations in all its forms, some of which are described above, is a single phenomenon with multiple components in different environmental contexts (Gartner, 1990, in Morris & Kuratko, 2002: 22). Ideally, all the entrepreneurship components should be present within one established organisation to create a situation where the entrepreneurial spirit or philosophy permeates the entire organisation rather than individuals or other parts of the organisation exclusively. Such an ideal situation has been referred to in literature as true corporate entrepreneurship (Covin, 1999); entrepreneurial management (Stevenson & Jarillo, 1990); entrepreneurial posture (Covin, 1991);, firm-level entrepreneurship; strategic entrepreneurship (Dess, 1999), and pioneering-innovative management (Khandwalla, 1987).

There is a wide variety of attributes and practices that define corporate entrepreneurship as defined. The next part of the chapter will examine the question of how corporate entrepreneurship has been operationalised by those who have adopted a firm-level perspective to the concept. Alternatively, the question is about which attributes or factors must be fostered and be present in order to label a firm ‘entrepreneurial’.

4.4.5 Entrepreneurship in the public sector (or non-profit organisations)

Public sector entities are often portrayed as non-entrepreneurial and as having a culture similar to that of traditional (non-innovative) corporates. Sadler (2000: 3) describes them as 'bureaucratic, conservative and disingenuous monoliths'. Cornwall and Perlman (1990: 226-227, in Sadler, 2000: 3) cite the ambiguity of goals, limited autonomy, anti-risk-taking reward systems, short-term orientation and over-cautious managerial behaviour as reasons for the lack of innovation and entrepreneurship. The lack of a profit motive (or an expected return) is also often mentioned in literature as another reason.

Gartner's 1990 Delphi study highlighted the 'expected return' as a key component of entrepreneurship. Such a return does not have to be monetary. As such, both not-for-profit and for-profit organisations may pursue a return and thus both can be entrepreneurial. It is therefore noteworthy that more than 70 years ago Schumpeter (1934) posited that entrepreneurship existed in the private or public sector. He classified innovations, which he called new combinations, into various categories, among which the following three are important: (1) producing a new quality or a new kind of product; (2) introducing a new method of production; and (3) carrying out a new organisation of production. Schumpeter believed that innovation could be pursued by large corporations and government bodies as well as by small entrepreneurial firms.

Schumpeter's 1934 concept of public entrepreneurship is nowadays similarly referred to as '*social entrepreneurship'*. Dees (2001) posits that social entrepreneurship combines the passion of a social mission with an image of business-like discipline, innovation, and passion to succeed in the private sector. In addition to not-for-profit ventures, social entrepreneurship can add value in social purpose business ventures, such as pro-profit community development banks and hybrid organisations mixing not-for-profit and for-profit motives, such self sustaining development banks.

Public sector organisations are indeed concerned with broader goals than just a commercial motive (Forster, Graham & Wanna, 1996, in Wanna, Forster & Graham, eds. 1996), Borins (1998, in Sadler, 2000) asserts that public sector innovation often arises from a holistic integration of across-agency initiatives. He found that career public servants at the middle management and front-line staff levels initiate innovation in the public sector. His research contradicts the view that innovation in the public sector is invariably a response to a crisis. This view corroborates Drucker's (1985) view that entrepreneurship involves a purposeful and organised search for value-enhancing opportunities. Thus Borins (1998, in Sadler, 2000) work demonstrated that both planning and 'groping' have a role to play in public sector entrepreneurship. He cites the example of the establishment of the national health service of the UK as nothing less than a planned act of innovation.

4.4.6 Corporate entrepreneurship in DFIs

DFIs are a hybrid between commercial and public sector organisations. Their main competitive advantage over commercial organisations is the development knowledge that they possess. Their advantage over their public sector counterparts is financial prudence and businesslike governance practices. Thus DFIs ought to be knowledge-based organisations (DBSA Vision 2014, 2004: 2). This means that they should develop, adopt and adapt cutting-edge development knowledge and apply it to challenges of underdevelopment in the developing world. This application of knowledge is akin to 'innovation' in the Von Braun (1997) innovation model, discussed in Chapter 3 of the present study. Drucker (1985: 98) posits that knowledge-based innovation is a key source and driver of entrepreneurship. It should follow, therefore, that DFIs ought to be entrepreneurial, and for them to be entrepreneurial, their knowledge workers need to be entrepreneurs.

Knowledge-based innovations are characterised by long lead times from creativity to technology to products and services. They are also characterised by

the convergence of several different kinds of knowledge from a number of different sources. Drucker (1985: 103) cites the example of the Pereire Brothers who founded an entrepreneurial bank in 1852. The bank failed because it was based on a single concept of venture capital finance. Drucker (1985) argues that, for it to succeed, the bank also needed the systematic knowledge of banking that had been developed at the same time elsewhere. Indeed, until all the synergistic pieces of knowledge converge, the lead-time of knowledge-based innovation invariably cannot even begin.

The literature proposes certain requirements for knowledge-based innovation to meet the lead-time and convergence characteristics. These are: a clear focus on the strategic position (innovation cannot be introduced tentatively); a market focus, aimed at creating or capturing a market for its products; and a focus on learning and practising entrepreneurial management (Drucker, 1985; Davila et al., 2006).

4.5 Common corporate entrepreneurship attributes

Among the various definitions of the CE construct, the dissimilar conceptual models of CE and differing manifestations of CE from organisation to organisation and from sector to sector, it is evident that there is a constant set of organisational factors that summarise the major sub-dimensions of the concept of corporate entrepreneurship.

Based on the aforementioned literature review, the following summary of the most consistently mentioned major sub-dimensions is made: *management support*; *reward and resource availability*; *organisational structure and boundaries; risk taking; and innovation*. Kuratko, Hornsby and Montagno (1993) document a comparable list from their literature review and research of common CE factors. In agreement, Hornsby et al. (1999) identify a similar list of common constructs and elements of corporate entrepreneurship.

Lumpkin and Dess (1996, in Covin, 1999: 4), in their thorough review of the broadly defined corporate entrepreneurship literature, also identify five 'dimensions of entrepreneurial orientation', namely: autonomy; innovativeness; risk taking; proactiveness; and competitive aggressiveness. They also conclude that it is unclear whether all five dimensions of entrepreneurial orientation will always be present, or whether any of these identified dimensions must always be present before the existence of an entrepreneurial orientation should be claimed (Covin, 1999).

The instrument adapted and used in the present study to diagnose DFI organisational factors that foster or hinder innovation and corporate entrepreneurship is the Corporate Entrepreneurship Assessment Index (CEAI) developed by Hornsby et al. (1990), which they originally called the Intrapreneurial Assessment Instrument. This CEAI instrument was chosen because it measures five of the six dimensions that the present study has identified from the literature as consistent CE organisational factors. The CEAI is used in similar studies worldwide. It was adapted for the present study by adding three innovation factors, i.e. the innovation portfolio, the innovation processes, and the innovation systems, to form a new instrument called the Innovation and Corporate Entrepreneurship Assessment Instrument (ICEAI). The ICEAI is discussed in the next section.

4.6 Innovation and Corporate Entrepreneurship Assessment Instrument (ICEAI)

In their identified five-factor structure, Hornsby et al. (1990) and Kuratko et al. (1993) selected a number of items for each factor in the structure. The results of their factor analysis were as follows: top management support for CE (19 items) with a Chronbach alpha of .89; autonomy/work discretion (10 items) with an alpha of .80; rewards/reinforcement (6 items) with an alpha of .65; time availability (6 items) with an alpha of .92; and organisational boundaries (7 items) with an alpha of .58. These instrument validation results were reinforced by the

findings of a study of 119 Fortune 500 CEOs (Zahra, 1991), which examined the five-factors in the structure as antecedents, as well as the association between internal entrepreneurship and the financial performance of the firm. Hornsby, Kuratko and Montagno (1999) again later supported the existence of these factors in a cross-cultural study of Canadian firms.

Hornsby, Kuratko and Zahra (2002) established sound psychometric properties for an instrument that measures the five factors and concluded that the existence of such stable organisational factors should be recognised in promoting entrepreneurial activities within an organisation. They proffered the view that these five factors represent a succinct description of the internal organisational factors that influence middle managers to foster entrepreneurial activity within established companies.

Also, based on the results of empirical studies documented in literature, it is concluded that the greater the extent to which an individual perceives the existence of management support, autonomy/discretion, rewards/reinforcements, resource/time availability, and flexible organisational boundaries, the higher the probability of entrepreneurial behaviour by that individual.

The CEAI instrument (Hornsby et al., 1990) was modified by adding further dimensions in order to recognise the *presence of innovation* as a common dimension among all firms that could be reasonably described as entrepreneurial. The validity of the innovation dimensions and of the entire modified questionnaire is tested in the present study in Chapter 5.

The following eight sub-sections briefly discuss factors of the modified instrument, namely the **I**nnovation and **C**orporate **E**ntrepreneurship **A**ssessment **I**nstrument (ICEAI).

4.6.1 Management support for corporate entrepreneurship

Management support entails a clear direction from the top of the organisation that permeates throughout the organisation to motivate, support, and reward

innovation and entrepreneurial behaviours. In support of this view, the literature refers to the willingness of managers to facilitate and promote entrepreneurial activity in the organisation (Quinn, 1985; MacMillan, Block & Narasimha, 1986; Sykes & Block, 1989; Stevenson & Jarillo, 1990; Damanpour, 1991; Kuratko et al., 1993; Pearce II et al,. 1997, Hornsby et al., 1999; Hisrich & Peters, 2002). According to these authors, management support can assume many forms, including championing ideas, providing necessary financial or human resources, and facilitating the embedding of the entrepreneurial activity in the organisational systems and processes.

Barringer and Bluedorn (1999) and Zahra, Kuratko and Jennings (1999) assert that the ability of an organisation to increase its entrepreneurial activity is also determined by the compatibility of its management practices with its entrepreneurial intentions. Among the most pertinent of these management practices is strategic management leadership (Covin & Slevin, 1991; Zahra, 1993; Herbert & Brazeal, 1998; Barringer & Bluedorn, 1999). Strategic leadership implies management facilitation of both incremental and radical innovation in order to enhance the organisation's competitiveness and its tactical operations and processes (Kemelgor, 2002).

Covin and Slevin (1991) refer to the behaviour of top management in support of entrepreneurship as 'entrepreneurial posture'. Adonisi (2003: 36) claims that entrepreneurial posture comprises three components: strategic management's propensity to support risky ventures; the extent and frequency of product innovation; and the pioneering nature of management to engage in proactive competition with industry rivals.

Morris and Kuratko (2002) and many other researchers claim that organisational culture plays a key role in a company's ability to develop corporate entrepreneurship. However, Thornberry (2003: 341) asserts that 'pockets or islands of entrepreneurial activity can develop and thrive, at least for a while, in cultures that are not in themselves entrepreneurial'. According to this view,

successful ventures can develop in non-entrepreneurial companies with the right kind of technical interventions. All it takes is a critical mass of 'switched on' (Thornberry, 2003: 338) corporate entrepreneurs, with some championing at the leadership level, to start seeing entrepreneurial activity.

The management cadre plays an important role in fostering a culture of corporate entrepreneurship in an organisation or part thereof. The first step in the process of establishing such an entrepreneurial culture is to secure commitment and support by top and middle management. Only after commitment by these levels of management may the concept be introduced throughout the whole organisation (Hisrich & Peters, 2002: 53). This assertion will be tested in DFIs in the present study.

4.6.2 Work discretion

Work discretion is a construct that is affected by a number of factors: degree of formality and prescriptiveness; desire for conformance and compliance with set job descriptions; degree of rigidity in work formats; desire for consistency from time to time and between people doing the same task; desire for individual initiative in carrying out tasks; and level of freedom and discretion in own job (Morris & Kuratko, 2002: 220).

In the context of the corporate venturing form of corporate entrepreneurship, researchers are unanimous that a high degree of autonomy should be accorded to those charged with venturing (MacMillan, 1986; Block & MacMillan, 1995: 253; Simon et al., 1999: 156). Advocating for autonomy, Shapiro (1984) cites situations where increased autonomy dramatically increased performance of ventures. As for the characteristics of the venture teams, Hill and Hlavacek (1972) found in their study of a hundred cases that venture teams: separated from the operating organisation; were multidisciplinary; had diffuse authority; were given a broad mission; had direct access to senior management; and were not subjected to defined time deadlines. On the contrary, a later study by Dunn (1977) found the following characteristics of ten failed ventures: their missions

were too broad; too few constraints were placed on their activities; they enjoyed too much functional autonomy; and they were not put under enough pressure to produce.

It appears from these contradictory views that too much of a good thing can precipitate venture failure, as far as autonomy or work discretion is concerned. In support of this view, MacMillan (1986) suggests that management cannot abdicate its oversight responsibility, but has to monitor the venturing activity more closely.

In short, the facilitation of entrepreneurship appears more consistently with role flexibility and autonomy, which can be achieved if employees enjoy a high degree of autonomy and are empowered to exercise discretion and personal initiative in performing their jobs.

4.6.3 Rewards and reinforcements

Reward and reinforcement normally take the form of recognition and incentives. Recognition is a reward that occurs after demonstrable innovations or entrepreneurial outcomes. In contrast, incentives are designed before an innovation effort starts, and they link performance measures and rewards (Davila et al., 2006).

The literature on corporate entrepreneurship highlights the fact that an effective reward system that spurs entrepreneurial activity must consider: goals; feedback; individual responsibility; and results-based incentives or rewards (Kanter, 1983; Sathe, 1985; Barringer & Bluedorn, 1999; Davila et al., 2006).

To foster corporate entrepreneurship, recognition is more appropriate than incentives. It is important to note that recognition does not have to happen through explicit management systems in an organisation. It can happen within the realm of personal interactions: praise in the passage or over a cup of coffee, or recognition by peers. In short, people are motivated by: expected incentives;

passion about the activity; recognition; and leadership vision that provides a clear sense of purpose.

4.6.4 Resources/Time availability

Organisational resources are broadly defined to include time, money, equipment and competencies. The actual and perceived availability of these resources by employees is an important element in facilitating innovation and corporate entrepreneurship (Sathe, 1985; Schuler, 1986; Sykes & Block, 1989). Covin and Slevin (1991) indicate that entrepreneurial ventures are resource-consuming activities and, therefore, a firm's ability to pursue innovations will be constrained by the available resources. Hornsby et al. (1999) further argue that a key challenge facing the pursuit of corporate entrepreneurship as a strategic thrust is resource deployment to support strategic entrepreneurial efforts. Therefore, the resource view of strategy holds the internal resources of an organisation as a source of unique and inimitable competitive advantage (Twormey & Harris, 2000).

Hornsby et al. (1992) profess that fostering corporate entrepreneurship requires that individuals be afforded time to incubate new and innovative ideas. Therefore, the workload of employees must be moderated to such an extent that they are allowed to work with others on time-consuming innovations.

Time availability assumes greater importance when attempting to foster radical innovation than incremental innovation. Radical innovation takes time and is accompanied by a risk that the creation may not find its way to the marketplace.

Therefore, resource availability, particularly time, is an essential organisational characteristic for the implementation of CE. In the present study, employee perceptions about time availability in a DFI environment are assessed with the objective of fostering a CE culture within DFIs.

4.6.5 Organisational boundaries, barriers and bureaucracies

Following the old adage that 'structure follows strategy', the organisational structure should be supportive of the innovation strategy and should in turn act as a foundation for the innovation process and systems. However, not all structures facilitate the implementation of innovation and entrepreneurial strategies.

Obsolete strategy and bureaucratic structures create barriers to entrepreneurial behaviour in organisations. The most familiar forms of bureaucracy include hierarchical control, centralised authority and inflexible or fixed functional boundaries (Burgelman, 1983; Khandwalla, 1997). These authors argue that fixed and static bureaucratic organisational forms tend to stifle innovative behaviour.

According to Sharma (1999), in large organisations where established bureaucracies are prevalent, the creativity necessary for radical innovation and the individual initiative pertinent to embarking on new ventures are often suppressed. The sheer size of these organisations demands that there be control and order, but such order and predictability, if strictly adhered to, work against innovation.

The present study will test employee perceptions on organisational boundaries and bureaucracy and how these affect corporate entrepreneurship in DFIs.

4.6.6 Innovation technology enablement

It is essential to examine the available technology that enhances innovation and entrepreneurship within an organisation. This relates mainly to the use of electronic communication to: virtually extend the organisational boundaries; overcome cultural, physical and time separation; and tap into new ideas of employees, customers, suppliers and partners (O'Hara-Devereaux & Johansen, 1994; Schrage, 2000; Thomke, 2001). All these authors highlight electronic

technology as a new and important element of innovation management to harness the power of partnerships and collaboration within and between organisations.

The present study will assess the extent to which employees of DFIs use technology to enable innovation, and will attempt to foster the use of electronic communication in the experimental DFI to capture new ideas from employees.

4.6.7 Innovation management process and systems

Innovation systems are established policies, procedures and information mechanisms that facilitate innovation processes within and across organisations (Davila et al., 2006: 120). For innovation to take place successfully there needs to be an explicit process in place to manage all the steps of innovation, from conceptualisation through design, implementation, measurement, and reward to monitoring.

The rigidity or inflexibility that is often associated with defined processes and systems is not about systems and processes per se. The literature confirms that the problem is more about the inability to change them when they are no longer useful (Cameron, 1986; Miller, 1990; Leonard-Barton, 1995). The obsolescence of competencies and the inability to renew them is called the 'competency trap' (Levitt & March, 1988).

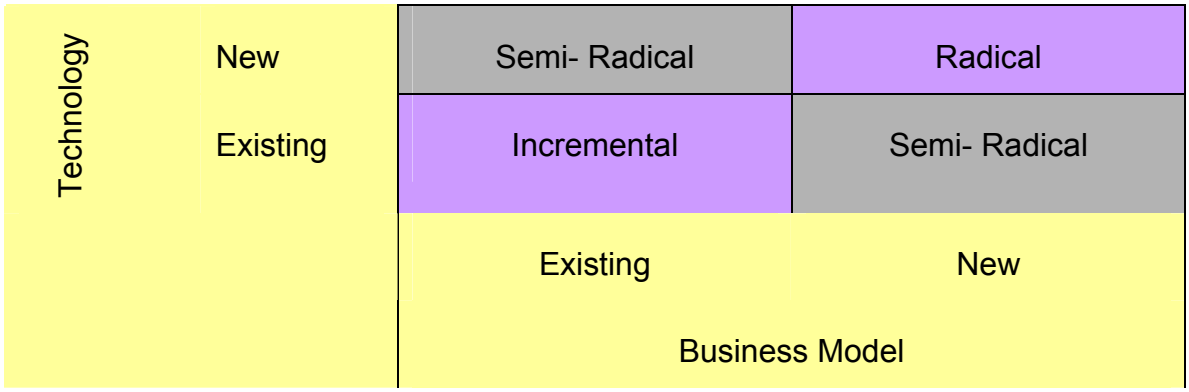
It is therefore wrong to assume that structure, processes and systems are the natural foes of creativity, or to feel that imposing any order on 'intrapreneurs' will have a detrimental effect on the results. What should be realised is that structure, systems and processes can enhance creativity, and ultimately innovation, if they are built and used in the right way.

The present study departs from the premise that structure, processes and systems are in place, and focuses rather on testing employee views on how these elements are allowed to evolve to facilitate innovation and entrepreneurial activity in DFIs.

4.6.8 Innovation portfolio management

As documented in Chapter 3, section 3.3, innovation is not only about technological innovations or how to use inventions. It also involves introducing new business models. Business model innovation is the introduction of a new means of production, new products, or new forms of organisation (Schumpeter, 1934). Davila (2006) concurs, and goes on to make the proposition that business models describe how the company creates, sells, and delivers value to customers. Therefore, business model innovation is about value capture or commercialisation of creativity. The risk and return characteristics differ within and between these types of innovation, depending on the amount of investment, the level of risk and the novelty of the innovation. The interplay between technological innovations and business model innovations indicates the nature of the innovation, and is shown in the Innovation Matrix illustrated in Figure 4.12.

Figure 4.12: The Innovation Matrix



Source: Adapted from Davila et al. (2006: 14).

Incremental innovation is the most prevalent form of innovation used by most companies. It entails small improvements to the 'business as usual' and is aimed at wringing out as much value as possible from existing products or services without making significant investments (Banbury & Mitchell, 1995).

Radical innovations are significant changes that alter the rules of the game for the business, technology or industry. Radical innovations carry by their nature

high risk and high impact and usually require substantial investments, so should be approached with caution in established businesses. They are usually associated with start-ups (Day & Schoemaker, 2000).

Creating a portfolio of incremental and radical (including semi-radical) innovations is essential in order to sustain innovation and corporate entrepreneurship (Davila et al., 2006: 15). Like financial asset portfolios, innovation portfolios are a risk-management technique if the diversification within the portfolio is optimal. It is the top-management team of an organisation that bears the responsibility of balancing the innovation portfolio. Aligning the innovation portfolio with the overall business strategy is a key role of top management.

4.7 Entrepreneurially conducive corporate culture

The fundamental role of corporate culture in motivating and shaping entrepreneurial activity has been discussed by, among others, Kanter (1983), Russell and Russell (1992) and Sadler (2000). These authors confirm what has been noted in 4.6.2 and 4.6.7 above, that rigid and outdated bureaucratic methods of control associated with organisational structure can constrain entrepreneurial activity, given the uncertainties inherent in innovation. As such, there are discernible differences between the traditional corporate and entrepreneurial corporate cultures. As products of the entrepreneurial corporate environments, the profile of intrapreneurs reflects the characteristics of the period and place in which they find themselves (McGuire, 1976) and such a profile differs from that of traditional managers.

According to Hisrich and Peters (2002), a typical corporate culture favours risk-averse, cautious and rational decision-making practices and processes. People are discouraged from taking initiative, being proactive, making learning mistakes or failing, and acting outside the strictly defined boundaries of their functional areas. This restrictive environment is not conducive to creativity, innovation, flexibility or independence or taking ownership and responsibility (Hisrich &

Peters, 2002: 47). Such a culture is supported by established *inflexible* control mechanisms such as hierarchical lines of authority, responsibility and reporting, and documented systems to be *strictly* adhered to.

A corporate entrepreneurial culture, on the other hand, encourages initiative and risk-taking inside and outside 'the box'. According to Hisrich and Peters (2002: 47), the goals under the intrapreneurial culture differ and are: 'to suggest, try, and experiment; to create and develop regardless of the area; and to take responsibility and ownership'. The supportive organisational structure for this culture is flat, networked and is conducive to knowledge sharing. This culture encourages the building of trust and counsel among people.

Russell and Russell (1992) have empirically verified the connection between culture and innovation by measuring the effects of norms and values on innovative outcomes. They have identified a number of dimensions of culture that impact the entrepreneurial process They argue that the innovation norms and values encapsulated in such dimensions tend to reinforce behaviours that assist organisation members in navigating the uncertain waters of innovation development (Russell, 1999).

4.8 Barriers to corporate entrepreneurship

Sadler (2000) suggested that corporate entrepreneurship and its facilitating factors are not absolutes - if certain factors exist, they will promote or inhibit the opportunity for corporate entrepreneurship. The literature has also observed the following common factors as promoting or inhibiting corporate entrepreneurship in the private sector, on the one hand, and in local government utilities, Government Business Enterprises (GBEs) or corporatised state-owned entities on the other hand. The following is a set of key drivers and inhibitors of corporate entrepreneurship:

- An intense external competitive environment is a positive incubator for corporate entrepreneurship (Slevin & Covin, 1990).

- Networked and flat structures are more communicative and tend to foster entrepreneurship (Slevin & Covin, 1990). Conversely, bureaucratic structures, which rely on centralised decision-making, inhibit entrepreneurship.

- Knight (1986) maintains that entrepreneurship involves tolerating failures as well as applauding successes. Saxena (1991) reasons that a managerial vision, policies and programs that are directed towards opportunities rather than problems must be established to facilitate the development of an entrepreneurial spirit.

- For Angel and Van de Ven (1989), the environment must promote cohesive work groups with open conflict-resolution mechanisms, and must provide access to innovation role models and mentors.

- Liebcap (1986) maintains that large organisations tend to plan strategy and are not as prepared as smaller organisations to implement spontaneous innovation. Size per se is not a problem, but it is the bureaucracy that often goes along with it that is an impediment (Saxena, 1991). Smaller companies are believed to be more entrepreneurial because they remain closer to their markets and become aware of opportunities more quickly (Zahra, 1995). Zahra (1995) suggests that they need to be innovative to survive, but that they may lack the financial resources to implement CE activities;

- A participative decision-making environment is more conducive to entrepreneurship, observe Pearce and David (1983);

- Hage and Aiken (1970) argue that an organisation with a high proportion of professionals and diverse specialists tends to be more change-tolerant and innovative, and that there is a high correlation between entrepreneurship and specialisation;

- Ramamurti (1986) observes that opportunities for entrepreneurship are enhanced in situations where the goals are inconsistent but are clearly understood. He argues that this promotes flexibility. He reasons that where

the value to be added may be expressed in financial or social or other measures, the pursuit of a particular value is a clear and necessary precondition to entrepreneurship conduct.

- It is recorded in the literature that organisational autonomy is a key ingredient of public-sector entrepreneurship. The public sector reforms and increased devolution to agency level have promoted autonomy (in Sadler, 2000).

During his 1998 fieldwork, Sadler (2000: 8) contradicted some of the above observations by identifying a number of factors that foster entrepreneurship in the private sector, but which demonstrate no significant statistical correlation in the public sector, including:

- A culture of risk-taking; this need not necessarily be financial, and risk-taking may be absent in an entrepreneurial public-sector environment;

- An organic organisational structure; Sadler's study (2000) did not support the view that the bureaucracy and conservatism of larger organisations act as a barrier to public-sector entrepreneurship. He found that the operations of the public-sector organisations necessitate hierarchical organisational structures. Cornwall and Perlman (1990: 111) advise that even where there is low centralisation of power and decision-making, such as in the public sector, the empowerment and delegation should not be equated with anarchy, and that entrepreneurial structures should be controlled. Despite the hierarchical structures, public-sector entrepreneurship emerges by utilising distinctive public-sector characteristics to promote flexibility and organic clusters within the structures.

4.9 Conclusion

This chapter is the second of the two literature review chapters. In this chapter, the theory of corporate entrepreneurship was reviewed to build on the argument started in Chapter 3 that unless opportunities and events are perceived and

acted upon by members of the organisation, the individual characteristics, latent or developed, are worthless.

According to the reviewed literature, entrepreneurial organisations create mechanisms that focus the attention of organisational members on entrepreneurial opportunities, and provide resources as empowerment to implement their innovations. The following organisational variables identified seem to enjoy general acceptance in literature as instrumental in the entrepreneurial process: management support; work discretion; rewards systems; resource availability; organisational culture, structure and bureaucracy; innovation processes and systems; and innovation portfolio management.

The outcome of a combination of the identified organisational variables and the individual factors is the organisational (profit- or non-profit-making) entrepreneurial intensity, which in turn results in enhanced organisational performance. Therefore the literature finding is to reject the following proposition:

H_0:A1 Entrepreneurship and corporate entrepreneurship principles are **not** applicable to organisations that pursue non-profit motives, such as DFIs; and **cannot** enhance their performance (refer to section 1.7 in Chapter 1).

Thus there is enough evidence in literature to **accept** the alternative proposition that: entrepreneurship and corporate entrepreneurship principles **are** also applicable to organisations that pursue non-profit motives, such as DFIs; and **can** enhance their performance.

The present study first performed a pre-experimental diagnosis of both factors, as reported in Chapter 6, using an innovation and corporate entrepreneurship assessment instrument, as tested for validity in Chapter 5. The results of both the training intervention and the entrepreneurial intensity are reported in Chapter 8.