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**ASSESSMENT OF
CORPORATE ENTREPRENEURSHIP
AND THE LEVELS OF INNOVATION IN THE
SOUTH AFRICAN
SHORT-TERM INSURANCE INDUSTRY**

by

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SUMMARY

ASSESSMENT OF CORPORATE ENTREPRENEURSHIP AND THE LEVELS OF INNOVATION IN THE SOUTH AFRICAN SHORT-TERM INSURANCE INDUSTRY

By

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The global economy is creating profound and substantial changes for businesses and industries throughout the world. These changes make it necessary for businesses to examine their purpose carefully and to devote a great deal of attention to selecting and following strategies in their pursuit of the levels of success that have a high probability of satisfying multiple stakeholders. There is a significant amount of written consensus regarding corporate entrepreneurship as a means for promoting and sustaining global corporate entrepreneurship and economic growth. This consensus focuses mainly on international businesses and not on South African businesses. Before corporate entrepreneurship and innovation can be instilled in an industry or business the current status must first be determined. Little empirical research is available in the South African context that indicates the successes and failures of corporate entrepreneurship in businesses. This study addresses the management dilemma that exists (particularly in South Africa) as how to foster and implement corporate entrepreneurship in businesses to sustain this competitive advantage and improve performance.

Ireland, Kuratko and Morris (2006) developed a corporate entrepreneurship health audit instrument to assess corporate entrepreneurship and innovation in a business. The

purpose of this study is to make use of this health audit instrument to assess the corporate entrepreneurial and innovative levels in the South African short-term insurance industry.

The empirical evidence indicated that significant statistical differences exist between the employees in the short-term insurance industry in terms of various aspects of the degree and frequency of entrepreneurship, and various corporate entrepreneurial climate factors (management support, work discretion, time availability and organisational boundaries). The results of two self-administered questionnaires revealed that gaps exist in the businesses in terms of the various business units as well as the management levels. A corporate entrepreneurial development programme can be developed to address these gaps. The study proved that an international instrument can be applied in a South African context. Because this was the first formal study being done in the field of corporate entrepreneurship in the South African short-term insurance industry, it can serve as a benchmark for individual short-term insurance businesses.

DECLARATION OF ORIGINAL WORK

I, Darelle Groenewald declare that the thesis presented here is my original work except where indicated, which is submitted to the University of Pretoria in partial fulfilment of the requirements for the degree DPhil in Entrepreneurship. This research work has not been presented to any university in the past.



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SIGNATURE

DATE

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CHAPTER 1: INTRODUCTION AND BACKGROUND TO STUDY

“... The more the organisation can exhibit entrepreneurial properties/qualities and its people believe in behaving entrepreneurially – the greater the firm’s ability to achieve maximum innovation or entrepreneurial success.”

Echols and Neck (1998:39)

1.1 INTRODUCTION

The global economy is creating profound and substantial changes for businesses and industries throughout the world. These changes make it necessary for businesses to examine their purpose carefully and to devote a great deal of attention to selecting and following strategies in their pursuit of the levels of success that have a high probability of satisfying multiple stakeholders. Johnson (2001:135) states that many people in large businesses believe that once a business reaches a certain size, it unavoidably loses its capacity to act entrepreneurially and to stimulate and foster innovation. According to Christensen (2004:302) businesses have been faced with increasing demands for both faster product development and more features in smaller products, and higher and uniform quality, stability and lower prices, despite the inherent incompatibility of such demands.

Christensen (2004:302) indicates that many large businesses find it difficult to integrate the entrepreneurial spirit in a well-structured or bureaucratic business. Therefore these businesses must think non-traditionally to cope with the increasing paradoxes. According to Johnson (2001:135), if a business does not adopt a proactive attitude towards innovation and the creation of new ventures, it is unlikely to survive in an increasingly aggressive, competitive and dynamic market place.

Aloulou and Fayolle (2005:24) indicate that the need for corporate entrepreneurship has arisen from a variety of pressing problems among larger businesses, including stagnation,

decline and weakness of managerial practice and turnover of innovative-inclined employees who were constrained by the bureaucratic inertia of their businesses.

Miller and Camp (1985) in Kuratko, *et al.* (2004:78) warn managers who attempt to practice business as usual when these businesses move from positions with mature businesses, that they may misapply management practices that have worked before but will not work now. Zahra and O'Neil (1998) also point out that when the factors in the external environment and the internal business interact, managers are challenged to respond creatively and act in innovative ways. Established businesses seeking to "refocus" or "transform" themselves through entrepreneurial behaviours and actions are finding the challenges overwhelming but the outcomes productive. Barringer and Bluedorn (1999) suggested that, increasingly, "...entrepreneurial attitudes and behaviours are necessary for firms of all sizes to prosper and flourish in competitive environments".

Kuratko and Hodgetts (2007:54) state that in response to rapid, discontinuous and significant changes in businesses' internal and external environments, many established businesses have restructured their operations in fundamental and meaningful ways.

Businesses are turning to corporate entrepreneurship because they are not experiencing the continual innovation, growth and value creation that they once had (Thornberry, 2001:1).

Corporate entrepreneurship is recognised as a potentially viable means of promoting and sustaining competitiveness, and transforming businesses and industries into opportunities for value-creating innovation (Aloulou and Fayolle, 2005:24; Antoncic and Zorn, 2004:7; Kuratko and Hodgetts, 2007:56; Kuratko, Ireland, Covin and Hornsby, 2005:699).

According to Ireland, *et al.* (2006a:10), businesses increasingly rely on corporate entrepreneurship and innovation to develop and nurture simultaneously today's and tomorrow's competitive advantages. Leading edge businesses see the effective use of corporate entrepreneurship as a source of competitive advantage and as a path to higher levels of financial and non-financial performance.

According to Morris, *et al.* (2008:20), remaining competitive is very different from achieving sustainable competitive advantage. The quest for competitive advantage requires that businesses and the managers within them continually reinvent themselves.

From this brief introduction it is clear that businesses and industries throughout the world are operating in an uncertain and dynamic global economy. Businesses of the future need continual innovation, growth and value creation to survive. Through corporate entrepreneurship the entrepreneurial spirit within the organisational boundaries can be created, allowing an atmosphere of innovation to prosper. It is also highlighted that businesses need to achieve a sustainable competitive advantage to remain competitive.

Current knowledge is inadequate and poorly researched in terms of providing empirical evidence in the field of corporate entrepreneurship. Thornberry (2003:333) noted that there is relatively little field research regarding the successes or failures of large businesses who have tried systematically to instil corporate entrepreneurship within their businesses. Zahra (1991:193) also indicated that “a lack of compelling evidence on the contributions of corporate entrepreneurship performance exists. Even though some research has attempted to fill this gap in literature there is still much more to be learned about the substance and process of corporate entrepreneurship”.

The purpose of this study is to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

This chapter provides the background and literature review of the study. It sets out the research problem, purpose of the study, research objectives, hypotheses, research methodology, importance and benefits, as well as an outline of chapters two to seven. This is done to guide the flow of the study. In this study various terminologies are sighted by different authors - terminology such as business, organisation, company, enterprise, venture and firm. For purposes of this study the term “business” will be used which refer to a profit seeking entity. Where authors are directly referred to these constructs will not be changed.

1.2 LITERATURE REVIEW

The literature review will give a brief overview of research on and about: the concept of corporate entrepreneurship; the relation between corporate entrepreneurship and innovation; the importance and value of corporate entrepreneurship; how to foster, develop and implement corporate entrepreneurship; sustaining corporate entrepreneurship and innovation; conceptual models for corporate entrepreneurship; measuring instruments for corporate entrepreneurship and, lastly, corporate entrepreneurial research conducted in South Africa.

1.2.1 Defining corporate entrepreneurship

As with the definition of entrepreneurship, various authors according to (Kuratko, Hurley and Hornsby, 2001:199) have various interpretations of the definition of corporate entrepreneurship. Pinchot (1985) defines “intrapreneurship” as entrepreneurship inside the organisation where individuals will champion new ideas from development to complete profitable reality. Ireland, *et al.* (2006a:1) define corporate entrepreneurship as a process through which individuals in an established business pursue entrepreneurial opportunities to innovate, without regard for the level and nature of currently available resources. Stevenson and Jarrilo (1990:23) refer to corporate entrepreneurship as a process by which individuals inside businesses pursue opportunities without regard to the resources controlled by them. Antoncic and Hisrich (2003a, 2004, 2007) refer to emergent behavioural intentions or behaviours deviating from the customary way of doing business, and Hisrich, Peters and Shepherd (2008:68) as a spirit of entrepreneurship within the existing business. Morris, *et al.* (2008:11) define corporate entrepreneurship as a term used to describe entrepreneurial behaviour inside established mid-sized and large businesses.

Vesper (1984) in Kuratko, *et al.* (2001:199) developed three major definitions of corporate entrepreneurship, which can be identified as (1) new strategic direction; (2) initiative from below; and (3) autonomous business creation. Vesper’s study illustrates that corporate entrepreneurship could be any one of these individual types, as well as any or all possible combinations.

Zahra (1991:196) includes all the major aspects of corporate entrepreneurship in the following definition of corporate entrepreneurship: “Corporate entrepreneurship refers to formal and informal activities aimed at creating new business in established companies through product and process innovations and market developments. These activities may take place at the corporate, division (business), functional, or project levels, with the unifying objective of improving a company’s competitive position and financial performance. Corporate entrepreneurship also entails the strategic renewal of an existing business.”

For purposes of this research the construct “corporate entrepreneurship” will be referred to as defined by Sharma and Chrisman (1999:18): “Corporate entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing organisation, create a new organisation or instigate renewal or innovation within the organisation”.

The associated terminology with the construct “corporate entrepreneurship” will be referred to Thornberry’s (2003:330) four broad categories of corporate entrepreneurship: corporate venturing, intrapreneuring, organisational transformation and industry rule-breaking. Corporate venturing involves starting businesses within a business and usually originates from a core competency or process. Intrapreneuring is an attempt to take the mindset and behaviours of external entrepreneurs to create and build businesses and bring these characteristics to bear inside an existing, and usually large, corporate setting. Organisational transformation involves corporate renewal. This type of entrepreneurship fits the original Schumpeterian definition if transformation involves innovation and a new arrangement or combination of resources, and results in the creation of sustainable economic value. Industry rule-breaking is a subset of transformation and involves the competitive environment of the industry.

1.2.2 Corporate entrepreneurship and innovation

According to Antoncic and Hisrich (2003b:13), innovation cannot be discounted as a defining element of entrepreneurship and corporate entrepreneurship. Innovation and entrepreneurship research have an important common historical background. This background pertains to the broad view of the Schumpeterian innovation. Schumpeter

(1934:66) understood innovation broadly as: the introduction of a new product or a new product quality; the introduction of a new production method (this may be based on a new scientific discovery, but not need be. It can also be a new way of dealing with a product commercially); the opening-up of a new market; the use of new raw materials or sources of semi-manufactures; and the creation of a new industry business such as the establishment of a monopoly situation for the breakdown of a monopoly.

Ireland, *et al.* (2006a:10) support this and also indicate that innovation takes place in businesses in the form of new products, new processes to create products and new administrative structures and routines to help the firm operate efficiently and effectively.

Schumpeter positioned the entrepreneur as an agent of change, whose creative behaviour in terms of different innovation aspects was seen as a disruption (a creative disruption) in the economic equilibrium of an industry. Drucker (1985) also considered innovation a specific function of entrepreneurship. In Drucker's view, innovation distinguishes the difference between what is entrepreneurial and what is managerial. It is the Schumpeterian innovation that differentiates behaviour of entrepreneurs from non-entrepreneurial managers, making entrepreneurship and innovation almost inseparable.

Hitt, Ireland, Camp and Sexton (2001:484) indicate that there is a strong interrelationship between innovation and entrepreneurship. Lumpkin and Dess (1996) argue that a key dimension of an entrepreneurial orientation is an emphasis on innovation.

Johnson (2001:136) claims that many people view innovation and corporate entrepreneurship as a vehicle to stimulate growth and development. If a business does not adopt a proactive attitude towards innovation and the creation of new ventures, it is unlikely to survive in an increasingly aggressive, competitive and dynamic market place.

1.2.3 The importance and value of corporate entrepreneurship

Kuratko, *et al.* (2004:78) cite a few researchers who indicate that, as the corporate landscape becomes more complex, competitive and global, established businesses have increasingly embraced corporate entrepreneurship for the purposes of: profitability (Zahra, 1991); strategic renewal (Guth and Ginsberg, 1990); fostering innovativeness (Baden-

Fuller, 1995); gaining knowledge for future revenue streams (McGrath, Venkataraman and MacMillan, 1994); and international success (Birkshaw, 1997).

Kuratko, Ireland, Covin and Hornsby (2005:699) support these researchers and indicate that corporate entrepreneurship is also practiced in businesses to develop competitive advantages and a separate identifiable strategy.

Antoncic and Zorn (2004:6-7) state that past research has presented much evidence for the relationship of corporate entrepreneurship to organisational growth (Covin and Slevin 1986, Covin 1991, Zahra and Covin, 1985; Morris and Sexton, 1996; Wiklund, 1999; Antoncic and Hisrich, 2001) and profitability (Covin and Slevin, 1986; Zahra, 1991, 1993; Zahra and Covin, 1995; Wiklund, 1999; Antoncic and Hisrich, 2000, 2001).

Morris and Sexton (1996) in Antoncic and Hisrich (2004:524) found a significant positive relationship between entrepreneurial intensity and increased growth. Zahra and Covin (1995) and Wiklund (1999) found that entrepreneurial orientation of businesses tends to have sustainable long-term effects on growth and financial performance in addition to short-term effects.

Hisrich and Peters (1998) proved that entrepreneurship often results in the creation of new value. Organisational wealth creation has been considered an important, yet implicit, consequence of corporate entrepreneurship in general (Kanter, 1984; Peters and Waterman, 1982; Pinchot, 1985 in Hisrich and Peters, 1998) as well as in corporate entrepreneurship induced performance measurement (Naman and Slevin, 1993, in Hisrich and Peters, 1998).

Antoncic and Hisrich (2004:542) indicate that businesses with entrepreneurial top management postures engaging in entrepreneurial activities are expected to achieve higher levels of growth (absolute – growth in sales and in number of employees and relative – growth in market share), profitability (absolute – return of sales, return on equity, and return on assets and relative – in comparison to competitors) and new wealth creation (new available funds), than businesses that are lower in corporate entrepreneurship engagement.

Ireland, *et al.* (2006a:10) proved that leading edge businesses see the effective use of corporate entrepreneurship as a source of competitive advantage and as a path to higher levels of financial and non-financial performance. Corporate entrepreneurship can be a source of competitive advantage at both the corporate and the business unit levels.

Thornberry (2001:2) states that not all businesses need to embrace a concept of corporate entrepreneurship. Some businesses are doing quite well running their businesses in a planned, effective and efficient manner. But some businesses need an infusion of creativity, especially if they are operating in a rapidly changing or turbulent environment. Thornberry (2001:2) indicates that it is the large slow-moving bureaucratic business operating in an increasingly turbulent environment that needs to do the most entrepreneurial soul searching.

1.2.4 How to foster, develop and implement corporate entrepreneurship

Hisrich, Peters, and Shepherd (2008:68) define an entrepreneurially fostering environment as an environment that enhances organisational members' perceptions of entrepreneurial action as both feasible and desirable.

Antoncic and Zorn (2004:7) point out that one important organisational element that is beneficial to corporate entrepreneurship is organisational and management support for entrepreneurial activities.

Antoncic and Zorn (2004:8) state that organisational support refers to management encouragement, worker's discretion about their work-related decisions, designating idea champions, establishing procedures to solicit and examine employee ideas, permeability of job boundaries, training, rewards and reinforcement, and availability of time and financial resources for pursuing new ideas or projects.

Organisational support for entrepreneurial activities has been proved as beneficial for corporate entrepreneurship in the following ways: top management involvement (Merrifield, 1993; Antoncic, 2007); training (Stevenson and Jarillo, 1990); trusting individuals within the business to identify opportunities (Stevenson and Jarillo, 1990);

resource availability (Kanter, 1984; Pinchot, 1985); encouragement (Hisrich and Peters, 1984); and rewards (MacMillan, 1986; Hisrich, *et al.*, 2008).

Organisational support elements such as management support, work discretion, rewards, time availability and loose intra-organisational boundaries, identified by Hornsby, *et al.* (1993) have been seen as crucial elements impacting on corporate entrepreneurship.

Echols and Neck (1998:39) indicate that behaviours of employees and the structure of a business are primary ingredients necessary for corporate entrepreneurial success. Entrepreneurial success is defined in terms of innovative capacity that enables a business to renew itself and survive longer.

Nayager and Van Vuuren (2005:37) did research on the analysis of an organisational strategy, structure and culture that supports corporate entrepreneurship. In this research Nayager and Van Vuuren (2005:37) indicate that, in order to create innovation, the business must have an internal environment or orientation that supports entrepreneurship. The businesses' strategies, structure, systems, policies, procedures and managers should therefore support innovation and corporate entrepreneurship. If managers understood or knew how their businesses were performing in the various facets of entrepreneurial orientation, the managers would know where to make improvements.

The key to making an organisational structure entrepreneurial involves several factors, especially fostering the right climate or culture (Echols and Neck, 1998:42). An entrepreneurial climate that promotes the detection and facilitation of opportunities, as well as fostering motivation to pursue opportunities, provides an ideology to which employees can commit while facilitating the emergence of social capital.

Parboteeah (2000) states that developing and nurturing an entrepreneurial culture will contribute to businesses' ability to develop innovative solutions and sustain strategic competitive advantages.

Kuratko and Hodgetts (2004:63) suggest that to structure the business for a corporate entrepreneurial climate, businesses need to invest heavily in entrepreneurial activities that allow new ideas to flourish in an innovative environment. As a way for businesses to

develop key environmental factors for intrapreneurial activity, a corporate entrepreneurship training programme often induces the change needed in the work atmosphere.

Toftaoy and Chatterjee (2005:15) state that corporate entrepreneurship training programmes, within the business, will separate businesses from their competitors. The corporate entrepreneurship training programme is a way of launching corporate entrepreneurial teams, via intrapreneurship workshops or seminars.

Marcus and Zimmerer (2003:11) investigated the corporate performance of Fortune 500 companies. The investigation focused on corporate entrepreneurial training programmes in Fortune 500 companies, and utilised a self-reporting technique in order to determine the presence of such programmes in the business. All the respondents indicated that the impact of intrapreneurial programmes was positive.

Marcus and Zimmerer (2003:18) conclude their findings and indicate that as corporate entrepreneurship programmes provide opportunities for success, increasing future research could provide an objective basis for determining the extent to which such programmes are feasible and have the potential to be incorporated into organisational structures.

1.2.5 Sustaining corporate entrepreneurship and innovation

Aloulou and Fayolle (2005:25) refer to some researchers who indicated that corporate entrepreneurship is recognised as a potentially viable means for promoting and sustaining competitiveness and transforming corporations and industries by providing opportunities for value-creating innovation (Miller, 1983; Guth and Ginsberg, 1990; Naman and Slevin, 1993; Stopford and Baden-Fuller, 1994; Lumpkin and Dess, 1996).

Morris, *et al.* (2008:8) state that traditionally competitive advantage was achieved by having lower costs than the competition, achieving higher quality or product performance, adding a new product feature, or delivering better customer service. This unfortunately will no longer produce sustainable advantage.

According to Morris, *et al.* (2008:20), remaining competitive is very different from achieving sustainable competitive advantage. The quest for competitive advantage requires that businesses and the managers within them continually reinvent themselves. Advantage derives from five key company capabilities: adaptability, flexibility, speed, aggressiveness and innovativeness.

Ireland, *et al.* (2006a:15) state that sustainable corporate entrepreneurship is more likely in businesses where all individuals' entrepreneurial potential is sought and nurtured and where organisational knowledge is widely spread.

Businesses that are more adaptable, flexible, fast, aggressive and innovative are better positioned not only to adjust to a dynamic, threatening and complex external environment, but to create change in that environment. These businesses do not take the external environment as a given, and instead define themselves as agents of change, leading customers instead of following them, creating new markets, and rewriting the rules of the competitive game.

1.2.6 Conceptual models for corporate entrepreneurship

From the research conducted in the field of corporate entrepreneurship various conceptual models have been developed for the aspects in corporate entrepreneurship. Most researchers also use these models to guide research actions. The most prominent conceptual models for corporate entrepreneurship are briefly indicated.

Guth and Ginsberg (1990) developed a domain model for corporate entrepreneurship. This model attempted to provide a framework for tracking research in corporate entrepreneurship. Covin and Slevin (1991) developed a conceptual model of organisational behaviour in examining the behaviours of entrepreneurs and their impact on the businesses' actions. A third model is the organisational model for internally developed ventures developed by Brazeal (1993). This model defines corporate venturing as an internal process that embraces the ultimate goal of growth through the development of innovative products, processes and technologies that should be institutionalised as a process geared towards long-term prosperity.

Hornsby, *et al.* (1993) developed an interactive model of the corporate entrepreneurial process. This model is an expansion of the model of Brazeal and describes the interaction of organisational factors and individual characteristics that is ignited by precipitating events that lead to successful corporate entrepreneurship.

Kuratko, *et al.* (2004) developed a model for sustaining corporate entrepreneurship. Kuratko, *et al.* (2004:86) indicate that it has been established that change or transformational triggers cause businesses to pursue strategies for entrepreneurial activities and to institute certain internal organisational factors to ensure their implementation. The model proposes that it is the degree of ongoing entrepreneurial behaviour of individuals and the perceptions of a businesses' executive management towards entrepreneurial activities that need to be focused upon in future research. This model will be used as the basic framework for this study.

Morris, *et al.* (2008:50) adapted a model from Covin and Slevin, the strategic integration framework. The focus of this framework is the ongoing interaction of entrepreneurship throughout the entire business.

Lastly Shaw, O'Loughlin and McFadzean (2005) developed the micro-model of corporate entrepreneurship and innovation. This model is a multi-stage, multi-individual, complex process that helps to provide insight for altering the organisational dynamics.

1.2.7 Methods for measuring entrepreneurial activity

In the field of corporate entrepreneurship a few measuring instruments exist that were developed to measure various aspects of entrepreneurship in businesses. These measuring instruments form the basis of various researchers' research where the instruments are used as originally developed or where they are adapted to fit the exact research purpose.

Khandwalla (1977) developed a questionnaire to measure various dimensions of corporate entrepreneurship. The ENTRESALE was refined by Miller and Friesen (1982) and Covin and Slevin (1989). The goal of the ENTRESALE instrument, according to Knight (1997:213) is: "entrepreneurship at the firm level ... reflecting innovative and proactive

disposition of management". The ENTRESALE includes a corporate entrepreneurial orientation in research and development activities, leadership and proactiveness. It also explores activities such as the number of marketed new lines of products and services. The ENTRESALE not only assesses management's orientation towards corporate entrepreneurship, but also what management favours and how they act, especially in terms of the external environment and the competition. It does not address adequately the internal orientation towards corporate entrepreneurship.

In 1990 Kuratko, *et al.*, developed an instrument - initially called the intrapreneurial assessment instrument (IAI) – and later changed to the corporate entrepreneurship assessment instrument (CEAI). The CEAI was developed to identify the dimensional structure of businesses with respect to their ability to foster intrapreneurial activity (Kuratko, *et al.*, 1990:54). The CEAI is designed around five key antecedents to the creation of sustainable entrepreneurship in a business. These antecedents include management support; work discretion/autonomy; reinforcement; time availability and organisational boundaries. The instrument has been shown to be psychometrically sound as a viable means for assessing areas requiring attention and improvement in order to achieve intended results through the use of a corporate entrepreneurship strategy (Morris, *et al.*, 2008:331).

Pinchot and Pellman (1999) developed the Innovative Climate Questionnaire. This questionnaire consisted of nineteen Innovative Success Factors that together create the conditions for cost-effective innovation. This instrument can only be used to predict a businesses' capacity to have an innovative climate, and does not measure whether or not a business is entrepreneurial in nature.

The Entrepreneurial Performance Index (EPI) was developed by Morris (1998). The items in this instrument capture the degree and frequency of entrepreneurship, as well as the underlying dimensions of innovativeness, risk-taking and proactiveness. In addition, product, service and process innovation are covered (Morris and Kuratko, 2002:291).

Hill (2003) developed an instrument, the Intrapreneurial Intensity Index. This measuring instrument was developed to determine the intensity of intrapreneurship within large South African businesses. The instrument can provide an overall view of the businesses

intrapreneurial ability, as well as identify the specific areas in the business that require change or modification in order to become more intrapreneurial.

1.2.8 Research conducted in South Africa

Limited South African research exists in the field of corporate entrepreneurship and more specifically in terms of evaluating corporate entrepreneurial mindsets, corporate entrepreneurship training programmes and the effect thereof as well as fostering corporate entrepreneurship.

Existing research that could influence this research study (briefly mentioned) are as follows:

- The development of an instrument to measure intrapreneurship: entrepreneurship within the corporate setting (Hill, 2003);
- Key factor intrapreneurship – the development of a systems model to facilitate the perpetuation of entrepreneurship in the larger South African business (Goosen, 2002);
- Conducting an entrepreneurial audit (Govender, 1998);
- The importance of entrepreneurship in large enterprises: a critical evaluative study (Nel, 1993);
- The identification of corporate intrapreneurial characteristics among middle level managers at Sasol Fertilisers (Ras, 2000);
- The relationship between corporate entrepreneurship, market orientation, organisational flexibility and job satisfaction (Adonisi, 2004);
- The nature and being of entrepreneurship and its importance for business success (Swanevelder, 2001);
- Factors affecting the institutionalisation of corporate entrepreneurship (Mwale, 1998);
- Assessing the impact of remuneration systems on corporate entrepreneurship, a critical view (Parbhoo, 1997);
- An overview of the most important components for the development of an entrepreneurial culture model for the South African Broadcasting Corporation (Evans, 1996);

- Corporate Entrepreneurship in Development Finance Institutions: A focus on the Development Bank of Southern Africa (Gantsho, 2006);
- Entrepreneurship's contribution to the success of deregulated electricity utilities (Dykman, 2005);
- Corporate Entrepreneurship within Pretoria East Hospital (Bauwmeester, 2005) and
- Factors impacting on corporate entrepreneurial behaviour within a retail business – a case study (Kamffer, 2004).

From the mentioned research the studies that would mostly have an impact on this research study are the research of Gantsho (2006), Bauwmeester (2005), Kamffer (2004) and Govender (1998). These studies used and adapted a measuring instrument similar to the one that will be used in this study. In both Gantsho (2006) and Bauwmeester's (2005) research an experimental case study design was followed.

1.3 THE RESEARCH PROBLEM

From the literature review it is evident that to develop and nurture businesses' current and future competitive advantages, advantages that are grounded in innovation, businesses increasingly have to rely on corporate entrepreneurship. Corporate entrepreneurship represents the framework for the facilitation of ongoing change and innovation in established businesses (Morris and Kuratko, 2002). There is a significant amount of written consensus regarding corporate entrepreneurship as a means for promoting and sustaining global corporate competitiveness and economic growth. This consensus mainly focuses on international businesses and not on businesses in South Africa. The management dilemma that exists (in particular in South Africa) is then how to foster and implement corporate entrepreneurship in businesses to sustain this competitive advantage and improve performance.

In spite of its potential to create value by contributing to improved organisational performance, many established businesses do not encourage entrepreneurial behaviour and often have structural barriers in place that prevent this from occurring (Ireland, *et al.*, 2006a:11). From research conducted by Ireland, *et al.* (2006a:16), a conclusion was made that businesses that are successful in terms of their corporate entrepreneurial

strategies are those where the employees have an entrepreneurial mindset. The process of combining entrepreneurial behaviours with strategic actions is vital to designing and successfully using a corporate entrepreneurship strategy that will result in competitive advantage.

Kuratko, *et al.* (2004) developed a model for sustaining corporate entrepreneurship. The model proposes that it is the degree of ongoing entrepreneurial behaviour of individuals, and the perceptions of a businesses' executive management towards entrepreneurial activities, that need to be focused upon in future research. Kuratko, *et al.* (2004:86) note that this model should provide insights for researching the entire corporate entrepreneurship process from both the individual and organisational levels. "This area has great potential for research in terms of its impact on organisational change and ultimately on organisational success."

Guth and Ginsberg (1990:9) commented on the research which has been done by Kuratko, *et al.*, in developing a corporate entrepreneurial assessment instrument for an effective corporate entrepreneurial environment where a quasi experimental design was followed within one business and factor-analysis technique used. Guth and Ginsberg's conclusion was that more thorough empirical methods like these are needed to develop theory in this important area of corporate entrepreneurship.

Morris, *et al.* (2008:323) indicates that as the businesses aggressively pursue the future, managers must continually assess the actual levels of entrepreneurial activity occurring within the business. Organisations must track outcomes related to innovation, competitive position and financial performance.

Ireland, *et al.* (2006b) developed a health audit to assess corporate entrepreneurship and innovation in a business. This instrument can be used to assess the degree to which businesses' employees are prepared to engage in entrepreneurial behaviour as exercised through innovation, risk-taking and proactive actions. Firstly, the businesses' level of entrepreneurial intensity is determined. Then the businesses' internal work environment is examined to understand the factors accounting for the degree of entrepreneurial intensity the business has at a point in time. Lastly, the audit reveals to the business the type of work to be done to help employees form an entrepreneurial mindset as the source of, and

reinforcement for, the entrepreneurial behaviour needed to display for the chosen corporate entrepreneurial strategy to be successfully implemented.

The management question that needs to be addressed is: Can corporate entrepreneurship and innovation levels be assessed in South African industries?

From this management question the following research questions are formulated:

- Can the model for sustaining corporate entrepreneurship be applied in South African short-term insurance businesses?
- Will the health audit instrument be able to determine the entrepreneurial intensity and the entrepreneurial culture in South African short-term insurance businesses?
- Will it be possible to develop a corporate entrepreneurial development programme for South African short-term insurance businesses, from the results of the health audit?
- How can a corporate entrepreneurial development programme be used to develop and sustain corporate entrepreneurship in South African short-term insurance businesses?
- How can a corporate entrepreneurial development programme be used to address the gaps between the various business unit levels in South African short-term insurance businesses?
- What will be the content of a corporate entrepreneurial development programme for South African short-term insurance businesses?

Limited empirical research is available on corporate entrepreneurship in South Africa. No formal study has been conducted in South Africa where the Health Audit of Ireland, Kuratko and Hornsby had been used. A few research studies did make use of the Entrepreneurial Performance Index and the Corporate Entrepreneurship Assessment Instrument individually. There is also no record of any formal research conducted on corporate entrepreneurship amongst the short-term insurance businesses in South Africa.

1.4 PURPOSE OF THE STUDY

The purpose of the study is to make use of a corporate entrepreneurial assessment instrument, the Health Audit Instrument developed by Ireland, *et al.* (1996) to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses. The purpose is to develop a corporate entrepreneurial development programme that can be used to foster and implement corporate entrepreneurship in South African short-term insurance businesses.

This study will also inform and provide proof to other South African businesses of the value of assessing their businesses in terms of their corporate entrepreneurial and innovative mindset which could assist in sustaining a competitive advantage.

The research objectives of this study, formulated to address the management and research questions, are addressed in the next section.

1.5 RESEARCH OBJECTIVES

The primary and secondary objectives of the study are presented below.

1.5.1 Primary objective

The primary objective of this research is to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

1.5.2 Secondary objectives

In order to achieve this primary objective various secondary objectives are formulated. The secondary objectives of the study are:

To determine by means of a literature study:

- how entrepreneurship and corporate entrepreneurship relate to one another;
- the link between corporate entrepreneurship and innovation;

- the importance and value of corporate entrepreneurship;
- how to foster, develop and implement corporate entrepreneurship;
- how to sustain corporate entrepreneurship and innovation;
- the conceptual models that exist for corporate entrepreneurship;
- the methods of measuring entrepreneurial activity; and
- the design, content and structure of a corporate entrepreneurial development programme.

To determine by means of a case study design:

- how to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses, by means of a corporate entrepreneurial health audit instrument.

1.6 HYPOTHESES

The following hypotheses are formulated for this study and were seen as important by senior management in each short-term insurance business:

Ho1: There is no statistical difference in terms of **the years that the employees have been working** in South African short-term insurance businesses and the perceptions on **the rate of new products/service introductions compared to competitors.**

Ho2: There is no statistical difference in terms of the **years that the employees have been working** and the perceptions that **top level decision-making is characterised by an active search of big opportunities** in South African short-term insurance businesses.

Ho3: There is no statistical difference in terms of the **years that the employees have been working** in South African short-term insurance businesses and the perceptions that **top level decision-making is characterised by large bold decisions despite uncertainties of the outcomes.**

- Ho4: There is no statistical significant difference in terms of the **years that the employees have been working** in South African short-term insurance businesses and the perceptions **that top level decision-making is characterised by compromises** among the conflicting demands of owners, government, management, customers, employees and suppliers are made by a business.
- Ho5: There is no statistical significant difference between the **business unit levels** and the **emphasis** that South African short-term insurance businesses **place on continuous improvement in methods of production and/or service delivery**.
- Ho6: There is no statistical significant difference between the **business unit levels** in South African short-term insurance businesses and how the **top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems**.
- Ho7: There is no statistical significant difference between the **management levels** in South African short-term insurance businesses and how **the executives take risks in exploring new opportunities**.
- Ho8: There is no statistical significant difference between the **management levels** in South African short-term insurance businesses and the **“live and let live” philosophy in dealing with competitors**.
- Ho9: There is no statistical significant difference between **the management levels** in South African short-term insurance businesses and **how top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems**.
- Ho10: There is no statistical significant difference between **the management levels** in South African short-term insurance businesses and **how top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes**.

Ho11: There is no statistical significant difference between the **management levels** in South African short-term insurance businesses and **how top level decision-making is characterised by compromises** among conflicting demands of owners, government, management, customers, employees and suppliers.

Ho12: The **degree of entrepreneurship** is not a high in South African short-term insurance businesses.

Ho13: The **frequency of entrepreneurship** is not high in South African short-term insurance businesses.

Ho14: The **entrepreneurial intensity** in South African short-term insurance businesses.

Ho15: There is no statistical significant difference between the **years working** in South African short-term insurance businesses and the **number of product improvements/revisions**.

Ho16: There is no statistical significant difference between **years in current job** in South African short-term insurance businesses and the **number of product improvement/revisions**.

Ho17: There is no statistical significant difference between the **business units** in South African short-term insurance businesses and the **number of product improvement/revisions**.

Ho18: There is no statistical significant difference between the **management levels** in South African short-term insurance businesses and the **number of product improvements/revisions**.

Ho19: There is no statistical significant difference between the **years working** in South African short-term insurance businesses and the **number of product improvements/revisions compared with competitors**.

Ho20: There is no statistical significant difference between **years in current job** in South African short-term insurance businesses and the **number of product improvement/revisions compared with competitors**.

Ho21: There is no statistical significant difference between the **business units** in South African short-term insurance businesses and the **number of product improvement/revisions compared with competitors**.

Ho22: There is no statistical significant difference between the **management levels** and the **number of product improvements/revisions compared with competitors**.

Ho23: There is no statistical significant difference between the **years** in South African short-term insurance businesses and the **number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”)**.

Ho24: There is no statistical significant difference between **years in current job** in South African short-term insurance businesses and the **number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”)**.

Ho25: There is no statistical significant difference between the **business units** in South African short-term insurance businesses and the **number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”)**.

Ho26: There is no statistical significant difference between the **management levels** in South African short-term insurance businesses and the **number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”)**.

Ho27: There is no statistical significant difference between the corporate entrepreneurship opinions of the **managers and employees** in South African short-term insurance

businesses regarding the corporate entrepreneurship construct: **managerial support** for corporate entrepreneurship.

Ho28: There is no statistical significant difference between the corporate entrepreneurship opinions of the different **business unit levels** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **managerial support** for corporate entrepreneurship.

Ho29: There is no statistical significant difference between the corporate entrepreneurship opinions of the **managers and employees** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **work discretion**.

Ho30: There is no statistical significant difference between the corporate entrepreneurship opinions of the different **business unit levels** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **work discretion**.

Ho31: There is no statistical significant difference between the corporate entrepreneurship opinions of the **managers and employees** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **rewards/reinforcement**.

Ho32: There is no statistical significant difference between the corporate entrepreneurship opinions of the different **business unit levels** in South African short-term insurance businesses regarding the corporate entrepreneurship **construct: rewards/reinforcement**.

Ho33: There is no statistical significant difference between the corporate entrepreneurship opinions of the **managers and employees** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **time availability**.

Ho34: There is no statistical significant difference between the corporate entrepreneurship opinions of the different **business unit levels** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **time availability**.

Ho35: There is no statistical significant difference between the corporate entrepreneurship opinions of the **managers and employees** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **organisational boundaries**.

Ho36: There is no statistical significant difference between the corporate entrepreneurship opinions of the different **business unit levels** in South African short-term insurance businesses regarding the corporate entrepreneurship construct: **organisational boundaries**.

Ho37: There is no need for a **corporate entrepreneurship development programme** in short-term insurance businesses in South Africa.

1.7 RESEARCH METHODOLOGY

1.7.1 Research design

This research is designed as a formal study. The goal of a formal research design is to test the hypotheses or answer the research questions posed (Cooper and Schindler, 2006:140). The formal study consists of a literature review and an empirical study. The literature review aims to survey the background on corporate entrepreneurship in terms of the concept corporate entrepreneurship, the relationship between corporate entrepreneurship and innovation, the importance and value of corporate entrepreneurship, how to foster, develop and implement corporate entrepreneurship, sustaining corporate entrepreneurship and innovation, conceptual models for corporate entrepreneurship and methods for measuring entrepreneurial activity. The literature review will provide an insight and understanding into the research problem as well as the necessary background to guide the empirical part of the study.

The empirical part of the study will focus on the assessment of corporate entrepreneurial and innovative levels in South African short-term insurance businesses. The assessment will be done by means of a corporate entrepreneurial health audit instrument developed by Ireland, *et al.* (1996). The empirical method is embedded in a case study design. Cooper

and Schindler (2008:153) indicate that case studies place more emphasis on a full contextual analysis of fewer events or conditions and their interrelations. In a case study the emphasis on detail provides valuable insight for problem solving, evaluation and strategy. Cooper and Schindler (2008:153) also state that a single well designed case study can provide a major challenge to a theory and simultaneously provide a source of new hypotheses and constructs.

The time dimension of the study is cross-sectional. The research will be conducted in a field environment in South African short-term insurance businesses.

1.7.2 Sampling

The target population will be employees in South African short-term insurance businesses. The parameters of interest indicate that the participants must be employees from different short term insurance businesses employed in the South African short-term insurance industry; the employees must be full time employees in South African short-term businesses; and the full time employees must include employees from top management level to normal workers in all the various business units in the businesses.

The study will make use of a non-probability, purposive or judgmental sampling technique. In a purposive or judgmental sampling technique, an experienced individual selects the sample based upon some appropriate characteristic of the sample members (Zikmund, 2003:213). The sample is drawn from different insurance businesses in the South African short-term insurance industry. The sample size is 1900.

1.7.3 Data collection

For the literature section of the study, data will be collected by means of a literature search using secondary data such as journals, textbook, databases and the Internet. A self-administered questionnaire will be used to assess the corporate entrepreneurial and innovative levels in five South African short-term insurance businesses. The responses will be anonymous and this data source will be respected in the study. This was the only way in which data could be accessed. There was an agreement between the respective businesses to treat the anonymity as highly confidential.

The entrepreneurial health audit developed by Ireland, *et al.* (2006) will be used to conduct the assessment. The entrepreneurial health audit consists of three stages. First, the business level entrepreneurial intensity is determined by means of the Entrepreneurial Performance Index (EPI) of Morris (1998). The EPI consist of 21 questions. The first 12 questions determine the degree of entrepreneurship in terms of innovativeness, risk-taking and proactiveness, and the other 9 questions determine the frequency of entrepreneurship. Together these 21 questions determine a businesses entrepreneurial intensity level. The EPI has been proved as a reliable and valid instrument.

Secondly, the insurance businesses internal work environment is examined to understand the factors accounting for the degree of entrepreneurial intensity the insurance business has at a point in time. The Corporate Entrepreneurship Assessment Instrument (CEAI) of Kuratko, *et al.*, will be used to collect this information. Kuratko, *et al.*, developed the CEAI in 1990. The instrument consists of 78 five-point likert-style questions. The desired outcome of the CEAI is to assess a level of corporate entrepreneurship intensity and recognition of corporate entrepreneurship by management within a business. Six distinct internal organisational factors are addressed: management support, work discretion, organisational boundaries, rewards/reinforcement, time availability and specific climate variables. The CEAI has been proved as a reliable and valid instrument.

Thirdly, the audit reveals to businesses the type of work to be completed, to help employees form an entrepreneurial mindset as the source of, and reinforcement for, the entrepreneurial behaviour to be displayed, in order for the chosen corporate entrepreneurial strategy to be successfully implemented. As a way for businesses to develop a sound programme for understanding entrepreneurial activity, a corporate entrepreneurial development programme should be established.

1.7.4 Data analysis

The quantitative data of the questionnaires will be analysed with a statistical package (SPSS) by the University of Pretoria's statistical department. For comparative purposes, comparative statistical tools such as the ANOVA discriminant and correlation analysis will be used to test the hypotheses and to make statistical inferences. More specifically a comparison will be made between the opinions of the managers and staff; and also

between the various business unit levels in South African short-term insurance businesses.

1.7.5 Referencing technique

The Harvard Referencing technique is used in this study.

1.8 IMPORTANCE AND BENEFITS OF THE STUDY

It is hoped that this research will contribute to the understanding of corporate entrepreneurship and innovation, and lead to ideas for structuring of corporate entrepreneurial units that are unique to the South African market. These insights are helpful to businesses in understanding what can be done to improve the businesses ability to compete in the complex, rapidly changing competitive environments.

The findings of the research can help South African businesses understand the corporate entrepreneurial process and can provide guidelines for businesses involved in corporate entrepreneurship. This will also assist managers in undertaking change efforts directed at stimulating a corporate entrepreneurial and innovative mindset.

The findings are important for South African management faced with the challenge of developing world-class businesses through the process of institutionalising corporate entrepreneurship.

The entrepreneurial health audit tool developed by Ireland, *et al.* (2006) can be used by decision makers as part of their effort to help their businesses successfully engage in entrepreneurship as a path to organisational effectiveness.

The South African short-term insurance industry in particular will benefit from this study as no other formal study in the field of corporate entrepreneurship has ever been conducted in this industry. The results can be used to set standards for benchmarking for short term insurance businesses.

1.9 OUTLINE OF THE STUDY

The study will be presented in such a way that it follows a logical progression to build up to the specific research problem and objectives. The research starts with a thorough and broad literature review based on the field of entrepreneurship, corporate entrepreneurship, corporate entrepreneurship development programmes and measuring instruments. Thereafter the research methodology followed by this research is explained in full detail followed by the findings, conclusions and recommendations of this study. Figure 1.1 gives an illustration of the research process followed.

Chapter 2: The field of entrepreneurship

Chapter two focuses on the literature review in the field of entrepreneurship. Firstly entrepreneurship is defined, followed by a brief history on the field of entrepreneurship. The next section deals with the role of entrepreneurship in the economy and the entrepreneurial process. This section is followed by the relationship between entrepreneurship and innovation. Lastly the relationship between entrepreneurship and corporate entrepreneurship is discussed.

Chapter 3: Corporate entrepreneurship – a theoretical overview

Chapter three gives a theoretical overview of corporate entrepreneurship. The definition of corporate entrepreneurship is firstly discussed. This is followed by a discussion on the necessity of corporate entrepreneurship and the various corporate entrepreneurship conceptual models. Fourthly the various aspects of entrepreneurial intensity are discussed. This is followed by an explanation of the relationship between corporate entrepreneurship and innovation. The fostering, development and implementation of corporate entrepreneurship, as well as the various conceptual models of corporate entrepreneurship are presented next, highlighting its relevance to this particular study. Lastly, corporate entrepreneurship as a strategy is discussed.

Chapter 4: Corporate entrepreneurship measuring instruments and development programmes

Chapter four focuses on the literature on corporate entrepreneurship, measuring instruments and development programmes. Three specific measuring instruments will be discussed. The content of various corporate entrepreneurship development programmes will be discussed and compared.

Chapter 5: Research methodology

In this chapter the research methodology introduced in chapter one is discussed in more detail. The research problem, purpose of the study, objectives and hypotheses are stated, as well as the means of testing the hypotheses. The chapter discusses the research design according to Cooper and Schindler (2008:147), outlining the specific methods used to gather the empirical information. A detailed discussion is given on the sampling design and how the case study is conducted. A detailed explanation will be given on the questionnaire used to obtain the empirical data. The reliability and validity of the study will also be addressed. Finally, the data processing and analysis is explained by means of statistical techniques used. These tests include ANOVA discriminant and correlation analysis.

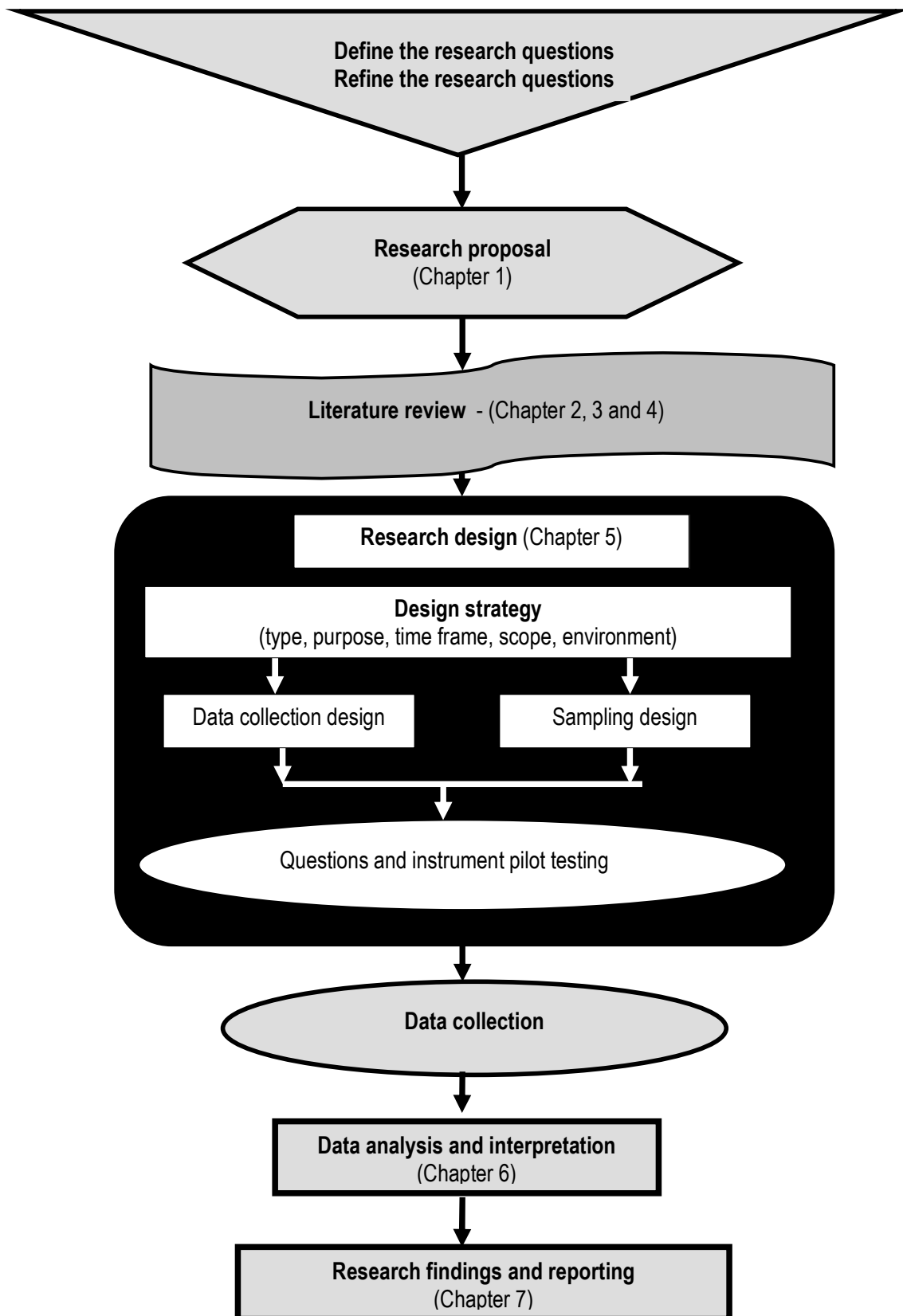
Chapter 6: Research findings

This chapter highlights the major findings of the research. Firstly demographic data will be presented followed by other descriptive statistics. Next the research findings obtained by the various analysis techniques will be presented in tabular format.

Chapter 7: Summary, conclusion and recommendations

Chapter seven summarises the major purpose and findings of the research study. A conclusion and recommendations of this study are presented. The research objectives and hypotheses are revisited. Finally, limitations of the study, contributions to the field of entrepreneurship and corporate entrepreneurship and recommendations for further research are presented.

FIGURE 1.1 The research process of the study



Source: Adapted from Cooper and Schindler (2008:65)



1.10 ABBREVIATIONS

CE	Corporate Entrepreneurship
CEAI	Corporate Entrepreneurship Assessment Instrument
CEDP	Corporate Entrepreneurship Development Programme
DV	Dependent variable
EI	Entrepreneurial Intensity
EO	Entrepreneurial Orientation
GEM	Global Entrepreneurship Monitor
EPI	Entrepreneurial Performance Index
IAI	Intrapreneurial Assessment Index
III	Intrapreneurial Intensity Index
IV	Independent variable
TEA	Total Entrepreneurial activity

CHAPTER 2: THE FIELD OF ENTREPRENEURSHIP

“Entrepreneurship is the most powerful economic force known to humankind!
The entrepreneurial revolution that captured our imagination during the late 1990s has now
permeated every aspect of business thinking and planning.”

Kuratko and Hodgets (2007:xix)

2.1 INTRODUCTION

This chapter presents a review on various aspects in the field of entrepreneurship. The purpose of this review is to give a background on what entrepreneurship entails and its relationship with corporate entrepreneurship. The aspects that will be addressed are the definition of entrepreneurship; history of the field of entrepreneurship; the role of entrepreneurship in the economy; the entrepreneurial process and the relationship between entrepreneurship and corporate entrepreneurship.

Kuratko and Hodgets (2007:xix) stress that: “Not too long ago the field of entrepreneurship was considered little more than an applied trade as opposed to an academic area of study. The economy was actually based upon entrepreneurship, and history has proven that with each downturn in the economy it is the entrepreneurial drive and persistence that brings entrepreneurship back”.

2.2 DEFINING ENTREPRENEURSHIP

Shane and Venkataraman (2000) observed that entrepreneurship is seen as a broad label under which a mixture of research is housed. Various researchers have mentioned that the problem with entrepreneurship is that a common definition and establishing the boundaries of entrepreneurship research have still not been solved (Bruyat and Julien, 2000; Usbasaran, Weasthead and Wright, 2001; Morris, 1998). The term entrepreneurship has been used to define a wide range of activities for example: creating,

founding, adapting and managing a venture (Cunningham and Lischeron, 1991; Hoy and Vesper, 1994; in Maes 2003:2).

Table 2.1 summarises various definitions of entrepreneurship from prominent researchers in the field of entrepreneurship.

TABLE 2.1: Definitions of entrepreneurship

Author	Definition
Schumpeter (1934)	Entrepreneurship is seen as new combinations including the doing of new things or the doing of things that are already being done in a new way. New combinations include (1) introduction of new goods, (2) new methods of production, (3) opening of a new market, (4) new source of supply, (5) new organisations.
Kirzner (1973)	Entrepreneurship is the ability to perceive new opportunities. This recognition and seizing of the opportunity will tend to “correct” the market and bring it back toward equilibrium.
Miller (1983)	A firm’s actions relating to product-market and technological innovation.
Drucker (1985)	Entrepreneurship is an act of innovation that involves endowing existing resources with new wealth-producing capacity.
Stevenson, Roberts and Grousbeck (1985)	Entrepreneurship is the pursuit of an opportunity without concern for current resources or capabilities.
Kanter (1985)	The creation of new combinations
Gartner (1985, 1989)	The process of new venture creation; the process by which new organisations come into existence.
Schuler (1986)	The practice of creating or innovating new products or services within existing businesses or within newly forming businesses
Rumelt (1987)	Entrepreneurship is the creation of new businesses, new business meaning that they do not exactly duplicate existing businesses but have some element of novelty.
Low and MacMillan (1988)	Entrepreneurship is the creation of new enterprise.

Hisrich and Peters (1989; 2008)	Entrepreneurship is the process of creating something different with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risk and receiving the resulting rewards of monetary and personal satisfaction.
Stevenson and Jarrilo (1990)	The process by which individuals – either on their own or inside organisations – pursue opportunities without regard to the resources they currently control. Entrepreneurship is the pursuit of opportunity beyond the resources you currently control.
Guth and Ginsberg (1990)	Entrepreneurship involves the identification of market opportunity and the creation of combinations of resources to pursue it.
Jones and Butler (1992)	The process by which firms notice opportunities and act to creatively organise transactions between factors of production so as to create surplus value
Krueger and Brazeal (1994)	The pursuit of an opportunity irrespective of existing resources
Timmons (1997)	Entrepreneurship is a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach, and leadership balanced.
Venkataraman (1997)	Entrepreneurship seeks to understand how opportunities to bring into existence future goods and services are discovered, created, and exploited, by whom and with what consequences.
Morris (1998)	Entrepreneurship is the process through which individuals and teams create value by bringing together unique packages of resource inputs to exploit opportunities in the environment. It can occur in any organisational context and results in a variety of possible outcomes, including new ventures, products, services, processes, markets and technologies.
Sharma and Chrisman (1999)	Entrepreneurship encompasses acts of organisational creation, renewal, or innovation that occur within or outside an existing organisation.
Kouriloff (2000)	The process of creating a new venture

Shane and Venkataraman (2000)	The discovery, creation and exploitation (including by whom and with what consequences) between factors of production so as to create surplus value
Low (2001)	The creation of a new enterprise
Global entrepreneurship monitor (Harding, 2002)	Any attempt at new business or new venture creation such as self-employment, a new business organisation, or the expansion of an existing business by an individual, team of individuals, or established businesses
Kuratko and Hodgetts (2007)	Entrepreneurship is a process of innovation and new-venture creation through four major dimensions – individual, organisational, environmental, process – that is aided by collaborative networks in government, education and institutions. All of the macro and micro positions of entrepreneurial thought must be considered while recognising and seizing opportunities that can be converted into marketable ideas capable of competing for implementation in today’s economy.

Source: (Meyer, Neck and Meeks in Hitt, Ireland, Camp and Sexton (2002:22); Welsch and Maltarich (2004:3); Maes (2003:7); Tang and Koveos (2004:162); Hisrich and Peters (1989); Guth and Ginsberg (1990); Kuratko and Hodgetts (2007)

As can be seen from table 2.1, entrepreneurship has multiple definitions of which no one definition has been accepted by the field of entrepreneurship. In a review of journal articles and textbooks over a five-year period Morris (1998) found 77 different definitions for entrepreneurship. From this research Morris determined that the most common terms associated with entrepreneurship are starting or creating a new venture, innovating or creating new combinations of resources, pursuing opportunity, acquiring or bringing together necessary resources, risk-taking, profit-seeking and creating value.

Of the available perspectives on definitions about entrepreneurship the definition of Stevenson and Jarillo (1986) in Morris, *et al.* (2008:10-11) captures the essence of entrepreneurship by integrating its core elements. Entrepreneurship is: “the process of creating value by bringing together a unique combination of resources to exploit an opportunity”.

This definition includes four key elements. Entrepreneurship firstly involves a process. This means it is manageable, can be broken down into steps or stages and is ongoing. As a process, entrepreneurship can be applied in any organisational context. Secondly, entrepreneurs create value where there was none before. Entrepreneurs create value within businesses and in the market place. Third, entrepreneurs put resources together in a unique way. Unique combinations of money, people, procedures, technologies, materials, facilities, packaging, distribution channels and other resources represent the means by which entrepreneurs create value and differentiate their efforts. Lastly, entrepreneurship is opportunity-driven behaviour. It is the pursuit of opportunity without regard to resources currently controlled. The ability to recognise new opportunities in the external environment, evaluate and prioritise these opportunities, and then translate these opportunities into viable business concepts lies at the heart of the entrepreneurial process.

Parkinson and Howorth in Anderson and Sarnawska (2008:224) argue that the only consensus is about what entrepreneurship is not: a static entity that is the preserve of elite individuals with special personality traits or characteristics. A multifaceted, dynamic understanding of entrepreneurship is emerging that presents challenges to research, breaks with functionalists positivism and calls for constant review of epistemological and ontological presumptions (Fletcher, 2006 in Anderson and Sarnawska; 2008:224).

Despite the fact that a concise universally accepted definition has not yet emerged, the field of entrepreneurship has grown tremendously since 1970. A great deal of research has been conducted in this field. In the next section the history of the field of entrepreneurship will be addressed.

2.3 HISTORY OF THE FIELD OF ENTREPRENEURSHIP

The word entrepreneur is derived from the French word “entreprendre”, meaning “to undertake” (Kuratko and Hodgetts, 2007:32; Wichham, 2006:3; Hisrich, *et al.*, 2008:6).

The recognition of entrepreneurs dates back to the eighteenth-century when economist Richard Cantillon associated the “risk-bearing” activity in the economy with the entrepreneur. Jean-Baptiste Say was the second author to take interest in entrepreneurs during 1803. Say regarded economic development as the result of venture creation.

Cantillon and Say regarded entrepreneurs as risk-takers because they invested their own money (Filion, 1998:67). The economists were mainly interested in understanding the role played by the entrepreneur as the motor of the economic system – from this standpoint the economist according to Filion (1998:67) viewed entrepreneurs as detectors of business opportunities (Higgins, 1959; Penrose, 1959; Kirzner, 1976), creators of enterprises (Ely and Hess, 1893; Oxenfeldt, 1943; Schloss, 1968) and risk-takers (Leibenstein, 1968; Kihlstrom and Laffont, 1979; Buchanan and Di Pierro, 1980).

It was actually Schumpeter (1928) in Filion (1998:67) who really launched the field of entrepreneurship, by associating it clearly with innovation.

“The essence of entrepreneurship lies in the perception and exploitation of new opportunities in the realm of business ... it always has to do with bringing about a different use of national resources in that they are withdrawn from their traditional employ and subjected to new combinations.”

Stevenson and Jarillo (1990:18-22) indicated that after Schumpeter’s clarification of innovation most economists and other non-economists have accepted the connection of entrepreneurship with innovation.

Entrepreneurship as a field of study began to emerge in the 1970s. Birch did various studies in 1979 and 1987 which revealed that the economic impact of entrepreneurship was not only attributed to business formation, but also to the growth of new businesses.

Because of the earlier findings relating entrepreneurship to organisational growth, a movement began in the mid-1980s to separate entrepreneurship from small business management – the ultimate difference being the growth of the business. Growth is regarded as the essence of entrepreneurship (Sexton and Smilor, 1997:97 in Meyer, Neck and Meeks, 2002:21).

Filion (1998:70) states that during the 1980s the field of entrepreneurship exploded and spilled over into most of the soft sciences and management sciences. The transition was marked by two events – the publication of the first-ever encyclopaedia containing the state

of the art in the field (Kent, Sexton, Vesper: 1982), and the first major annual conference (the Babson conference) dedicated to research in the new field.

According to Meyer *et al.*, in Hitt *et al.* (2002:21) the 1990s was a decade of debate over the domain of entrepreneurship research, its legitimacy and its contribution to management practice. Entrepreneurship research has been criticised for lack of rigor, multiple levels of analysis and an absence of a unifying framework to guide the field's research. Bygrave and Hofer (1991) argue that it is impossible to operationalise a construct that is not defined.

Barrett and Weinstein (1998:57) indicate that the 1990s have witnessed a new era of entrepreneurship theory and practice. Academic scholars have taken entrepreneurship to higher levels of sophistication via conceptualisation, modelling and empirical study. Entrepreneurs and managers have embraced new marketing and business philosophies and practices such as corporate entrepreneurship, market orientation and organisational flexibility to survive and thrive in increasingly competitive markets.

The theoretical roots of entrepreneurship builds on Stevenson and Jarillo (1990:17) who argue that the management literature on entrepreneurship is often based on classical entrepreneurship literature, which can be divided into three main categories: the effects of entrepreneurship (what happens when entrepreneurs act), the causes of entrepreneurship (why entrepreneurs act) and entrepreneurial management (how entrepreneurs act). The main differences are due to the different theoretical backgrounds of the researchers. Stevenson and Jarillo (1990:18) indicate that economists have dominated the effects of entrepreneurship such as the Chicago tradition (Knight, 1964; Schultz, 1975; 1980), the German tradition (Schumpeter, 1934), and the Austrian tradition (Mises, 1949; Kirzner, 1985; 1987). In contrast, studies on the causes of entrepreneurship are dominated by psychologists (Collins and Moore, 1964; Brockhaus, 1980; Brockhaus and Horwitz, 1986) and sociologists (McClelland, 1961), and studies on entrepreneurial management have mainly been considered from a practical point of view (Stevenson and Jarillo, 1990:18). Despite the differences in perspectives there are several similarities and overlaps – especially in the definitions of entrepreneurship, which are dominated by the effect studies, with their focus on what initiated entrepreneurship (Christensen, 2004:303).

Morris (1998) characterised the entrepreneurial field as having seven perspectives that are quite representative of the evolution of the field, whilst also emphasising the apparent importance of creation of the field. These perspectives are: the creation of wealth, the creation of enterprise, the creation of innovation, the creation of change, the creation of employment, the creation of value and the creation of growth (Morris, *et al.*, 2008:9).

The domain of entrepreneurship research is classified according to Meyer, Venkataraman and Gartner (1999) in Meyer *et al.* (2004:25) as follows:

“Entrepreneurship is about creation. The research domain in the entrepreneurship field involves the:

- creation of new venture opportunities;
- creation of new combinations of goods and services, methods of production, markets and supply chains;
- recognition and exploitation of new and existing opportunities; and
- cognitive processes, behaviours and modes of action to exploit new and existing opportunities”.

This domain classification corresponds with the seven perspectives characterised by Morris (Morris, *et al.*, 2008:9).

Heinonen and Poikkijoki (2006:82) state that there is no single theory of entrepreneurship, and the research conducted in this field has touched on several themes: the theory, types of entrepreneurs, the entrepreneurial process, organisational forms, the external environment and outcomes. Researchers have shifted their attention away from identifying people with certain characteristics and personality traits who prefer to become entrepreneurs, towards understanding the nexus of enterprising individuals and valuable opportunities. This focus demands a deeper understanding of opportunity in the entrepreneurial process on which the entire concept is assumed to be based. Entrepreneurship is a process of becoming, and the change involved usually takes place in quantum leaps in a holistic process in which existing stability disappears.

Filion (1998) postulates that the field of entrepreneurship can be defined as the field that studies the practices of entrepreneurs. It examines entrepreneurs' activities, characteristics, economic and social effects and the support methods used to facilitate the expression of entrepreneurial activity. Table 2.2 summarises the research trends in entrepreneurship.

The thinking about entrepreneurs first established by Cantillon in 1755 began from a venture capital and economic perspective around 1700. This viewpoint according to Filion (1998) is still progressing, although it lost its leadership to the behaviourist perspectives in the 1950s. The behaviourists led the field for several decades. Their approach to the study of entrepreneurs, have been less dominant since the 1980s, when management scientists of all kinds were working to identify more appropriate support systems for entrepreneurs. The 1990s produced more research that can be applied to help the practice of entrepreneurial action, in particular regarding entrepreneurial activities and the related competencies. Filion (1998) also notes that it is interesting to observe that the emergence of a research perspective in the field of entrepreneurship is limited by, and has not generally led to, an evolution in the original discipline. For instance, the explosion of behavioural studies of entrepreneurs was a consequence of the emergence of the behavioural science itself, not vice versa, and the limits of that science were clearly revealed in the limited understanding of entrepreneurial behaviour that it produced. This means that the science of entrepreneurship is, to some extent, fettered by the limitations of source paradigms that have evolved as a result of their application to entrepreneurship, and by its own inability to generate new paradigms with existing tools.

Meyer *et al.*, in Hitt *et al.* (2002:26) indicate that entrepreneurship's documented importance to, and impact on, the global economy. It still challenges researchers to continue seeking answers to important questions about the birth, growth, failure, renewal and transformation of businesses. Because the resulting economic impact is wealth and job creation, organisational performance becomes a critical factor. Just as the individual can affect the business, the business can affect the economy.

Ucbasaran, Weasthead and Wright (2001:57) conducted research in terms of the focus of entrepreneurial research, the contextual and process issues. From this research a conclusion was made that additional research should be directed towards gaining a

greater understanding of the behaviour of different types of entrepreneur (e.g. nascent, novice, serial and portfolio entrepreneurs) and the different organisational forms selected (e.g. corporate venturing, management buy-outs and buy-ins, franchising and the inheritance of a family business) by entrepreneurs.

Cornelius, Landstorm and Persson (2006:393) conducted research on the dynamic research front of a developing social science during 1982 and 2004. These researchers indicate that entrepreneurship research has been increasingly self-reflective. The interest in entrepreneurial research has grown as disciplinary specialists examine the state of entrepreneurship research; assess where we have been, and where we are going. The research community recognises and identifies with a large number of core and contributing authors who have led the research into increasingly complex areas. The increasing complexity of the research in entrepreneurship indicates a greater maturity in the discipline. There are some consistencies in research interests, but these have evolved as the research community has become more established.

Cornelius, *et al.* (2006:394) give, as an example, the examination of policies to assist in the development of entrepreneurship has gone from the general to the specific with researchers examining financial policy, legal policies and regional economic policies. Rather than criticising entrepreneurship as fragmented, this shows the centrality of the entrepreneur to the social order and the importance of academic endeavour to understand, and consequently support, the activities of these major economic entities. Figure 2.1 indicates the entrepreneurship development clusters over time.

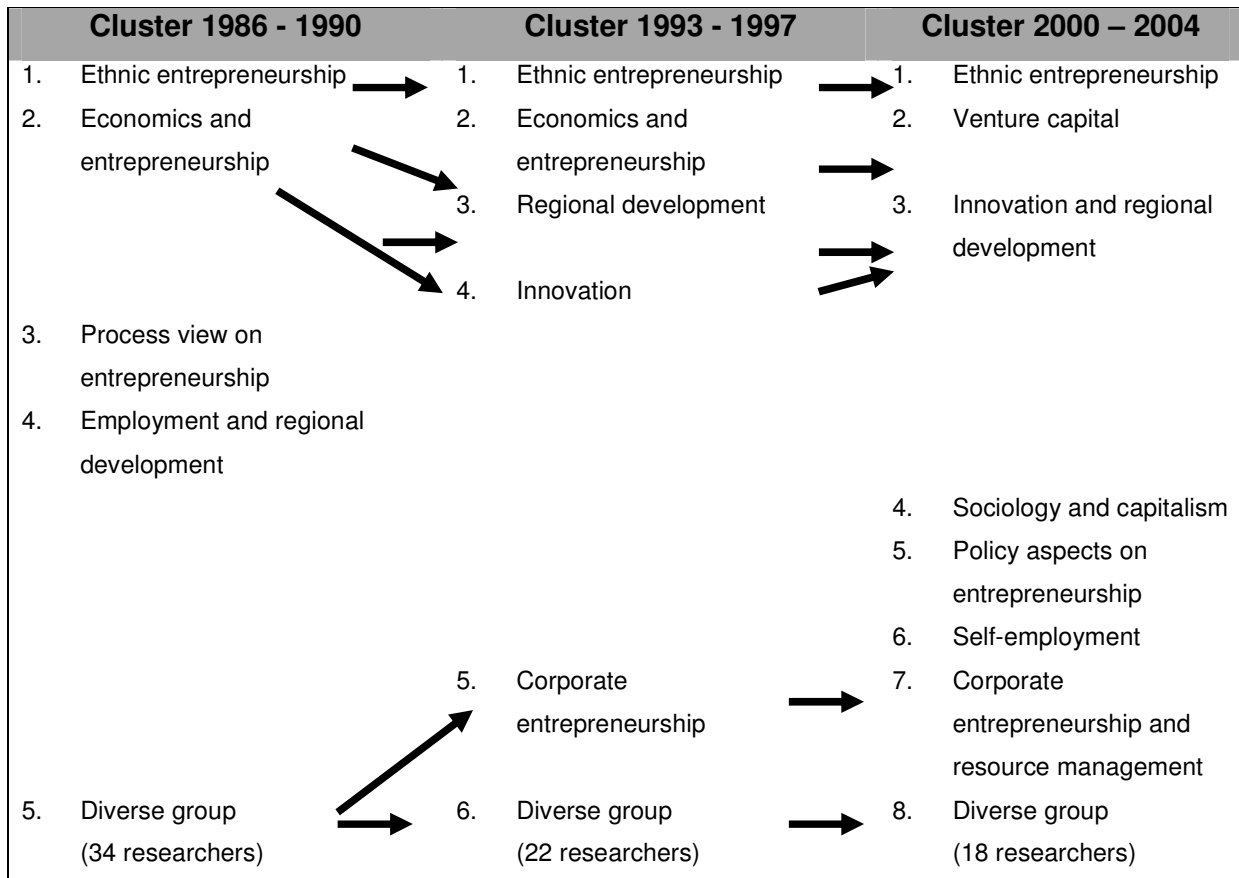
TABLE 2.2: Research trends in entrepreneurship

Period and topics	Perspective	Authors and researchers
1. What entrepreneurs do (1700) – (1950)	From an economic perspective	Cantillon; Say and Schumpeter
2. Who entrepreneurs are (1960) – (1980)	From a behaviourist perspective	Weber; McClelland; Rotter and De Vries
3. What entrepreneurs do and the trainability of entrepreneurs (1980 -)	From a management science perspective (finance, marketing, operation, human resources) and from an education perspective	Drucker; Mintzberg; McClelland; Gibb; Hisrich and Peters; Kuratko and Hodgetts
4. What support is needed by entrepreneurs (1985 -)	From a social perspective, including economists, geographers and sociologists	Gartner; Welsh; Bygrave and Reynold
5. What entrepreneurial activities are, and what competencies are required to perform these activities (1990 -)	From an entrepreneurship perspective	Timmons; Vesper and Brockhaus

Source: Fillion (1998:10)

From these clusters Cornelius, *et al.* (2006:394) proposes that more autonomous research groupings will develop. These research groupings will involve networks where tacit knowledge can be developed and exchanged, in which consensus can be reached regarding the problems of interest, definitions, methodological approaches, and more. If the entrepreneurship research will follow the evolutionary pattern of many other research fields, combined with the tendency being shown towards specialisation among entrepreneurship researchers, these research groupings will be important to the development of a cognitive style, professional language and the creation of concepts that establish a clear role for the research field – providing it with a recognisable identity in relation to other fields of research.

FIGURE 2.1: Entrepreneurship development clusters over time



Source: Cornelius, *et al.* (2006:394)

As has been noted by various researchers, the field of entrepreneurship is one of the most complexes in the social sciences. This also offers challenges to researchers in the 21st century.

Kuratko and Hodgetts (2007:xxxiii) note that in 2007 the growth of entrepreneurship research are celebrated by the number of academic journals devoted to entrepreneurship, the number of endowed professorships and chairs in Entrepreneurship, the development of the 21st Century Entrepreneurship Research Fellows by the National Consortium of Entrepreneurship Centres, and the increasing number of top scholars devoting much of their valuable research time and efforts to publishing on aspects of entrepreneurship and academic journals.

“Entrepreneurship is the new revolution, and it’s about continual innovation and creativity. It is the future of our world economy” (Kuratko and Hodgetts, 2007:xxxiii).

The next section will deal with the reasons why entrepreneurship is the future of the world economy.

2.4 ROLE OF ENTREPRENEURSHIP IN THE ECONOMY

There is a widespread recognition that entrepreneurship is the engine that moves the economy and society of most nations (Brock and Evans, 1989:7; Acs, 1992:38; Carree and Thurik, 2000). Barringer and Ireland (2006:14) state that entrepreneurship’s importance to the economy and society was first articulated in 1934 by Schumpeter. Schumpeter in Barringer and Ireland (2006:14) argued that entrepreneurs develop new products and technologies that over time make current products and technologies obsolete. Schumpeter called this process creative destruction. Because new products and technologies are typically better than those they replace and the availability of improved products and technologies increases consumer demand, creative destruction stimulates economic activity. The new products and technologies may also increase the productivity of all elements of society.

Covin and Slevin (1991:7) indicated that the overriding reason for the increased interest in entrepreneurship is the widespread belief that entrepreneurial activity stimulates general economic development as well as the economic performance of individual businesses. Entrepreneurship is the key element for gaining competitive advantage and consequently greater financial rewards.

Stevenson and Jarillo (1990:19) state that Birch (1979, 1987) did extensive research on the effects of entrepreneurship. The entrepreneurial function is responsible for economic improvement in the society, due to its innovations. Entrepreneurship also goes beyond the creation of small businesses and paves the way of the legitimization of the concept of corporate entrepreneurship.

Timmons (1990) notes that “...there is growing realisation internationally that entrepreneurs are the fuel, engine and throttle that drive the economic engine of the country.”

Hisrich, *et al.* (2008:14) indicate that the role of entrepreneurship in economic development involves more than just increasing per capita output and income. It also involves initiating and constituting change in the structure of business and society. This change is accompanied by growth and increased output, which allows more wealth to be divided amongst the various participants.

Given the supply and demand nature of market forces, entrepreneurs are the gap-fillers who, through their skills, perceive and take steps to correct market deficiencies. To encourage transformation in the market, entrepreneurs not only provide new goods and services, but also create more and newer jobs. Innovative entrepreneurial activities are at the base of many of the current global giants (Wingham in Hitt, Ireland, Camp and Sexton, 2001:20).

Wingham in Hitt, Ireland, Camp and Sexton (2001:20) also states that evidence continues to accumulate that the national level of entrepreneurial activity has a statistically significant association with subsequent levels of economic growth. The future of the world economic growth is to be found through stimulated entrepreneurial activity.

The Global Entrepreneurship Monitor (GEM) is one of the foremost proponents of the positive entrepreneurship-economic growth link. The Global Entrepreneurship Monitor project undertakes surveys of the adult population in 40 to 45 countries to establish a Total Entrepreneurial Activity (TEA) index for each country. The TEA is a measure of the proportion of individuals in the working age population who are actively trying to start their own business, including self-employment or running their own business that is less than three and a half years old. In each of the GEM reports, starting in 1999, the evidence was compelling. The GEM consortium is in no doubt that there is a strong positive correlation between entrepreneurial activity in a country and its economic growth (Deakins and Freel, 2006:34).

Driver, Wood, Segal and Herrington, (2001:6) note that while the relationship between entrepreneurship and economic growth is multifaceted and complex, entrepreneurial capability is a necessary ingredient of a country's capacity to sustain economic growth.

2.5 ENTREPRENEURIAL PROCESS

The entrepreneurial process is one through which a new venture is created by an entrepreneur. Nieman, Hough and Nieuwenhuizen (2003:20) state that this process results from the actions of the entrepreneur in bringing resources together to form the business in order to pursue the opportunity. Hisrich, *et al.* (2008:9) indicate that the entrepreneurial process is the process of pursuing a new venture, whether it is new products into existing markets, existing products into new markets, and/or the creation of a new business.

Various researchers have proposed an entrepreneurial process, for example Moore (1986); Wickham (2006); Timmons and Spinelli (2007); Hisrich, *et al.*, 2008) and Morris, *et al.* (2008). The original entrepreneurial process of Moore has been enhanced by Bygrave (Bygrave, 1989:9) and is illustrated in figure 2.2.

resulting enterprise. These phases proceed progressively but no one stage is dealt with in isolation or is totally completed before work on other phases occur. Table 2.3 gives an illustration of the entrepreneurial process.

TABLE 2.3: Entrepreneurial process

Identify and evaluate the opportunity	Develop the business plan	Resources required	Manage the enterprise
<ul style="list-style-type: none"> • Opportunity assessment • Creation and length of opportunity • Real and perceived value of opportunity • Risk and returns of opportunity • Opportunity versus personal skills and goals • Competitive environment 	<ul style="list-style-type: none"> • Title page • Table of content <ul style="list-style-type: none"> ○ Executive summary ○ Major sections ○ Description of the business ○ Description of the industry ○ Technology plan ○ Marketing plan ○ Financial plan ○ Production plan ○ Organisation plan ○ Operational plan ○ Summary • Appendixes 	<ul style="list-style-type: none"> • Determine resources needed • Determine existing resources • Identify resource gaps and available suppliers • Develop access to needed resources 	<ul style="list-style-type: none"> • Develop management style • Understand key variables for success • Identify problems and potential problems • Implement control systems • Develop growth strategy

Source: Hisrich, *et al.* (2008:10)

The entrepreneurial process captures all the activities related to entrepreneurship. This process forms the essence of entrepreneurship as can be seen from the definitions (table 2.1) of various researchers (Gartner, 1985, 1989; Hisrich and Peters, 1989, 2008; Stevenson and Jarillo, 1990; Jones and Butler, 1992; Morris, 1989; Kouriloff, 2000; Kuratko and Hodgetts, 2007).

In the next section the relationship between entrepreneurship and corporate entrepreneurship will be addressed.

2.6 THE RELATIONSHIP BETWEEN ENTREPRENEURSHIP AND CORPORATE ENTREPRENEURSHIP

According to Rothwell and Zegveld (1982) in Maes (2003:1) entrepreneurship has long been seen as a synonym for establishing new small firms as a suitable vehicle for entrepreneurial endeavour. A parallel strand in literature was later developed where the importance of entrepreneurship for, and within, existing businesses was stressed.

Morris, *et al.* (2008:33) state that the basics of entrepreneurship are universal. In the definition of entrepreneurship as referred to in paragraph 2.2 the focus was on a process of value creation through unique resource combinations for the purpose of exploiting opportunity. This definition does not indicate anything about starting a small business. The context within which entrepreneurship occurs is not part of the definition. The entrepreneurship phenomenon can occur in start-up ventures, small businesses, mid-sized businesses, large conglomerates, non-profit businesses and even public sector agencies.

What essentially distinguishes corporate entrepreneurship from entrepreneurship is the context in which the entrepreneurial act takes place. Entrepreneurs innovate for themselves, while corporate entrepreneurs innovate on behalf of an existing business (Carrier, 1996:6).

Morris, *et al.* (2008:26) observe that it is a very narrow view to associate entrepreneurship only with the start-up of a new business. Entrepreneurship happens in businesses of all sizes and types. Seeking and capitalising on opportunity, taking risks beyond what is secure, and having the tenacity to push an innovative idea through to reality represent the essence of what entrepreneurs do. Entrepreneurship is a perspective that can be exhibited inside or outside a business, in profit or not-for-profit enterprises, and in business or non-business activities. The purpose of entrepreneurship is to turn innovative ideas into organisational realities. Entrepreneurs create the new, while replacing or destroying the old. Entrepreneurs challenge assumptions and bend or break rules.

Davidson, Low and Wright (2001:10) state that during the previous decade a broader acceptance of entrepreneurship as a phenomenon was made where entrepreneurship is not restricted to independent small businesses, but is also present in large established businesses. As an example, Davidson, Low and Wright (2001:10) emphasize that the Entrepreneurship Theory and Practice Journal devoted two full issues to corporate entrepreneurship (1999, vol 23, Spring and Fall). The editors' opening line was: "The study of corporate entrepreneurship (CE) has become an integral part of the literature".

Sharma and Chrisman (1999:13) observe that entrepreneurship has become a more hypothetical and abstract term attached to any individual or group creating new combinations (for example, Lumpkin and Dess, 1996; Pass, Lowes, Davies and Kronish, 1999), either on their own or attached to existing businesses. Sharma and Chrisman (1999:13) also state that while the terms "entrepreneurship" or "independent entrepreneurship" are used to describe entrepreneurial efforts of individuals operating outside the context of an existing business, a variety of terms is used for the entrepreneurial efforts within an existing business. Examples of these terms are: corporate entrepreneurship (Burgelman, 1984; Zahra, 1993), corporate venturing (Biggadike, 1979), intrapreneuring (Pinchot, 1985), internal corporate entrepreneurship (Jones and Butler, 1992), internal entrepreneurship (Schollhammer, 1982; Vesper, 1984), strategic renewal (Guth and Ginsberg, 1990) and venturing (Hornsby, *et al.*, 1993).

The entrepreneurial process referred to in paragraph 2.5 of this study describes how a new business might be started. This process can also be applied to the application of entrepreneurship inside a large business. Morris, *et al.* (2008:33) give the example that these same stages would be pursued by a manager attempting to introduce a new service concept within an operating division, or one trying to pursue entrepreneurship with a company sales force. In both instances, opportunities must be identified, innovative concepts developed, resources mastered, ideas implemented and initiatives harvested. The major objectives to be accomplished in each stage remain the same.

Morris, *et al.* (2008:34) summarised the similarities between corporate and start-up entrepreneurship as follows:

- Both involve opportunity recognition and definition.

- Both require a unique business concept that takes the form of a product, service or process.
- Both are driven by an individual champion who works with a team to bring the concept to fruition.
- Both require that the entrepreneur be able to balance vision with managerial skill, passion with pragmatism and proactiveness with patience.
- Both involve concepts that are most vulnerable in the formative stage, and that require adaptation over time.
- Both entail a window of opportunity within and upon which the concept can be successfully capitalised.
- Both are predicated on value creation and accountability to a customer.
- Both find the entrepreneur encountering resistance and obstacles, necessitating both perseverance and an ability to formulate innovative solutions.
- Both entail risk and require risk management strategies.
- Both find the entrepreneur needing to develop creative strategies for leveraging resources.
- Both involve significant ambiguity.
- Both require harvesting strategies.

There are also important differences between corporate entrepreneurship and start-up entrepreneurship. Morris, *et al.* (2008:36) summarises the differences in table format (see table 2.4).

TABLE 2.4 Corporate and Start-up entrepreneurship: major differences

Start-up entrepreneurship	Corporate entrepreneurship
<ul style="list-style-type: none"> • Entrepreneur takes the risk • Entrepreneur “owns” the concept or innovative idea • Entrepreneur owns all or much of the business • Potential rewards for the entrepreneur are theoretically unlimited • One misstep can mean failure • Vulnerable to outside influence • Independence of the entrepreneur, although the successful entrepreneur is typically backed by a strong team • Flexibility in changing course, experimenting or trying new directions • Speed of decision making • Little security • No safety net • Few people to talk to • Limited scale and scope initially • Severe resource limitations 	<ul style="list-style-type: none"> • Company assumes the risks, other than career-related risk • Company owns the concept, and typically the intellectual rights surrounding the concept • Entrepreneur may have no equity in the company, or a very small percentage • Clear limits are placed on the financial rewards entrepreneurs can receive • More room for errors; company can absorb failure • More insulated from outside influence • Interdependence of the champion with many others; may have to share credit with any number of people • Rules, procedures and bureaucracy hinder the entrepreneur’s ability to manoeuvre • Longer approval cycles • Job security • Dependable benefit package • Extensive network for bouncing around ideas • Potential for sizeable scale and scope fairly quickly • Access to finances, research and development, production facilities for trial runs, an established sales force, an existing business, distribution channels that are in place, existing databases and market research resources and an established customer base

Source: Morris, *et al.* (2008:36)

It is clear from the arguments raised by the researchers in the field of entrepreneurship that entrepreneurship can happen in businesses of all sizes and types. Entrepreneurship does not only refer to starting a small business and it is not limited to selecting a set of people. An entrepreneurial perspective can be developed in any individual – inside or outside a business. According to Ferreira (2002:3) corporate entrepreneurship activities can be internally or externally oriented. Internal activities are typified as the development within a large business of internal markets and relatively small and independent units designed to create internal test markets or expand improved or innovative staff services,

technologies or production methods within the business. These activities may cover product, process and administrative innovations at various levels of the business. External entrepreneurship consists of the process of combining resources dispersed in the environment by individual entrepreneurs with their own unique resources to create a new resource combination independent of all others. External efforts entail mergers, joint ventures, corporate ventures, venture nurturing and venture spin-offs.

2.7 CONCLUSION

The purpose of the literature overview of the field of entrepreneurship discussed in this chapter was mainly to give the rationale of the phenomenon of entrepreneurship in established businesses. The literature review started with the definition of entrepreneurship. Researchers do not have an agreed-upon definition for entrepreneurship but most definitions correlate with the seven perspectives of Morris (1998): the creation of wealth; the creation of enterprise; the creation of innovation; the creation of change; the creation of employment; the creation of value and the creation of growth.

A brief history on the emergence of entrepreneurship was given as well as some research areas, identified by prominent researchers, for future research.

The entrepreneurial process (identify an opportunity; develop the business plan; resources required; and the management of the enterprise) captures all the activities related to entrepreneurship regardless of the context in which it takes place.

From the relationship between entrepreneurship and corporate entrepreneurship section, it is clear that corporate entrepreneurship is a definite field of study within the entrepreneurship domain. This knowledge is important for this study as it motivates and gives meaning to the phenomenon of entrepreneurship in established businesses.

Chapter 3 will address a literature review on all the various elements of corporate entrepreneurship. These elements form the theoretical underpinnings of this study.

CHAPTER 3: CORPORATE ENTREPRENEURSHIP – A THEORETICAL OVERVIEW

“Continuous innovation (in terms of products, processes and administrative routines and structures) and an ability to compete effectively in international markets are among the skills that increasingly are expected to influence corporate performance in the twenty-first century’s global economy. Corporate entrepreneurship is envisioned to be a process that can facilitate organisations’ efforts to innovate constantly and cope effectively with the competitive realities that companies encounter when competing in international markets.

Entrepreneurial attitudes and behaviours are necessary for organisations of all sizes to prosper and flourish in competitive environments.”

Kuratko and Hodgetts (2007:54)

3.1 INTRODUCTION

Ramachandran, Devarajan and Ray (2006:85) state that most businesses find that their ability to identify and innovatively exploit opportunities decreases as the businesses move from the entrepreneurial to the growth phase. The key to success in the highly competitive and dynamic environment in which most businesses presently operate is to retain this ability. Businesses need to adopt an entrepreneurial strategy – seeking competitive advantage through continuous innovation to exploit identified opportunities effectively – in order to sustain and grow under such circumstances. Johnson (2001:135) supports this viewpoint and adds that many people view innovation and corporate entrepreneurship as a vehicle to stimulate this growth and development.

Taking into consideration the introduction section in chapter 1 and the viewpoints of these researchers, corporate entrepreneurship is considered a vehicle to move a traditional hierarchical business to a point where sustainable entrepreneurship becomes a meaningful and important component of the business. In this chapter a thorough investigation will be made on various aspects concerning corporate entrepreneurship. A literature overview will be given to clarify firstly the definition of corporate entrepreneurship. Secondly, the necessity of corporate entrepreneurship and its benefits

for a business will be addressed. The conceptual models being used and applied in the field of corporate entrepreneurship will be highlighted next. The model on which this research is based will also be indicated. Fourthly, the concept of entrepreneurial orientation will be discussed. This is followed, fifthly, by a discussion on the relationship between corporate entrepreneurship and innovation. Next the aspects to foster, develop and implement corporate entrepreneurship in a business are reviewed. Lastly, corporate entrepreneurship as a strategy is addressed.

3.2 DEFINITION OF CORPORATE ENTREPRENEURSHIP

Christensen (2005:306 and 2004:303) indicates that the ideas behind corporate entrepreneurship can be traced back to the mid-1970s. Aloulou and Fayolle (2005:24) also state that the concept of corporate entrepreneurship was formally defined and both theoretically and empirically developed in the works of Burgelman (1983; 1984a; 1984b) and Miller (1983). Corporate entrepreneurship became a separate research topic when Pinchot's (1985) book on intrapreneuring in the mid-1980s was published.

Apart of these early developments, Christensen (2005:306; 2004:305); Covin and Miles (1999:48) and Guth and Ginsberg (1990:6) assert that it is still a concept in search of a clear definition. Various broader or narrower definitions have been proposed by different authors, some using the same definition for different phenomena and others using different definitions for the same phenomenon. Most researchers indicate that there is no unified definition for entrepreneurship (Hisrich, 1990; Stevenson and Jarillo, 1990; Zahra, 1991; Russel, 1999).

The concept of entrepreneurship within existing businesses is known under many different labels according to Zahra (1991:260); Christensen (2004:303-304); Aloulou and Fayolle (2005:24) and Antoncic (2007:310). Examples of these labels are: **corporate entrepreneurship** (Burgelman, 1983; 1985; Vesper, 1984; Guth and Ginsberg, 1990; Hornsby, *et al.*, 1993; Stopford and Baden-Fuller, 1994; Barret and Weinstein, 1998; Hornsby, Kuratko and Zahra, 2002; Morris and Kuratko, 2002; Antoncic and Hirsch, 2004); **internal corporate entrepreneurship** (Schollhammer, 1981; 1982; Cooper, 1981; Jones and Butler, 1992; Lumpkin and Dess, 1996); **intrapreneurship** (Pinchot, 1985; Nielsen,

Peters and Hisrich, 1985; Carrier, 1994; 1996; Antoncic and Hisrich, 1999; Chinho, Hojung and Chienming, 2003); **corporate venturing** (Burgelman, 1983; MacMillan, 1986; Ellis and Taylor, 1987; Vesper, 1990; Block and MacMillan, 1993); **entrepreneurial management** (Stevenson and Jarillo, 1990); **strategic renewal** (Guth and Ginsberg, 1990; Stopford and Baden-Fuller, 1994) and **strategic entrepreneurship** (Hitt, Ireland, Camp and Sexton, 2001; Ireland, Hitt, Camp and Sexton, 2001).

Russel (1999:67) indicates that although no consensus exist on the definition of corporate entrepreneurship, research indicates that corporate entrepreneurship belongs within the general domain of entrepreneurship. This has also been indicated in the literature review of chapter 2.

Table 3.1 summarises the major definitions found from various researchers on the different labels of corporate entrepreneurship.

TABLE 3.1 Definitions of the different Corporate Entrepreneurship labels

CORPORATE ENTREPRENEURSHIP (CE)	
Antoncic (2001:223) and Antoncic and Zorn (2004:6)	CE refers to a process that goes on inside an existing organisation, regardless of its size, and leads not only to new business ventures, but also to innovative activities and orientations such as developments of new products, services, technologies, administrative techniques, strategies and competitive postures.
Antoncic and Hisrich (2003a:200)	CE refers to entrepreneurial activities that occur within an existing organisation. It refers not only to the creation of new business ventures, but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies and competitive postures.
Burgelman (1983:1349)	CE refers to the process whereby the firms engage in diversification through internal development. Such diversification requires new resource combinations to extend the firm's activities in areas unrelated, or marginally related, to its current domain of competence and corresponding opportunity set
Carrier (1996:6)	A process of creating new business within established firms to improve organisational profitability and enhance a company's competitive position.
Chung and Gibbons (1997:14)	CE is an organisational process for transforming individual ideas into collective actions through the management of uncertainties.
Covin and Miles (1999:50)	The presence of innovation plus the presence of the objective of rejuvenating or purposefully redefining organisations, markets or industries in order to create or sustain competitive superiority.



Covin and Slevin (1991:7)	CE involves extending the firm's domain of competence and corresponding opportunity set through internally generated new resource combinations (also quoted Burgelman, 1984:154)
Guth and Ginsberg (1990:5)	CE encompasses two types of phenomena and the processes surrounding them (1) birth of new businesses within existing organisations – for example internal innovation or venturing, (2) the transformation of organisations through renewal of the key ideas on which they are built - for example strategic renewal
Hisrich and Peters (2002)	A spirit of entrepreneurship within the existing organisation.
Hornsby, Kuratko and Zahra (2002:255)	CE centres on re-energising and enhancing the ability of a firm to acquire innovative skills and capabilities.
Jennings and Lumpkin (1989:489)	CE is defined as the extent to which new products and/or new markets are developed. A business is entrepreneurial if it develops a higher than average number of new products and/or new markets.
Kuratko and Hodgetts (2007:55)	CE is a process whereby an individual or a group of individuals, in association with an existing organisation, creates a new organisation or instigates renewal or innovation within the organisation.
McFadzean, O'Loughlin and Shaw (2005:352)	CE is the effort of promoting innovation from an internal organisational perspective, through the assessment of potential new opportunities, alignment of resources, exploitation and commercialisation of said opportunities.
Miller (1998)	CE encompasses three related components: <i>product innovation</i> (the ability of a company to create new products or modify existing ones to meet the demands of current or future markets); <i>services or technologies to the market</i> ; and <i>proactiveness</i> and risk-taking.
Morris and Kuratko (2002:31); Morris, Kuratko and Covin (2008:11)	CE is a term used to describe entrepreneurial behaviour inside established mid-sized and large organisations.
Sathe (1989)	CE is a process of organisational renewal that has two distinct but related dimensions: <i>innovation and venturing</i> , and <i>strategic stress</i> creating new business through market developments, by undertaking product, process, technological and administrative innovations.
Schendel (1990:2)	CE involves the notion of birth of new businesses within on-going businesses, and the transformation of stagnant, on-going businesses in need of revival or transformation
Sharma and Chrisman (1999:18)	CE is the process whereby an individual or a group of individuals, in association with an existing organisation, creates a new organisation or instigates renewal or innovation within the organisation.
Spann, Adams and Wortman (1988:149)	CE is the establishment of a separate corporate organisation (often in the form of a profit centre, strategic business unit, division or subsidiary) to introduce a new product, serve or create a new market, or utilise a new technology.

Stevenson and Jarillo (1990:23)	Entrepreneurship is a process by which individuals – either on their own or inside organisations – pursue opportunities without regard to the resources they currently control. The essence of entrepreneurship is the willingness to pursue opportunity regardless of the resources under control.
Stevenson, Roberts and Grousbeck (1998)	CE is the process by which individuals inside organisations pursue opportunities without regard to the resources they currently control.
Ucbasaran, Westhead and Wright (2001:63)	A process of organisational renewal associated with two distinct but related dimensions: (1) <i>creating new businesses</i> through market developments or by undertaking product, process, technological and administrative innovations, (2) <i>redefinition of the business concept</i> , reorganisation, and the introduction of system-wide changes for innovation.
Vesper (1984; 1990)	CE involves employee initiative from below in the organisation to undertake something new. An innovation which is created by subordinates without being asked, expected or perhaps even given permission by higher management to do so.
Zahra (1991:260-261)	The process of creating new business within established firms to improve organisational profitability and enhance a company's competitive position or the strategic renewal of existing business.
Zahra (1991:262)	CE is a formal or informal activity aimed at creating new businesses in established organisations through product and process innovations and market developments. These activities may take place at the corporate, division (business), functional or project levels, with the unifying objective of improving a company's competitive position and financial performance. CE also entails the strategic renewal of an existing business.
Zahra (1993:321)	CE is a process of organisational renewal that has two distinct but related dimensions: <i>innovation and venturing</i> , and <i>strategic renewal</i> .
Zahra (1995:227 and 1996:1715)	CE – the sum of a company's innovation, renewal and venturing efforts. Innovation involves creating and introducing products, production processes and organisational systems. Renewal means revitalising the company's operations by changing the scope of its business, its competitive approaches or both. It also means building or acquiring new capabilities and then creatively leveraging them to add value for shareholders. Venturing means that the firm will enter new businesses by expanding operations in existing or new markets.
Zahra, Neabaum and Huse (2000:947)	The sum of a company's venturing and innovation activities.



INTERNAL CORPORATE ENTREPRENEURSHIP	
Jones and Butler (1992:734)	Internal CE refers to entrepreneurial behaviour within one firm
Schollhammer (1982:211)	Internal (or intra-corporate) entrepreneurship refers to all formalised entrepreneurial activities within existing business organisations. Formalised internal entrepreneurial activities are those which receive explicit organisational sanction and resource commitment for the purpose of innovative corporate endeavours – new product developments, product improvements, new methods or procedures
INTRAPRENEURSHIP	
Antoncic and Hisrich (2001:498)	A process that goes on inside an existing firm, regardless of its size, and leads not only to new business ventures but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies and competitive postures.
Antoncic and Hisrich (2003b:9)	Intrapreneurship refers to entrepreneurial activities that occur within an existing organisation. It refers not only to the creation of new business ventures, but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies and competitive postures.
Carrier (1996:7)	The introduction and implementation of a significant innovation for the firm by one or more employees working within an established organisation.
Hostager, Neil, Decker and Lorentz (1998:11-12)	Individuals and groups working within the corporation to: (1) identify ideas for new products or services, (2) turn these ideas into profitable products and services.
Kuratko, Montagno and Hornsby (1990:50)	Entrepreneurship inside the corporation.
Nielson, Peters and Hisrich (1995:181)	Intrapreneurship is the development within a large organisation of internal markets and relatively small and independent units designed to create, internally test-market, and expand improved and/or innovative staff services, technologies or methods within the organisation. This is different from the large organisation entrepreneurship/venture units whose purpose is to develop profitable positions in external markets.
Pinchot (1985:xv)	Entrepreneurship inside large corporations.
Rule and Irwin (1988:44)	Intrapreneurship is the means and methods by which the organisation identifies new ideas, products and philosophies.
CORPORATE VENTURING	
Biggadike (1979:104)	A corporate venture is defined as a business marketing a product or service that the parent company has not previously marketed, and that requires the parent company to obtain new equipment or new people or new knowledge

Block and MacMillan (1993:14)	A project is a corporate venture when it (a) involves an activity new to the organisation, (b) is initiated or conducted internally, (c) involves significantly higher risk of failure or large losses than the organisation's base business, (d) is characterised by greater uncertainty than the base business, (e) will be managed separately at some time during its life, (f) is undertaken for the purpose of increasing sales, profit, productivity, or quality.
Ellis and Taylor (1987:528)	Corporate venturing was postulated to pursue a strategy of unrelatedness to present activities to adopt the structure of an independent unit and to involve a process of assembling and configuring novel resources
Stopford and Baden-Fuller (1994:521)	The creation of new businesses within an existing organisation.
von Hippel (1977:163)	Corporate venturing is an activity which seeks to generate new businesses for the corporation in which it resides through the establishment of external or internal corporate ventures
VENTURE, INTERNAL VENTURES, INTERNAL CORPORATE VENTURING, NEW BUSINESS VENTURING	
Hornsby, Naffziger, Kuratko, Montagno, Roberts and Berry (1985:30)	Venture may be applied to the development of new business endeavours within the corporate framework.
Roberts and Berry (1993:6)	Internal ventures are a firm's attempts to enter different markets or develop substantially different products from those of its existing base business by setting up a separate entity within the existing corporate body.
Stopford and Baden-Fuller (1994:522)	New business venturing occurs when individuals and small teams form entrepreneurial groups inside a business, capable of persuading others to alter their behaviour, thus influencing the creation of new corporate resources.
Zahra (1996:1715)	Venturing means that the firm will enter new businesses by expanding operations in existing or new markets
Zajac, Golden and Shortell (1991:171)	Internal corporate venturing involves the creation of an internally-staffed venture unit that is semi-autonomous, with the sponsoring organisation maintaining ultimate authority.
ENTREPRENEURIAL ORIENTATION	
Lumpkin and Dess (1996:136)	The processes, practices and decision making activities that lead to new entry.
STRATEGIC OR ORGANISATIONAL RENEWAL	
Guth and Ginsberg (1990:6)	Strategic renewal involves the creation of new wealth through new combinations of resources.
Stopford and Baden-Fuller (1994:522)	Organisational renewal alters the resource pattern of business to achieve better and sustainable overall economic performance. To be sustainable, more pervasive effort is needed, involving more than a few individuals and the finance function.

Zahra (1993:321)	Renewal has many facets, including the redefinition of the business concept, reorganisation and the introduction of system-wide changes for innovation. Renewal is achieved through the redefinition of a firm's mission through the creative redeployment of resources, leading to new combinations of products and technologies.
Zahra (1995:227) and Zahra (1996:1715)	Renewal means revitalising a company's business through innovation and changing its competitive profile. It means revitalising the company's operations by changing the scope of its business, its competitive approaches or both. It also means building or acquiring new capabilities and then creatively leveraging them to add value for shareholders.

Source: Sharma and Chrisman (1999:13); Maes (2003:22-24); Ramachandran, Devarajan and Ray (2006:86)

Maes (2003:21) makes three observations from the different definitions: First, it illustrates that some researchers use different terms to label the same phenomenon. Second, it shows that different authors define the same term differently. Finally it demonstrates that sometimes the same author defines the terms differently in subsequent articles. As an example compare the definitions of Antoncic (2001:223); Antoncic and Hisrich (2003:200); Antoncic and Hisrich (2001:498) and Antoncic and Hisrich (2003b:9) where the identical definition is used for corporate entrepreneurship and intrapreneurship.

Carrier (1996:6) claims that the terms intrapreneurship and corporate entrepreneurship have almost been used implicitly to describe a situation occurring in a very large business.

From the analysis of all these definitions, Sharma and Chrisman (1999:16) state that the most widely accepted definition for corporate entrepreneurship was proposed by Guth and Ginsberg (1990:5) – “corporate entrepreneurship encompasses the birth of new businesses within existing businesses and the transformation (or rebirth) of businesses through a renewal of their key ideas”. This definition, according to Sharma and Chrisman, includes Biggadike's definition of corporate venturing (which contains Burgelman's definition) and also it introduces, in a different context, the interplay of the idea of new businesses and new combinations that characterises the debate found in the literature on entrepreneurship.

Burgelman (1984:154) interprets the term “new resource combinations” to be synonymous with innovation in the Schumpeterian sense. Corporate entrepreneurship is seen as the effort to extend a businesses competitive advantage through internally generated innovations that significantly alter the balance of competition within an industry, or create entirely new industries.

Guth and Ginsberg (1990:5) noted that Schumpeter’s (1934) view of the entrepreneur is one who carries out new combinations. As applied to entrepreneurial activities in large, complex businesses, its definition implies that the essential ingredient in corporate entrepreneurship is that decisions are made and actions are taken that result in new combinations of resources being implemented. This implementation of new combinations translates into changes in strategy that alter the pattern of resource deployment in an existing business versus changes in strategy that modify the magnitude of resource deployment. Changes in the pattern of resource deployment – new combinations of resources in Schumpeter’s terms – transform the business into something significantly different from what it was before – something new. This transformation of the business from the old to the new reflects entrepreneurial behaviour.

Guth and Ginsberg (1990:6) assert that what all the proposed concepts have in common, is that entrepreneurial activities can renew established businesses and that this activity can typically be achieved through innovation and venturing activities that give the business access to different skills, capabilities and resources.

Kuratko and Hodgetts (2007:55) observe that: *strategic renewal* (which is concerned with organisational renewal involving major strategic and/or structural changes); *innovation* (which is concerned with introducing something new to the marketplace); and *corporate venturing* (corporate entrepreneurial efforts that lead to the creation of new businesses within the corporate business), are important and legitimate parts of the corporate entrepreneurship process.

Covin and Miles (1999:52) established the following four forms of the corporate entrepreneurship phenomenon:

- Sustained regeneration (1999:52). This refers to organisational level entrepreneurial activity. Businesses that engage in sustained regeneration are those that regularly and continuously introduce new products and services or enter new markets. Businesses successful at the sustained regeneration form of corporate entrepreneurship tend to have cultures, structures and systems supportive of innovation. These businesses also tend to be learning businesses that embrace change and willingly challenge competitors in battles for market share. While introducing new products and services or entering new markets, these businesses will also cull older products and services from their lines in an effort to improve overall competitiveness through product life cycle management techniques.
- Organisational rejuvenation (1999:53). This refers to the corporate entrepreneurship phenomenon whereby the businesses seek to sustain or improve its competitive standing by altering its internal processes, structures and/or capabilities. Businesses need to change their strategies in order to be entrepreneurial. Corporate entrepreneurship may involve efforts to sustain or increase competitiveness through the improved execution of particular, pre-existing business strategies.
- Strategic renewal (1999:54) – refers to the corporate entrepreneurship phenomenon whereby the business seeks to redefine its relationship with its markets or industry competitors by fundamentally altering how it competes.
- Domain redefinition (1999:55) – refers to the corporate entrepreneurship phenomenon whereby the business proactively creates a new product-market arena that others have not recognised or actively sought to exploit. By engaging in domain redefinition the business, in effect, takes the competition to a new arena where its first or early mover status is hoped to create some basis for sustainable competitive advantage. Through domain redefinition, businesses often seek to imprint the early structure of an industry. In such a scenario, the entrepreneurial business may be able to create the industry standard or define the benchmark against which later entrants are judged.

Thornberry (2001:4) breaks corporate entrepreneurship into four strategic types: corporate venturing, intrapreneuring, organisational transformation and industry rule breaking. This

is almost similar to Stopford and Baden-Fuller's (1994) categorisation which identifies three types of corporate entrepreneurship: Intrapreneurship, which is defined as a part of corporate venturing, transformation and renewal of existing businesses, and changing the rules of competition for the industry, as suggested by Schumpeter (1934).

Ferreira (2002:3) summarises the domain of corporate entrepreneurship from various researchers' viewpoints as follows:

Corporate entrepreneurship activities can be internally or externally orientated. Internal activities are typified as the development within a large business of internal markets and relatively small and independent units designed to create internal test markets or expand improved or innovative staff services, technologies or production methods within the business. These activities may cover product, process, and administrative innovations at various levels of the business. Internal entrepreneurship expresses itself in a variety of modes or strategies – *administrative* (management of research and development), *opportunistic* (search and exploitation), *imitative* (internalisation of an external development, technical or organisational), *acquisitive* (acquisitions and mergers, divestments) and *incubative* (formation of semi-autonomous units within existing businesses).

External entrepreneurship according to Ferreira (2002:3) can be defined as the first phenomenon that comprises the process of combining resources dispersed in the environment by individual entrepreneurs with their own unique resources to create a new resource combination independent of all others. External efforts entail mergers, joint ventures, corporate venture, venture nurturing, venture spin-offs and others.

Whether internal or external in focus, corporate entrepreneurship can be formal or informal. Informal efforts occur autonomously, with or without the blessing of the official business. Such informal activities can result from individual activity or pursuit of self-interest, and some of these efforts eventually receive the business's formal recognition and become an integral part of the business concept (Ferreira, 2002:3).

Antoncic and Hisrich (2003b:7) indicate that intrapreneurship research has evolved into three focal areas. Firstly, the focus is on the individual intrapreneur (Sunder, 1981;

Pinchot, 1985; Luchsinger and Bagby, 1987; Ross, 1987; Lessem, 1988; Knight, 1989; McKinney and McKinney, 1989; Jones and Butler, 1992; Jennings, Cox and Cooper, 1994), mainly emphasising the intrapreneur's individual characteristics. Recognition and support of entrepreneurs in businesses is also a part of this focal area.

Secondly, the focus is on the formation of new corporate ventures (Hlavacek and Thompson, 1973; Cooper, 1981; Fast and Pratt, 1981; Hisrich and Peters, 1984; MacMillan, Block and Narasimha, 1984; Szypersky and Klandt, 1984; Vesper, 1984; Burgelman, 1985; Carrier, 1994; Krueger and Brazeal, 1994), with a primary emphasis on the differentiation of types of new ventures, their fit with the corporation and their enabling corporate internal environment.

Thirdly, the focus is on the entrepreneurial business (Hanan, 1976; Quinn, 1979; Schollhammer, 1981; Burgelman, 1983; Kanter, 1984; Drucker, 1985; Pinchot, 1985; Duncan, Ginter, Rucks and Jacobs, 1988; Rule and Irwin, 1988; Stevenson and Jarillo, 1990; Kuratko, Hornsby, Naffziger and Montagno, 1993; Merrifield, 1993; Stopford and Baden-Fuller, 1994; Muzyka, de Koning and Churchill, 1995), which mainly emphasises characteristics of such businesses.

For purposes of this research study the definition of Sharma and Chrisman (1999:18) will be adopted. This definition is in line with the construct and instrument used to assess corporate entrepreneurship.

“Corporate Entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing business, creates a new business or instigates renewal or innovation within the organisation”.

3.3 NECESSITY OF CORPORATE ENTREPRENEURSHIP

The global economy is creating profound and substantial changes for businesses and industries throughout the world. These changes make it necessary for businesses to examine the business's purpose carefully and to devote a great deal of attention to selecting and following strategies in pursuit of the levels of success that have a high

probability of satisfying multiple stakeholders. Johnson (2001:135) states that many people in large businesses believe that once a business reaches a certain size, it unavoidably loses its capacity to act entrepreneurially and to stimulate and foster innovation. According to Christensen (2004:302) businesses have been faced with increasing demands for both faster product development and more features in smaller products as well as higher and uniform quality, stability and lower prices, despite the inherent incompatibility of such demands.

According to Hisrich, *et al.* (2005:44) the differences in the entrepreneurial and managerial domains have contributed towards an increased interest in corporate entrepreneurship. This interest has intensified due to a variety of events occurring on social, cultural and business levels. Kuratko and Hodgetts (2007:56) indicate that the need for corporate entrepreneurship has arisen in response to a number of pressing problems. Examples of these pressing problems are: *rapid growth* in the number of sophisticated competitors; a *sense of distrust* in the traditional methods of corporate management; a *mass departure* of some of the best and brightest people from corporations to become small-business entrepreneurs; *international competition*; *downsizing* of major corporations; and *an overall desire* to improve efficiency and productivity. Aloulou and Fayolle (2005:24) add to these pressing problems: stagnation; decline; weakness of managerial practice; and turnover of innovative-inclined employees who were constrained by the bureaucratic inertia of their businesses. Hisrich, *et al.* (2005:44) add that hyper competition has forced businesses to have an increased interest in such areas as new product development, diversification, increased productivity, and decreasing costs by methods such as reducing the businesses labour force.

Carrier (1996:5) notes that increasingly turbulent markets, technical complexity, free trade and a growing awareness of the inflexible nature of many traditional management practices are putting tremendous pressure on businesses seeking to pursue growth. Stevenson and Jarillo (1990:17) pointed out that corporate entrepreneurship has grown in importance over recent years because large businesses wishing to compete have sought out the characteristics of flexibility, growth and innovation more generally associated with entrepreneurship.

Christensen (2004:302) indicates that many large businesses find it difficult to integrate the entrepreneurial spirit in a well-structured or bureaucratic business. These businesses must think non-traditionally to cope with the increasing paradoxes. According to Johnson (2001:135), if a business does not adopt a proactive attitude towards innovation and the creation of new ventures, it is unlikely to survive in an increasingly aggressive, competitive and dynamic market place.

Mostly because of these pressing problems Morris, *et al.* (2008:7) cited that an absolute wealth of new strategic initiatives have preoccupied executives' time over the past decade. These include rightsizing, unbundling, focusing on core business while divesting of others, business process engineering, total quality management, flattening structures and decentralising decision-making, outsourcing, creating self-directed work teams, forming strategic alliances, and more. But despite all these initiatives, major businesses have found themselves eliminating millions of jobs, closing plants, moving operations to low-cost countries and attempting to become lean and mean. Yet these businesses' continue to struggle. Morris, *et al.* (2008:7) state that from these outcomes, businesses must learn that: (1) turbulence in the external environment is causing a fundamental transformation in the internal operations of businesses; (2) there are no simple formulae for success in the new competitive environment - it is all about experimentation, as management looks for the right structure, approach to control, leadership style, and ways to reward employees; (3) there is an important upside to external environments as they become more complex, dynamic and hostile.

Hisrich, *et al.* (2005:44) emphasise that it is important to keep and instil the entrepreneurial spirit in a business in order to innovate and grow. This realisation has revolutionised management thinking. In large businesses, problems often occur that obstruct creativity and innovation, particularly in activities not directly related to the businesses main mission. The growth and diversification that can result from flexibility and creativity are particularly critical since large, vertically integrated, diversified corporations are often more efficient in a competitive market than smaller businesses. The resistance against flexibility, growth and diversification can in part be overcome by developing a spirit of entrepreneurship within the existing business, called corporate entrepreneurship.

Morris, *et al.* (2008:7) also state that traditionally competitive advantage was achieved by having lower costs than the competition, achieving higher quality or product performance, adding a new product feature, or delivering better customer service. Unfortunately this can no longer produce sustainable advantage. To be successful in any industry today, businesses must continually reduce costs, improve quality and enhance customer service. Such continuous improvements are a minimal criterion for remaining in the competitive game.

Christensen (2005:306) states that well-established and mature businesses need to experiment with new ways of organising and organisational structures that are known to enable innovation to take place, e.g. networks, loosely coupled businesses, and project businesses, as a supplement to the classic hierarchy. Notwithstanding, managers also need to recognise that innovation and renewal cannot be planned and managed in the same way as operational activities.

Morris, *et al.* (2008:7) indicate that remaining competitive is very different from achieving sustainable competitive advantage. The quest for competitive advantage requires that companies and the managers within them continually reinvent themselves. Advantage derives from five key organisational capabilities: *adaptability* (ability to adjust on a timely basis to new technologies, customer needs, regulatory rules and other changes in conditions without losing focus or causing significant disruption of core operations and commitments); *flexibility* (ability to design company strategies, processes and operational approaches that can simultaneously meet the diverse and evolving requirements of customers, distributors, suppliers, financiers, regulators and other key stakeholders); *speed* (the ability to act quickly on emerging opportunities, to develop new products and services more rapidly, and to make critical operational decisions without lengthy deliberations); *aggressiveness* (an intense, focused and proactive approach to eliminating competitors, delighting customers and growing employees); and *innovativeness* (a continuous priority placed on developing and launching new products, services, processes, markets and technologies and on leading the marketplace).

Ireland, *et al.* (2006a:10) state that corporate entrepreneurship can be a source of competitive advantage at both the corporate and the business unit levels. At the corporate level, corporate entrepreneurship helps diversified businesses determine the mix to

include in their portfolio of businesses and how to manage those businesses. At the business unit level, corporate entrepreneurship helps individual businesses develop and use one or more competitive advantages as a key means of implementing chosen strategies such as cost leadership or product differentiation. These positive outcomes show that corporate entrepreneurship is a set of processes and activities with real, tangible benefits. Businesses experiences suggest that when organisations operate in markets characterised by dynamism, complexity and hostility, the effective use of corporate entrepreneurship seems to have a very strong link to positive business performance.

Corporate entrepreneurship, according to Maes (2003:1) rejuvenates and revitalises existing businesses. Corporate entrepreneurship is brought into practice as a tool for business development of new products, services and processes (Kuratko, *et al.*, 1990; Lumpkin and Dess, 1996; Miles and Covin, 2002; Zahra, 1991; Zahra and Covin, 1995; Zahra, Nielsen and Bogner, 1999).

According to Ireland, *et al.* (2006a:11) corporate entrepreneurship is a process used in established businesses seeking to use innovation as a means to pursue entrepreneurial opportunities. Corporate entrepreneurship helps a business to create new businesses through product and process innovations and market developments and foster the strategic renewal of existing operations.

Echols and Neck (1998:39) claim that the more the business can exhibit entrepreneurial properties/qualities and its people believe in behaving entrepreneurially – the greater the businesses ability to achieve maximum innovation or entrepreneurial success.

Antoncic and Hisrich (2004:524) indicate that improved organisational results, usually in terms of growth and profitability, are thought to be a result of entrepreneurship in an established business. Corporate entrepreneurship is felt to be part of a successful business (Peters and Waterman, 1982; Kanter, 1984; Pinchot, 1985) and was found to be related to growth and profitability (Zahra, 1991, 1993; Russel and Russel, 1992; Zahra and Covin, 1995) of large businesses. It was found to be a good predictor of growth of small businesses (Covin, 1991), and of performance in hostile environments of small businesses (Covin and Slevin, 1989). Morris and Sexton (1996) found a significant positive

relationship between entrepreneurial intensity and increased growth. Zahra and Covin (1995), and Wiklund (1999) found that entrepreneurial orientation of businesses tends to have sustainable long-term effects on growth and financial performance in addition to short-term effects. Corporate entrepreneurship has been recognised as a potentially viable means of promoting and sustaining corporate competitiveness (Covin and Miles; 1999:47; Schollhammer (1982), Miller (1983), Khandwalla (1987), Guth and Ginsberg (1990), Naman and Slevin (1993), Lumpkin and Dess (1996), and Ireland, *et al.* (2006a:10).

Hisrich and Peters (1998) also proved that entrepreneurship often results in the creation of new value. Organisational wealth creation has been considered an important, yet implicit, consequence of corporate entrepreneurship in general (Kanter, 1984; Peters and Waterman, 1982; Pinchot, 1985) as well as in corporate entrepreneurship induced performance measurement (Naman and Slevin, 1993).

According to Antoncic and Hisrich (2004:542), businesses with entrepreneurial top management postures engaging in entrepreneurial activities are expected to achieve higher levels of *growth* (absolute – growth in sales and in number of employees, and relative – growth in market share), *profitability* (absolute – return of sales, return on equity, and return on assets, and relative – in comparison to competitors) and *new wealth* creation (new available funds) than businesses that are lower in corporate entrepreneurship engagement.

Antoncic and Hisrich (2003a:198) note that corporate entrepreneurship has been recognised as an important element in organisational and economic development, performance and wealth creation. Corporate entrepreneurship can be important for revitalisation and performance of businesses (Schollhammer, 1981, 1982; Burgelman, 1983, 1985; Kanter, 1984; Pinchot, 1985; Rule and Irwin, 1988; Mckinney and Mckinney, 1989; Guth and Ginsberg, 1990; Zahra, 1991); not only for large businesses but also for small and medium sized enterprises (Covin and Slevin, 1989; Covin and Covin, 1990; Carrier, 1994). Corporate entrepreneurship can affect an economy by increasing productivity, improving best practices, creating new industries and enhancing international competitiveness (Wennekers and Thurik, 1999).

The research of Barrett and Weinstein (1998) on the effect of market orientation and organisational flexibility on corporate entrepreneurship found that corporate entrepreneurship, flexibility and market orientation can provide the capabilities within the business to facilitate understanding of the challenges and trends, influence the formulation of appropriate strategic responses, and effectively execute a plan that is proactive towards the customer and the competition to ensure continued survival and success. Businesses can, with hard work and determination, become more entrepreneurial, be more flexible in their exercise of authority and responsibility, and increase their market orientation. Barrett and Weinstein's (1998) empirical work provided credibility to managerial investment in these areas.

In the longitudinal research of Zahra and Covin (1995:44) it has been proved that corporate entrepreneurship has a positive impact on financial measures of company performance. The effect on performance increases over time, suggesting that corporate entrepreneurship may be a generally effective means for improving long-term organisational financial performance. The results also indicated that corporate entrepreneurship is a particularly effective practice amongst businesses operating in hostile environments as opposed to benign environments. The study has three practical implications: (1) this study documents the general financial viability of engaging in corporate entrepreneurship; (2) the study suggests a need to use a long-term time horizon in order to judge adequately the financial consequences of corporate entrepreneurship and (3) the study identifies the context-specific character of effective entrepreneurial practice. Specifically, corporate entrepreneurship appears to be a particularly effective strategic practice among businesses operating in hostile business settings.

Zahra and Covin (1995:55) state that corporate entrepreneurship should not be viewed as a "short-term" fix, but as a long-term strategy for achieving superior financial performance. Managers should adopt a long-term perspective in developing, managing and evaluating corporate entrepreneurship. Zahra and Covin (1995:55) found that there is also a possibility that corporate entrepreneurship pays off by improving non-financial indicators of company performance.

Not all corporate entrepreneurship activities lead to improved company performance. Fast (1981) in Zahra and Covin (1995:46) argues that corporate entrepreneurship can be risky,

and detrimental to a businesses short-term financial performance. Poor communication, lack of strategic focus and dysfunctional organisational politics often doom corporate entrepreneurial activities (Burgelman and Sayles, 1983; Sexton and Bowman-Upton, 1991).

From this section of the literature review the necessity for corporate entrepreneurship can be summarised as follows. Businesses needs corporate entrepreneurship to grow; integrate and develop an entrepreneurial spirit; create and sustain competitive advantage and to be adaptable, flexible, fast, aggressive and innovative. The benefits of instilling corporate entrepreneurship in a business can also be summarised.

- Businesses that instil corporate entrepreneurship can gain and sustain competitive advantage at all levels of the business;
- rejuvenate and revitalise the existing business;
- develop new products, services and processes;
- pursue entrepreneurial opportunities;
- create new businesses within existing businesses;
- foster strategic renewal of existing operations;
- improve growth and profitability;
- sustain corporate competitiveness;
- increase financial performance; and
- create new value.

Corporate entrepreneurship can affect the economy by increasing productivity, improving best practices, creating new industries and enhancing international competitiveness.

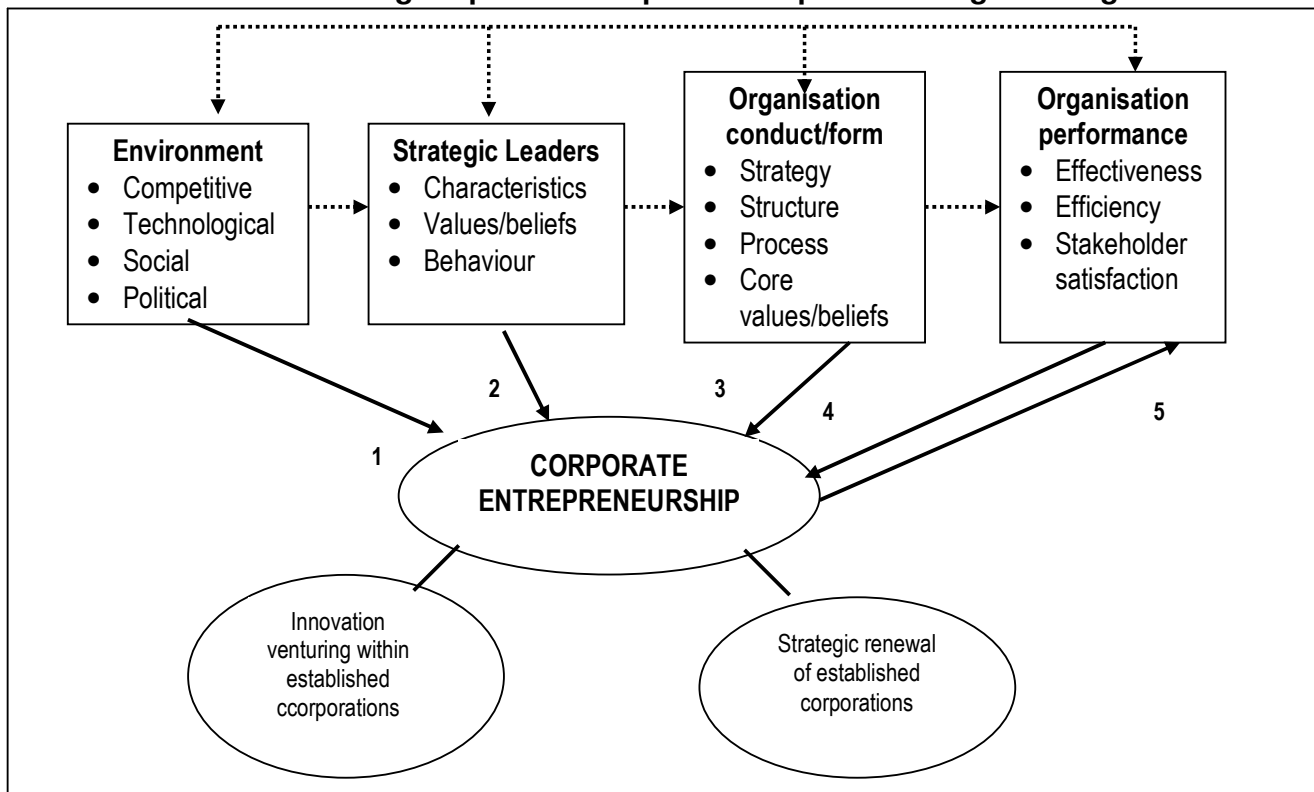
3.4 CORPORATE ENTREPRENEURSHIP CONCEPTUAL MODELS

In the field of corporate entrepreneurship various conceptual models have been developed to address aspects in corporate entrepreneurship. The conceptual models are mostly developed to improve the understanding of the various issues related to the process and phenomenon of corporate entrepreneurship. Most researchers also use these models to guide research actions.

3.4.1 A domain model for corporate entrepreneurship (Guth and Ginsberg)

Guth and Ginsberg (1990:5) attempted to provide a framework for tracking research in corporate entrepreneurship. According to Guth and Ginsberg (1990:5) the domain of corporate entrepreneurship encompasses two types of processes: *internal innovation* or venturing through the creation of new businesses within existing businesses, and the *strategic renewal* of key corporate ideas that transform businesses. Key components in the model include the environment, strategic leaders, business form and performance. Each component is an important element within the domain of corporate entrepreneurship. The model is illustrated in figure 3.1.

FIGURE 3.1 Fitting corporate entrepreneurship into strategic management



Source: Guth and Ginsberg (1990:7)

Guth and Ginsberg (1990:7-8) describe the components of this model as follows:

In this model the changes in industry competitive structures and the technologies underlying them affect the corporate entrepreneurship environment. Opportunities for new products and services stem from development of new technology and/or commercialisation of technologies developed by others. Both opportunities and problems stem from the potential of the business and its competitors in an industry to find new combinations of resources that lead to competitive advantage.

The entrepreneurial behaviour in businesses is critically dependent on the characteristics, values/beliefs and visions of their strategic leaders.

Business conduct/form influences corporate entrepreneurship: bureaucratic structures and management processes are widely regarded as appalling to innovation and change within businesses. There have been reports in the literature of high levels of new product introduction in businesses observed to have highly bureaucratic structures and processes.

Organisational performance influences corporate entrepreneurship: innovation and radical change may be precipitated when businesses has excess resources that allow them to seize upon opportunities that arise. Organisational performance may also be induced by crisis or severe external threats.

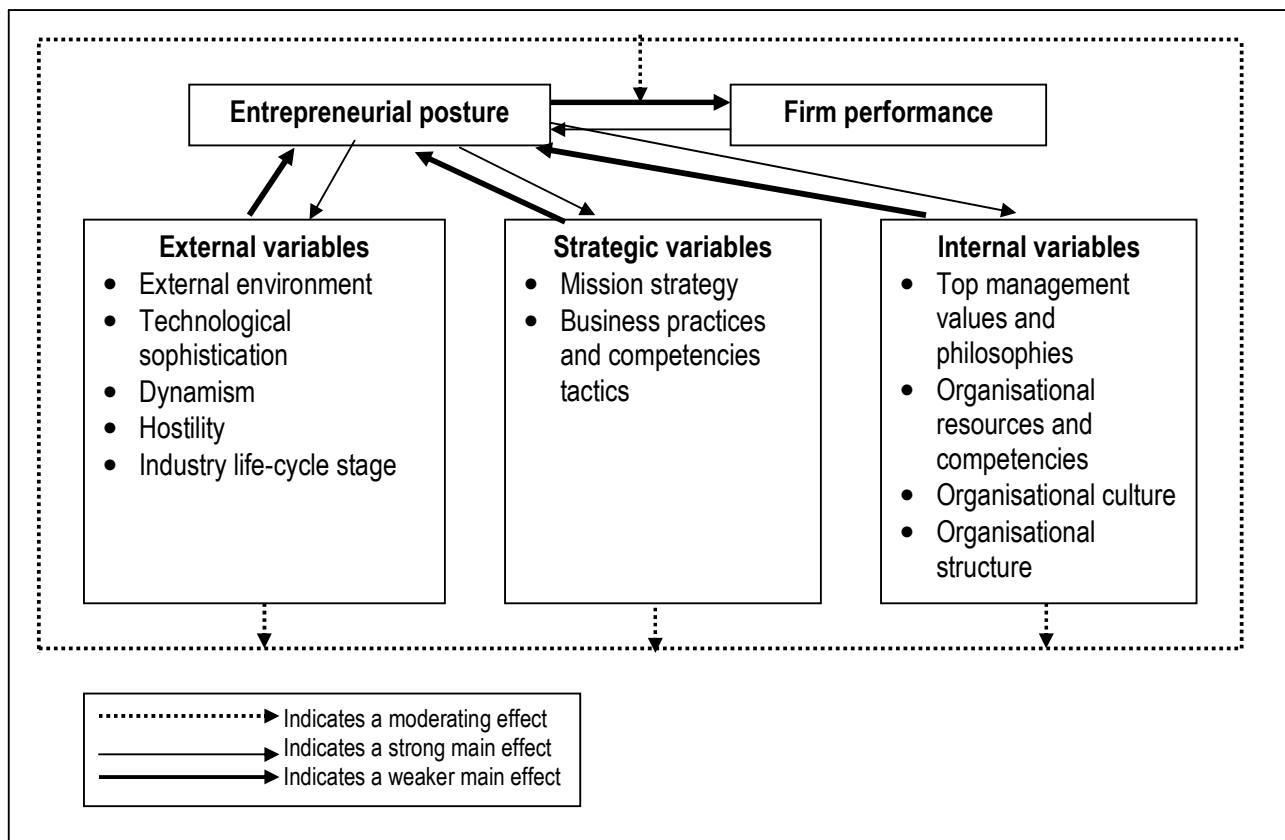
According to Guth and Ginsberg (1990:8), corporate entrepreneurship influences performance - on the short-run the performance orientation of many managements has often been cited as a deterrent to innovation and change. New ventures take several years to turn into contributors to overall corporate profit performance.

This model has not been empirically tested. Guth and Ginsberg (1990) indicate that empirical research is necessary on the combined effects of organisation structure, strategy and core organisational value/beliefs on corporate entrepreneurship.

3.4.2 A conceptual model of firm behaviour (Covin and Slevin)

Covin and Slevin (1991:7) developed a business-level model in examining the behaviours of entrepreneurs and the entrepreneurs' impact on the businesses actions. This model indicates that entrepreneurial behaviour at business level is affected by the businesses particular strategies, structures, systems and cultures. The model shows the antecedents and consequences of an entrepreneurial posture as well as the variables that moderate the relationship between entrepreneurial posture and business performance. The major purpose of this model is to allow for considerable managerial intervention and reduce the view of corporate entrepreneurship as unanticipated or mysterious. The model is presented in figure 3.2.

FIGURE 3.2 The conceptual model of entrepreneurship as firm behaviour



Source: Covin and Slevin (1991:11)

According to Khandwalla (1977) in Covin and Slevin (1991:8), businesses with entrepreneurial postures is risk-takers, innovative and proactive. These businesses are

willing to take on high-risk projects with chances of very high returns, and are bold and aggressive in pursuing opportunities. Entrepreneurial businesses often initiate actions to which competitors then respond, and are frequently first-to-market with new product offerings. In support of this strategic orientation, entrepreneurial businesses characteristically emphasise technological leadership, research and development.

Since entrepreneurial posture is a behavioural phenomenon, it can be managed (Covin and Slevin, 1991:24). Entrepreneurial posture affects, and is affected by, multiple organisational system elements. “Knowing how to manage entrepreneurial posture will become increasingly important because the environmental conditions that ‘require’ such a posture are evolving rapidly” (Covin and Slevin, 1991:24).

Important aspects from this model pertaining to this study are the following:

- an entrepreneur’s effectiveness can be measured in terms of his or her businesses performance;
- organisational performance is a function of organisational- as well as individual level behaviour. Organisational-level behaviour is a predictor of the key entrepreneurial effectiveness criterion of organisation performance;
- behaviour is the central and essential element in the entrepreneurial process;
- by knowing the behavioural manifestations of entrepreneurship the entrepreneurial level of businesses can reliably, verifiably and objectively be measured;
- business-level entrepreneurial behaviour is effected by, and can be managed through, the creation of particular organisational strategies, structures, systems and cultures;
- a behavioural model of entrepreneurship allows for considerable managerial intervention, and the entrepreneurial process can be viewed as much less unanticipated, mysterious and unknowable;
- the external environment has a strong if not deterministic influence on the existence and effectiveness of entrepreneurial activity; and
- just as entrepreneurial conditions may prompt entrepreneurial postures, such postures may induce a change in environmental conditions.

Zahra (1993:7) critiqued the model of Covin and Slevin and indicated various areas where the initial model could be improved and extended. A brief overview of this critique and improvement of the model will be addressed next.

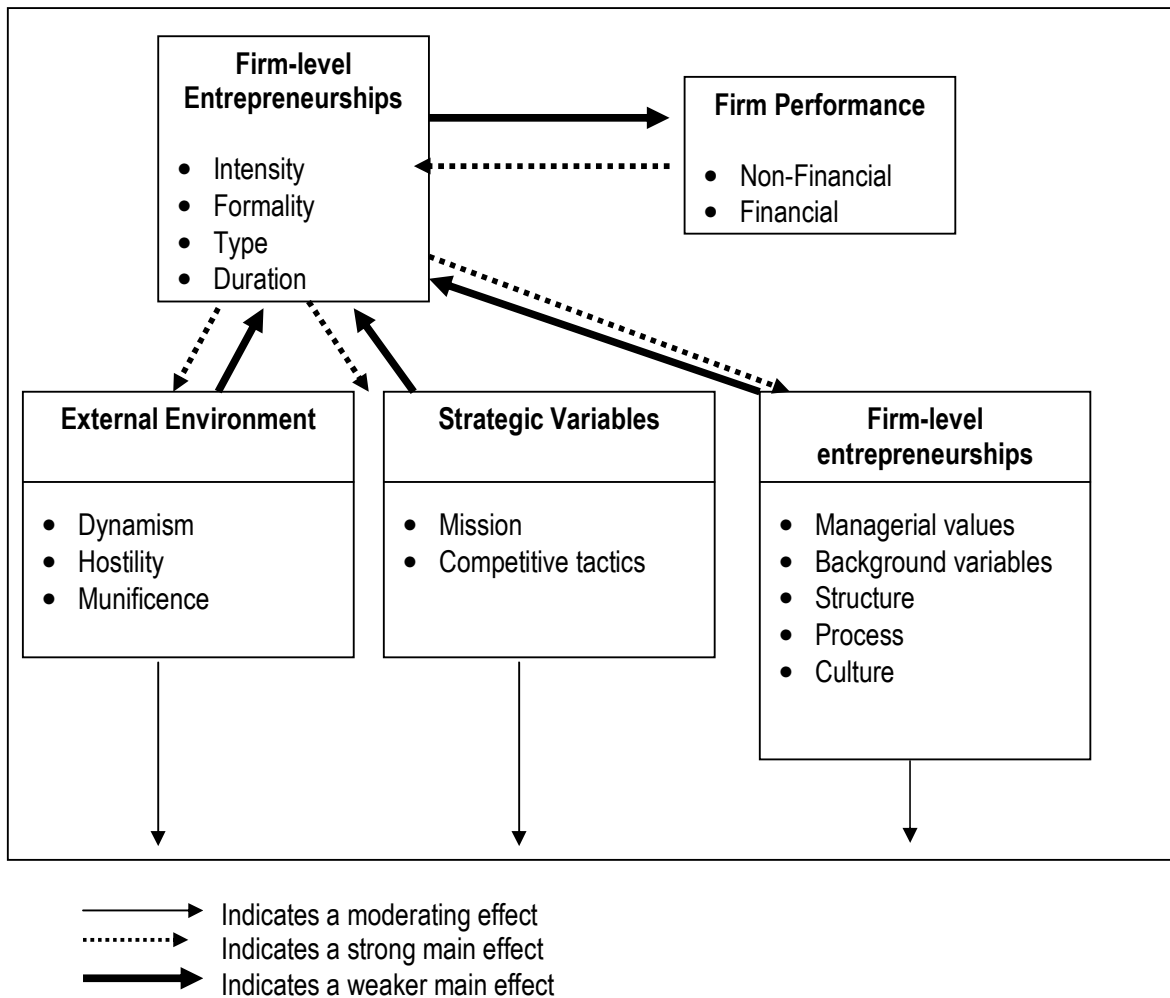
Zahra (1993:7) indicates that in terms of the nature of entrepreneurial behaviour the Covin and Slevin (1991) model should consider the intensity, formality, type (locus) and duration of firm-level entrepreneurship. Failure to distinguish these four dimensions may lead to misspecification of the relationship of entrepreneurship activities to other salient issues, such as the businesses performance. In terms of the locus of entrepreneurship, Zahra (1993:9) suggests three modifications to the Covin-Slevin model. The first centres on incorporating the specific level of the analysis (corporate, business and functional) in theorising about the antecedents of firm-level entrepreneurship. The second entails making a clear distinction between new ventures within an established firm's stand-alone ventures. The third suggests a change in the model to differentiate between domestic and international ventures/entrepreneurship efforts.

The model can benefit from recognising the importance of organisational processes that can spark entrepreneurial activities in the business (Zahra, 1993:10). The model should recognise the crucial effect of senior executives' background, values and experience as possible antecedents of a businesses entrepreneurial posture.

Zahra (1993:12) recommends another three changes to revise and extend Covin and Slevin's model. First, the model should recognise the financial and non-financial outcomes of entrepreneurship. Second, the model should acknowledge the possibility that growth and profitability are not always guaranteed through firm-type entrepreneurship. Third, it should be recognised that financial and non-financial criteria are useful at different points in the life of an entrepreneurial venture.

Zahra (1993:13) proposes a revised conceptual framework of firm-level entrepreneurship. This model is illustrated in figure 3.3.

FIGURE 3.3 A revised conceptual framework of firm-level entrepreneurship



Source: Zahra (1993:13)

There are four differences between the revised model and the original model of Covin and Slevin (1991). First, there is a more practical classification of the external environment set. It eliminates the technological sophistication variable because it appears to be redundant with environmental dynamism. An additional environmental attribute is added: munificence – this refers to the abundance of opportunities for innovation in the industry. Secondly, the model adopts a broader definition of a businesses entrepreneurial behaviour than originally proposed. The revised model incorporates intensity, formality, type and duration of entrepreneurial behaviour activities (Zahra, 1993:18). The internal set has been revised and highlights four subsets of variables: (1) managerial values and background (including age, past experience, and functional expertise; (2) organisational structure (including centralisation, formalisation, complexity and organicity; (3) managerial

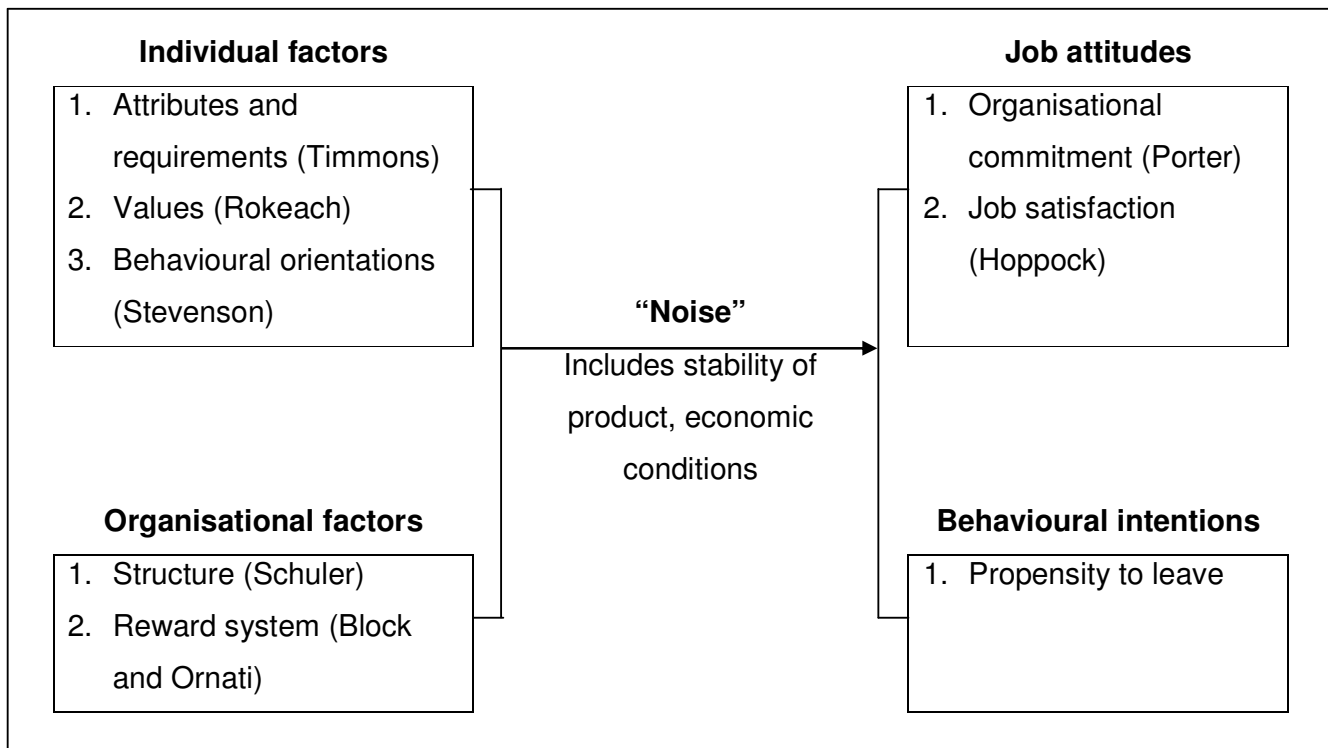
process (including participation and fairness); and (4) organisational culture (including openness and empowerment).

Thirdly the revised model considers both financial and non-financial outcomes of entrepreneurial activities. It also proposes that some non-financial benefits from entrepreneurship can produce financial results.

3.4.3 An organisational model for internally developed ventures (Brazeal)

Brazeal (1993) developed a model defining corporate venturing as an internal process that embraces the ultimate goal of growth through the development of innovative products, processes and technologies that should be institutionalised as a process geared towards long-term prosperity. Figure 3.4 illustrates this model.

FIGURE 3.4 The joint function of individual and organisational factors for internal ventures



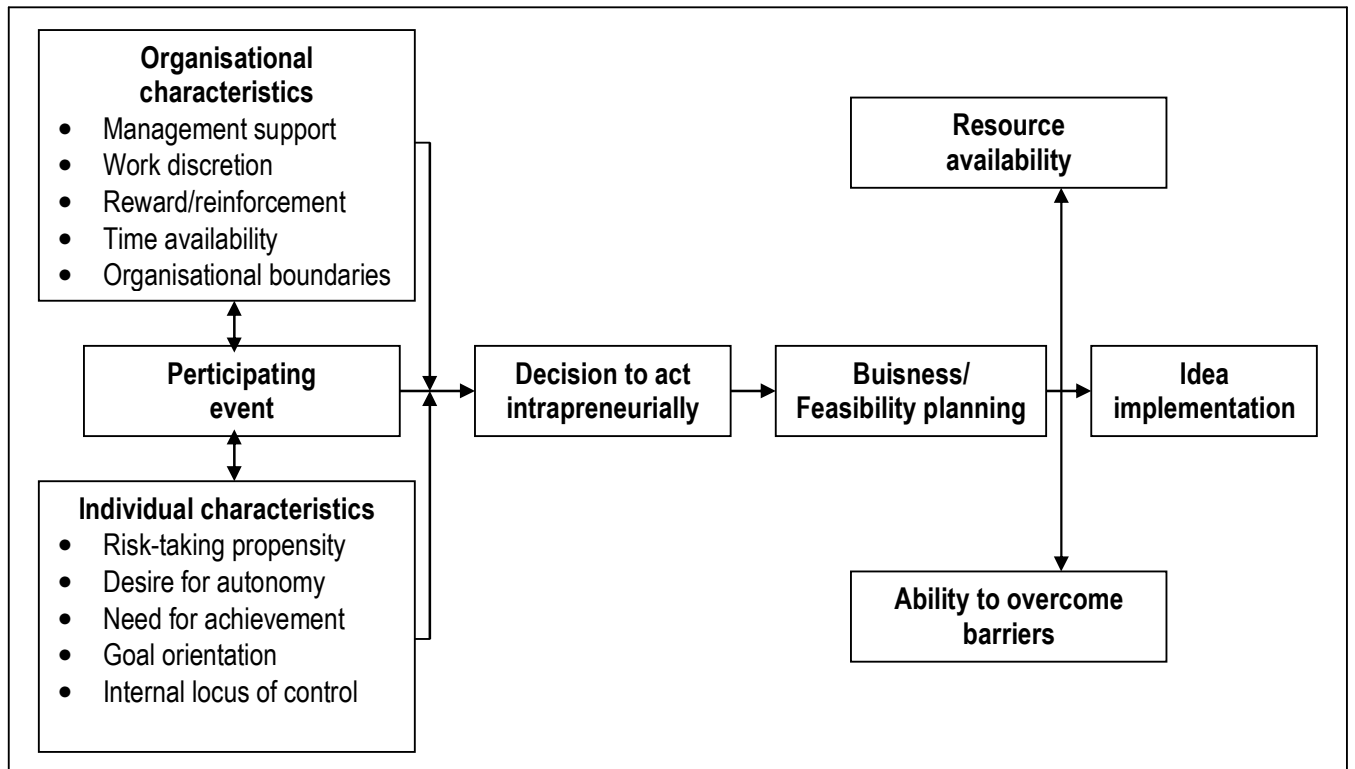
Source: Brazeal (1993)

This model focuses on a joint function between innovative-minded individuals and organisational factors. This implies that for a business to promote innovation among its employees, careful attention must be given to the melding of an individual's attitudes, values, and behavioural orientations with the organisational factors of structure and reward. Ultimately the key objective is to enhance a businesses innovative abilities through an organisational environment that is supportive of these individuals.

3.4.4 An interactive model of the corporate entrepreneurial process (Hornsby, *et al.*)

Hornsby, *et al.* (1993:29) expanded on the model of Brazeal by describing the interaction of organisational factors and individual characteristics that is ignited by precipitating events that lead to successful corporate entrepreneurship. The precipitating event could be a change in company management, a merger or acquisition, development of a new technology, or an event that acts as the impetus for the interaction between individual characteristics and organisational factors.

FIGURE 3.5 An interactive model of corporate entrepreneurship



Source: Adapted from Hornsby, *et al.* (1993:31)

Hornsby, *et al.* (1993:29) indicate, from literature, organisational characteristics that foster corporate entrepreneurship. These organisational characteristics are: appropriate use of *rewards* (any reward system, in order to be effective, must consider goals, feedback, emphasis on individual responsibility and rewards based results); *management support* (which relates to the willingness of managers to facilitate entrepreneurial projects); *resources* (which includes time and the availability of resources for innovative activities); *organisational structure* (which is identified in various ways); and *risk taking* (employees and management must be willing to take a risk and have a tolerance for failure should it occur).

While many businesses do not objectively assess the personality characteristics of either potential or current employees, it is important to recognise the influence of individual differences on innovative behaviour. This model suggests that investment in this assessment effort may be worthwhile. Individuals identified as having intrapreneurial potential could be targeted for training or other corporate entrepreneurial opportunities (Hornsby, *et al.*, 1993:31). The individual entrepreneurial characteristics include: risk-taking propensity, desire for autonomy, need for achievement, goal orientation, and internal locus of control.

The decision to act entrepreneurially occurs as a result of an interaction between organisational characteristics, individual characteristics and some kind of precipitating event. The precipitating event provides the impetus to behave entrepreneurially when other conditions are conducive to such behaviour (Hornsby, *et al.*, 1993:29).

Precipitating events were identified by Zahra in Hornsby *et al.* (1993:32) which include environmental factors such as hostility (threats to a businesses mission through rivalry), dynamism (instability to a businesses market because of changes), and heterogeneity (developments in the market that create new demands for a businesses products). In addition, organisational factors such as structure and managerial values were cited. Specific examples of precipitating events in the corporate entrepreneurship process could include, according to Hornsby *et al.* (1993:32): development of new procedures; a change in company management; a merger or acquisition; a competitor's move to increase market share; development of new technologies; cost reduction; change in consumer demand; and economic changes.

In figure 3.5 the decision to act entrepreneurially is actually the culmination of the interaction of three factors: business characteristics, individual characteristics and precipitating event.

The next step after the decision to act entrepreneurially is to develop an effective business plan. The entire plan will encompass all phases of start-up research needed to clarify the operations involved in a new venture. Bruno, Leidecker and Harder (1987) in Hornsby, *et al.* (1993:31) found many causes of failure could have been avoided through the development of a business plan. While an accurate and complete business plan is essential, its implementation and the ultimate success of the intrapreneurial idea depend on two factors - firstly the businesses ability to provide the needed resources required and secondly, can the corporate entrepreneur overcome both organisational and individual barriers that hinder the implementation of the idea. Sykes and Block (1989:159) in Hornsby, *et al.* (1993:32) suggested several obstacles for corporate venturing: the businesses enforcement procedures when mistakes are made; long-term planned activities; functional management structures; uniform compensation policies; and promotion of compatible individuals.

The implementation of an entrepreneurial idea is the result of the interaction of the factors described in this model. Having developed the feasibility analysis, acquired the resources necessary for the new venture, and overcome any existing organisational barriers, the corporate entrepreneur is now in a position to implement the idea and initiate the innovation.

3.4.5 A model of sustained corporate entrepreneurship (Kuratko, *et al.*)

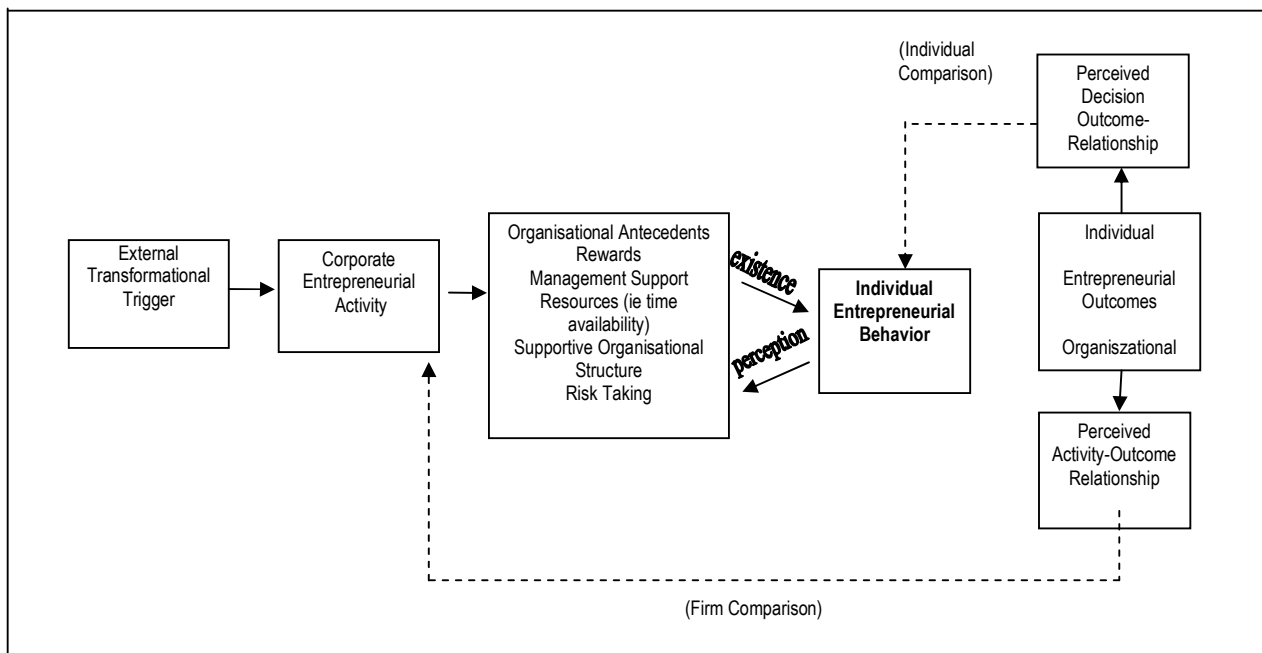
Kuratko, *et al.* (2004:78) state that more needs to be known about the specific factors that can influence all organisational members to achieve the objective of developing entrepreneurial behaviour. Kuratko *et al.* (2004) developed a model that focuses on the critical organisational factors that must exist and be perceived within the business in order to develop and sustain entrepreneurial activities.

This model focuses on the businesses ability to sustain entrepreneurship on an ongoing basis. The model demonstrates that sustainability is contingent upon individual members

continuing to undertake innovative activities and upon positive perceptions of these activities by the executive management, which will in turn lead to further allocation of necessary organisational support and resources. The model is presented in figure 3.6 and demonstrates that a transformational trigger (something external or internal to the company that creates a threat or opportunity) initiates the need for strategic change. One way to accomplish this change is through entrepreneurial activity. The entrepreneurial activity (e.g. product or service or process) is driven by individuals within the company.

The proposed model centres on the individual employee's decision to behave entrepreneurially. Sustained entrepreneurial activity is the result of the perception by the individual that several organisational antecedents are present, such as top management support, autonomy, rewards, resources, and flexible organisational boundaries. The outcomes realised from this entrepreneurial activity are then compared, at both the individual and organisational level, with previous expectations. Entrepreneurial behaviour will result when both the individual employee and the leadership in the company perceive that the outcomes are equitable, or that they meet or exceed expectations. Both parties must be satisfied with the outcomes or the amount of entrepreneurial activity will decline. Satisfaction with performance outcomes serves as feedback mechanism for either sustaining the current strategy or selecting an alternative one. Individuals, as agents of strategic change, must also be satisfied with the intrinsic and extrinsic outcomes they receive for their entrepreneurial behaviour. The model suggests that in a major strategic change both individual behaviour and organisational strategy change are instrumental in making the change successful (Kuratko, *et al.*, 2004:77).

FIGURE 3.6 A model of sustained corporate entrepreneurship

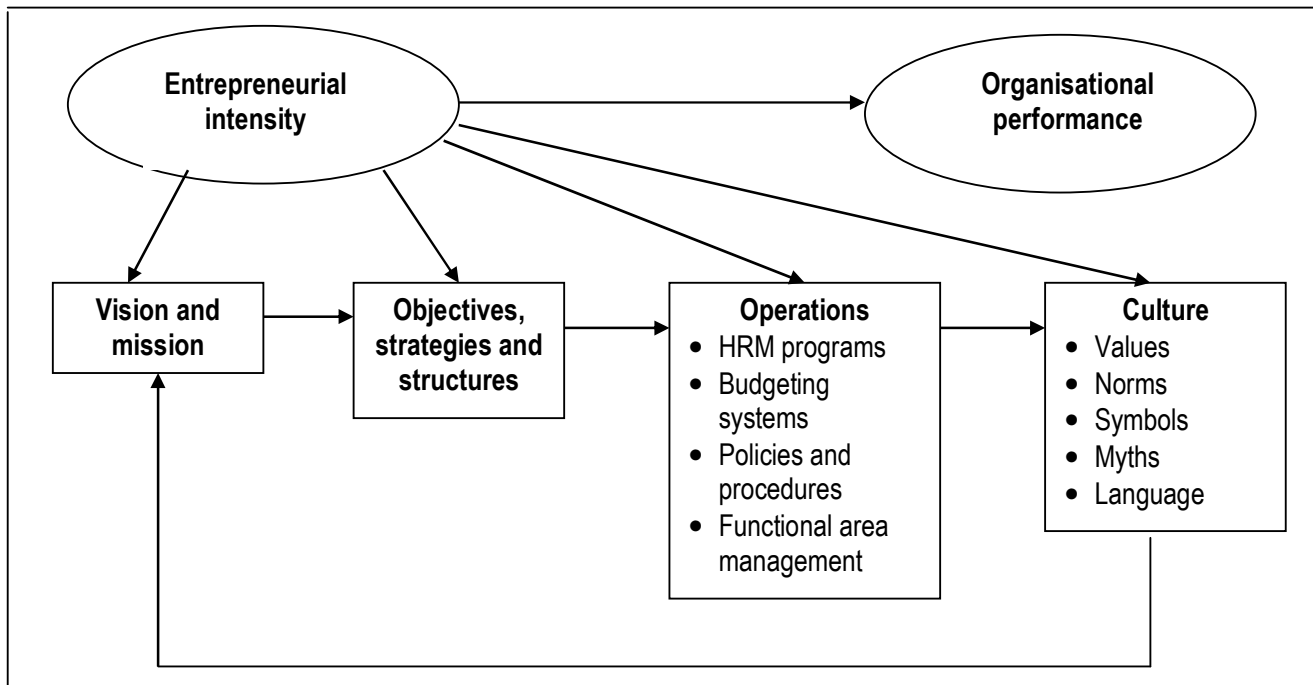


Source: Kuratko, *et al.* (2004:79)

3.4.6 A strategic integration framework (Morris, *et al.*, as adapted from Covin and Slevin)

The focus in this framework is the ongoing integration of entrepreneurship throughout the entire business, which is more difficult than viewing it as a discrete activity or event or behaviour. Entrepreneurship is not just something that a person or team does at a point in time, but instead should capture the essence of what a business is about and how it operates. The framework indicates that a business's entrepreneurial orientation or intensity has a direct and positive influence on company performance. It does so because it is interwoven with the vision and mission of the business, the strategies, objectives, structures, the everyday operations, and the overall organisational culture. The major purpose of this integrative model is to allow for considerable managerial intervention to foster corporate entrepreneurship as company leaders begin to understand that innovative behaviour by employees should not be an accidental or serendipitous occurrence.

FIGURE 3.7 Strategic integration of entrepreneurship throughout the business

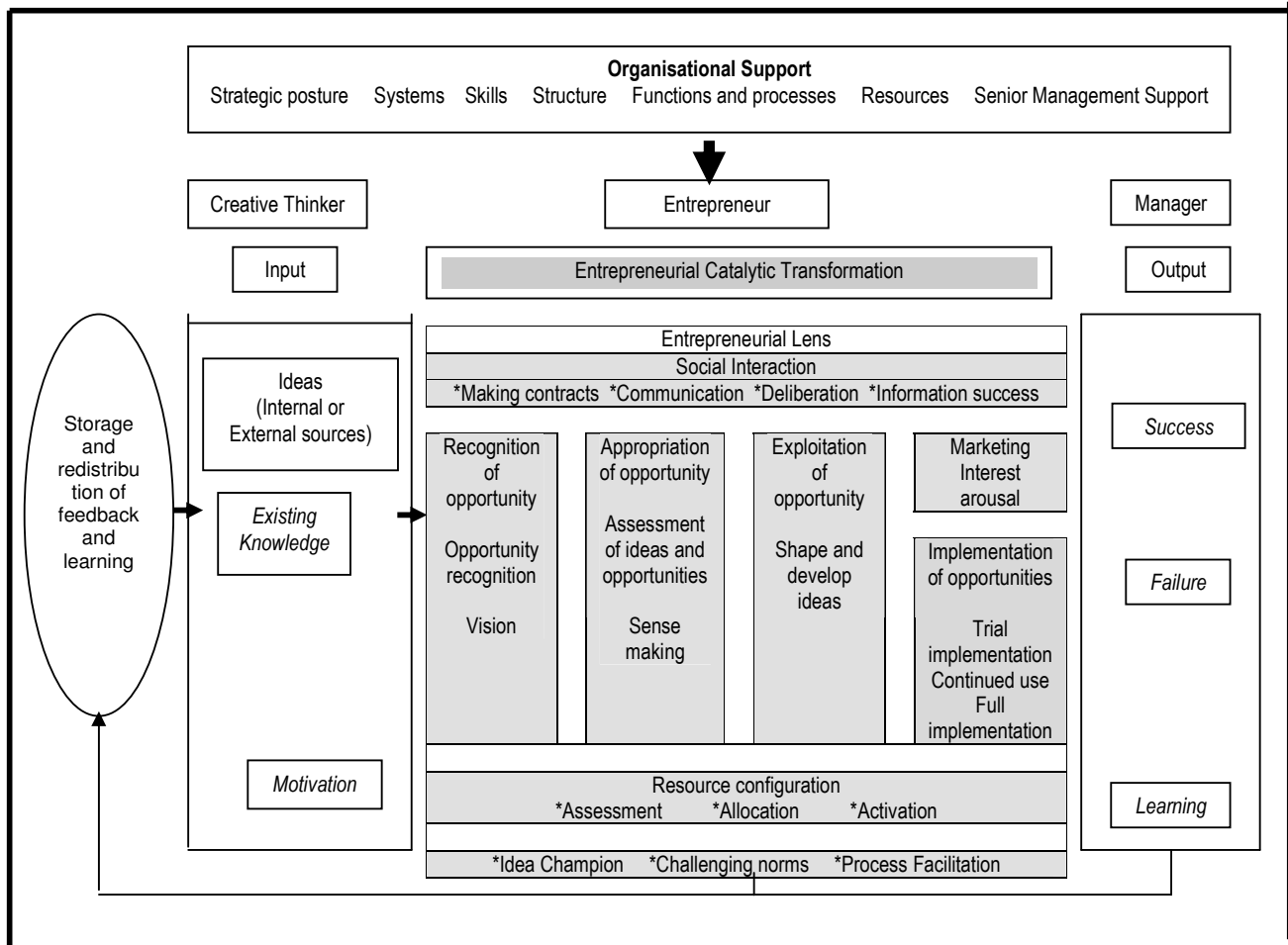


Source: Morris, *et al.* (2008:50)

3.4.7 The micro-model of corporate entrepreneurship and innovation (Shaw, *et al.*)

Shaw, *et al.* (2005:394) did research to determine the missing link between corporate entrepreneurship and innovation. From this research they developed a new model, as illustrated in figure 3.8, for corporate entrepreneurship and innovation. This model is a multi-stage, multi-individual, complex process that helps to provide the insight for altering the organisational dynamics. It indicates that an entrepreneurial philosophy, which stimulates change and the provision of a supportive environment, is most likely to foster innovation. Entrepreneurial businesses are often the most proactive when it comes to innovation, which in turn provides the potential for competitive advantage. The model gives managers insight into how to introduce entrepreneurial activity into businesses and the management of innovation.

FIGURE 3.8 The micro-model of corporate entrepreneurship and innovation



Source: Shaw, *et al.* (2005:397)

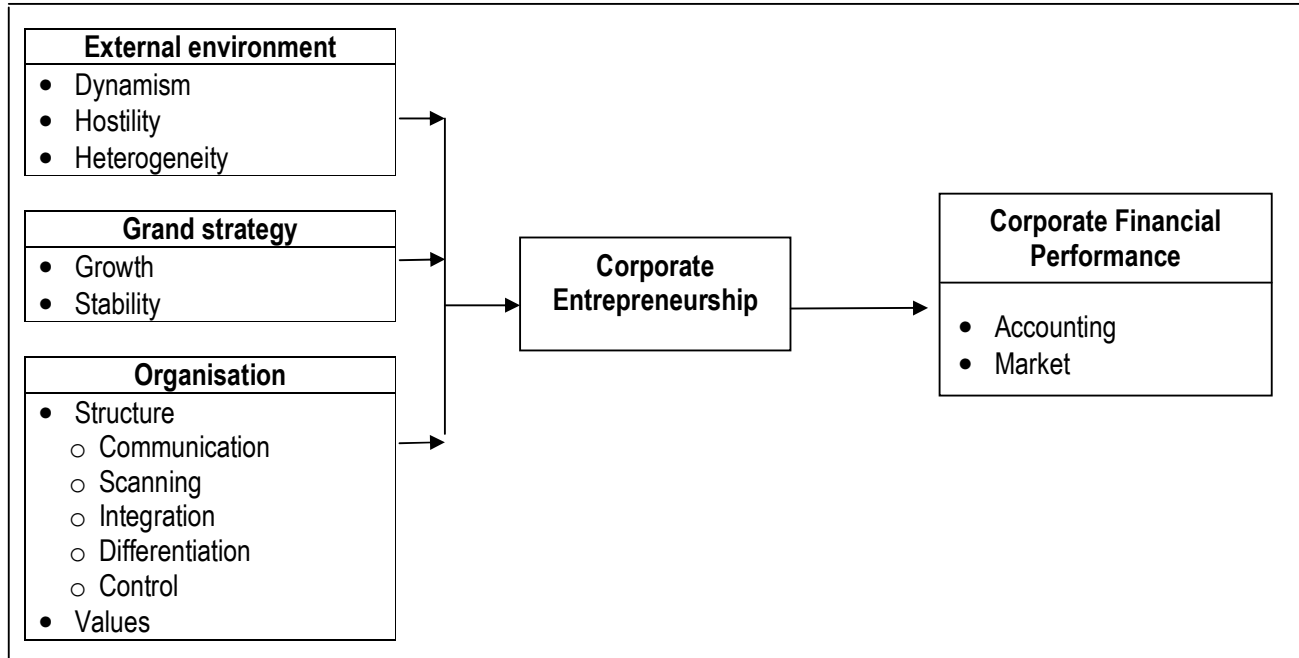
3.4.8 Model of predictors and financial outcomes of corporate entrepreneurship (Zahra)

Zahra (1991:260) advances that only a few studies systematically examined the effect of corporate entrepreneurship on company performance (e.g. Bigadike, 1979; Block, 1989; Miller and Camp, 1985; Zahra, 1986).

According to Zahra (1991:260) this model posits that a combination of environmental, strategic and business-related variables jointly influences corporate entrepreneurship efforts. Each variable may independently influence corporate entrepreneurship, but only

by examining its simultaneous effects can corporate entrepreneurs' major precursors be reliably understood.

FIGURE 3:9 A model of predictors and financial outcomes of corporate entrepreneurship



Source: Zahra (1991:263)

Zahra (1991:279) empirically tested this model and the results clearly indicate that businesses have emphasised corporate entrepreneurship as they perceived their environment as becoming increasingly dynamic, hostile and heterogeneous. Growth-oriented strategies were positively associated with corporate entrepreneurship and stability strategies negatively related. Communication and scanning had positive relations to corporate entrepreneurship. The results on differentiation and integration varied in their association with corporate entrepreneurship – the variables were associated in opposite directions with external and internal corporate entrepreneurship. Differentiation was negatively associated with internal, but positively with external corporate entrepreneurship. Integration was positively associated with internal corporate entrepreneurship because of unity of effort resulting from increased coordination. Integration was negatively associated with external corporate entrepreneurship. Control was negatively associated with

corporate entrepreneurship – increased formal controls were associated with lower corporate entrepreneurship.

Person-related values were relevant in the case of internal corporate entrepreneurship and competition-oriented values were relevant in the case of externally oriented corporate entrepreneurship ventures. Lastly, a positive association was made between corporate entrepreneurship activities and businesses financial performance.

This model can be applicable to this study specifically in terms of the organisational factors that influence the pursuit of corporate entrepreneurial activities. These variables form the context within which employees and executives perceive opportunities for new ventures.

3.4.9 Model of corporate entrepreneurship and wealth creation (Antoncic and Hisrich)

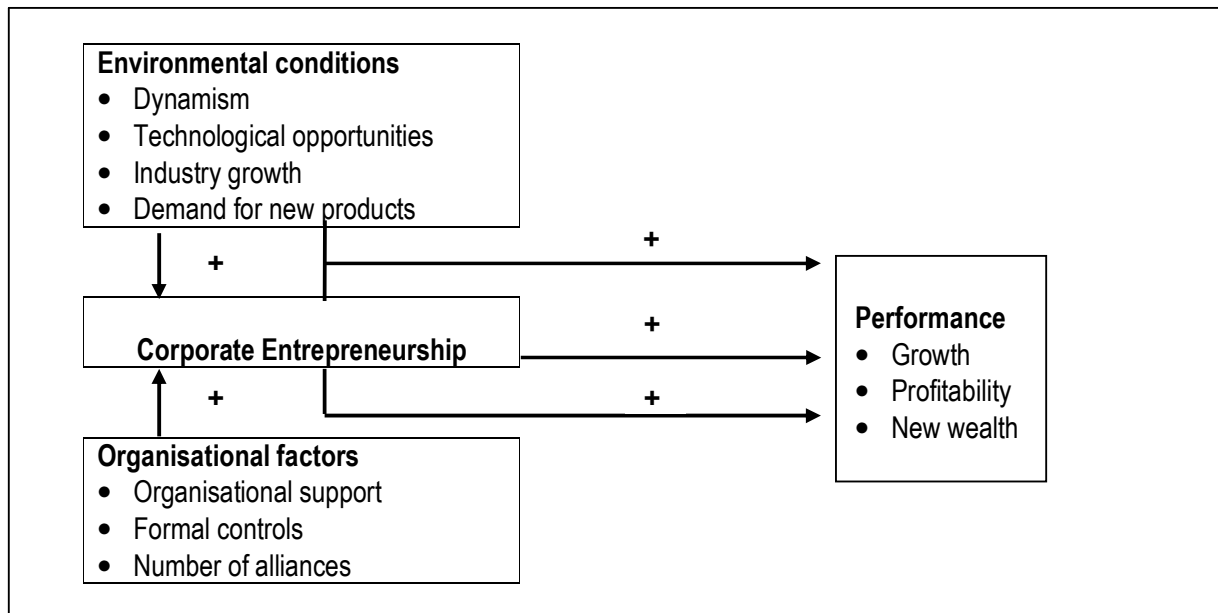
Antoncic and Hisrich (2004:523) indicate that because of various limitations with corporate entrepreneurial models, a study was designed to remedy these weaknesses. In order to reduce the previous problems with clarification of relationships among elements in the corporate entrepreneurship model, a new model was built. This model includes corporate entrepreneurship and its two direct antecedent concepts (environmental and organisational factors, including also organisational alliances with other firms); wealth creation, in addition to growth and profitability as performance elements; and indirect and interaction effects. In testing this model the following findings were made by Antoncic and Hisrich (2004:539 – 540):

First, the results suggested that the influence of industry growth on performance may not be mediated by corporate entrepreneurship. This sharply contradicts the findings of Zahra (1993). Antoncic and Hisrich proposed further investigation in this regard. Organisational growth and new wealth creation, but not profitability, can be influenced directly by industry growth and by the fit between this industry characteristic and corporate entrepreneurship.

Secondly, technological opportunities can be an important element impacting on corporate entrepreneurship. These environmental conditions can have some indirect effect on organisational performance, but fitting the level of corporate entrepreneurship to the level

of these conditions may not be conducive to organisational growth, profitability or new wealth creation.

FIGURE 3.10 A model of corporate entrepreneurship and wealth creation



Source: Antoncic and Hisrich (2004:534)

Thirdly, demand for new products can be an important factor in directly impacting on corporate entrepreneurship. It may also have some direct influence through entrepreneurship on performance. More importantly, organisational new wealth creation and profitability, but not growth, can be influenced directly by the demand for new products, as well as by the fit between this industry characteristic and corporate entrepreneurship.

Fourth, the findings suggest that organisational support can be an important direct predictor of corporate entrepreneurship, as well as have indirect influence on performance. Organisational growth, but not new wealth creation and profitability, can be impacted by fitting the level of organisational support to the level of corporate entrepreneurship.

Fifth, formal controls can be important in fostering corporate entrepreneurship, but their impact on performance is weak.

Sixth, the number of strategic alliances can be positively related to corporate entrepreneurship. However, at a higher number of ties this relationship can become negative.

The most important of these drivers of corporate entrepreneurship is organisational support, which is to a large extent under the influence of management. According to figure 3.10 new wealth creation can be influenced directly and indirectly in the following ways. New wealth creation can be influenced by industry growth for all businesses and demand for new products for younger businesses. New wealth creation is also influenced directly by the interactions of these two environmental elements (industry growth for younger businesses, only; demand for new products for growth oriented firms only) with corporate entrepreneurship and indirectly by organisational support and technological opportunities. According to this model organisational growth can be impacted directly by industry growth and by the interactions of industry growth and organisational support with corporate entrepreneurship and indirectly by organisational support. Profitability can be affected directly, and in interaction with corporate entrepreneurship, by the demand for new products, as well as indirectly by organisational support.

The results show that organisational support can be the most important predictor of corporate entrepreneurship. Corporate entrepreneurship can be to a large extent stimulated and affected by management and organisational members. In order to impact corporate entrepreneurship, enhancing intra- and inter-organisational factors should be a priority. The most important among all examined organisational factors is management and organisational support, since it tends to have the strongest influence on corporate entrepreneurship and a substantial indirect influence on organisational wealth creation, growth and profitability.

In order to grow faster (Antoncic and Hisrich, 2004:543), businesses should pursue growth strategies, fit their level of corporate entrepreneurship to the level of industry growth and make sure that their level of organisational support actually translates into the corresponding level of corporate entrepreneurship.

3.4.10 Comments on models

The models discussed in this section of the literature review that can be applied to this study are:

- The interactive model of Hornsby, *et al.* (1993) as shown in Fig 3.5. This model indicates the characteristics that foster corporate entrepreneurship. It also identifies obstacles or barriers to corporate entrepreneurship.
- The model of sustained corporate entrepreneurship by Kuratko, *et al.* (2004) Fig 3.6, focuses on the factors necessary to develop entrepreneurial behaviour and how to sustain entrepreneurship on an ongoing basis, and
- The model of Covin and Slevin that has been adapted by Morris, *et al.* (2008:50). Fig 3.7 focuses on how to integrate entrepreneurship throughout the business. A specific focus is on the entrepreneurial intensity.

These three models can be linked directly to the hypotheses formulated for this study (refer to chapters 1 and 5 for the research hypotheses).

The biggest criticism towards the development of models by researchers in the field of corporate entrepreneurship is that it has not been tested empirically. In this regard Zahra, Antoncic and Hisrich are three of the researchers that do continuously improve existing models and also test them empirically. The latest model developed by Antoncic and Hisrich (2004) addresses various limitations identified by corporate entrepreneurial models. An important contribution of this model is with regard to the importance of organisational support that can be a direct predictor of corporate entrepreneurship success. This aspect is also addressed in the hypotheses of this study.

For the purposes of this study corporate entrepreneurship is seen as a model that is adopted by a business.

In the following section entrepreneurial orientation will be discussed.

3.5 ENTREPRENEURIAL ORIENTATION

Entrepreneurial orientation, according to Child (1972) in Lumpkin and Dess (1996:136), refers to processes, practices and decision-making activities that lead to new entry. Entrepreneurial orientation emerges from a strategic-choice perspective which asserts that new-entry opportunities can be successfully undertaken by purposeful performance. Entrepreneurial orientation involves the intentions and actions of key players functioning in a dynamic generative process aimed at new venture creation.

Miller (1983:771) provided a useful starting point for the specific dimensions of entrepreneurial orientation. Miller suggested that an entrepreneurial business is one that engages in product market innovations, undertakes somewhat risky ventures, and is first to come up with proactiveness to characterise and test entrepreneurship. Various researchers have adopted Miller's original conceptualisation (e.g. Covin and Slevin, 1989; Guth and Ginsberg, 1985; Morris and Paul, 1987; Naman and Slevin, 1993; Schafer, 1990).

Pearce, Kramer and Robbins (1997:149) indicate that there is a growing body of empirical evidence of a positive relationship between an entrepreneurial orientation and improved performance, as indicated by both financial and non-financial performance measures.

The entrepreneurial orientation of a business is described by Altinay and Altinay (2004:334) as a dimension of strategic posture represented by the businesses risk-taking propensity, the tendency to act in a competitively aggressive, proactive manner and reliance on frequent product innovation. Businesses are said to have entrepreneurial orientation when innovative organisational members work together, producing fresh ideas while being provided with a prevailing atmosphere conducive to acting on those ideas. Altinay and Altinay (2004:334) continue and indicate that entrepreneurial orientation concentrates on encouraging creative behaviour among employees and benefits by initiating the development of new products, processes or systems to maintain and increase their presence in the marketplace. Creating an entrepreneurial orientation has turned out to be a more multifaceted task for businesses than ever before. As businesses become larger and more complex, businesses are challenged to find a way to nurture and

empower innovative, opportunity-seeking, entrepreneurial employees, while encouraging accountability. Businesses need to bring about a new way of thinking to the management of the business.

Dess and Lumpkin (2005:147) indicate that corporate entrepreneurship has two primary aims: (1) the creation and pursuit of new venture opportunities, and (2) strategic renewal. Dess and Lumpkin (2005:147) claim that whatever form corporate entrepreneurship efforts take, the key to creating value successfully is viewing every value chain activity as a source of competitive advantage. The effect of corporate entrepreneurship on a business's strategic success is strongest when it animates all parts of a business. It is found that in businesses where the strategic leaders and the culture together generate a strong impetus to innovate, take risks, and aggressively pursue new venture opportunities, they tend to be more successful. These ideas are captured by the concept known as "entrepreneurial orientation".

Dess and Lumpkin (2005:148) added to the research originally conducted by Miller (1983) and identified five dimensions of entrepreneurial orientation: (1) autonomy (independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through to completion); (2) innovativeness (the willingness to introduce newness and novelty through experimentation and creative processes aimed at developing new products and services as well as new processes); (3) proactiveness (a forward-looking perspective characteristic of a marketplace leader that has the foresight to seize opportunities in anticipation of future demand); (4) competitive aggressiveness (an intense effort to outperform industry rivals, characterised by a combative posture or an aggressive response aimed at improving position or overcoming a threat in a competitive marketplace), and (5) risk-taking (making decisions and taking action without certain knowledge of probable outcomes. Some undertakings may also involve making substantial resource commitments in the process of venturing forward).

According to Morris, *et al.* (2008:69), just as important as determining the dimensions of entrepreneurship in a business is the frequency of entrepreneurship. The dimensions of entrepreneurship (innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness) determine the level of entrepreneurship in a business. The frequency of

entrepreneurship refers to how many entrepreneurial events take place within a business over a given period of time.

To assess the overall level of entrepreneurship in a business the concepts of degree and frequency must be considered together (Morris, *et al.* 2008:69). A business may engage in several different entrepreneurial initiatives (high on frequency), but none of them is all that innovative, risky or proactive (low on degree). On the other hand, a business may pursue a path that emphasises breakthrough developments (high degree) that are done every four or five years (low frequency).

Morris, *et al.* (2008:74) concur that many researchers like Covin and Slevin, 1989; Davis, Morris and Allen, 1991; Miller and Friesen, 1982; Morris and Sexton, 1996; Wiklund and Shepherd, 2005; and Zahra, 1986; have demonstrated statistically significant relationships between entrepreneurial orientation and a number of indicators of organisational performance. Examples of such indicators include profits, the income-to-sales- ratio, the rate of growth in revenue, the rate of growth in assets, the rate of growth in employment, and a composite measure of 12 financial and non-financial criteria. Morris, *et al.* (2008:74) also states that the linkage between entrepreneurial orientation and performance appears especially strong for businesses that operates in increasingly turbulent environments. Rapid rates of change and threatening developments in the external environment may force businesses to find ways to be more entrepreneurial.

A very important observation made by Morris, *et al.* (2008:75) is that within businesses, entrepreneurial orientations can be expected to differ significantly among various divisions, units, departments and areas.

The results of a study conducted by Barringer and Bluedorn (1999:433) state that in determining the relationship between strategic management and corporate entrepreneurship, a business's entrepreneurial orientation is influenced by the nature of its strategic management practices. Scanning intensity is an important correlate of entrepreneurial behaviour. A strong relationship exists between planning flexibility and corporate entrepreneurial orientation.

Researchers are increasingly using entrepreneurial orientation as the basis of study in corporate entrepreneurship. Examples include Aloulou and Fayolle, 2005; Brizek and Khan, 2006; Jacobs and Kruger, 2001; Scheepers, Hough and Bloom, 2007; Wang, 2008; Heilbrunn, 2008.

Morris, *et al.* (2008:75) note examples of aspects that are not yet known about entrepreneurial orientation. Some of these aspects are:

- to what extent does the relative importance of degree versus frequency vary depending on such strategic factors as
 - the pace of technological change in an industry,
 - the levels of competitive intensity,
 - or the heterogeneity of market demand?
- under what conditions is degree versus frequency the strongest contributor to company performance?
- it is also necessary to determine whether frequency and degree contribute equally to short-term as opposed to long-term performance;
- another critical question concerns the types and amounts of costs associated with entrepreneurial orientation; and
- finally, it is not clear that high levels of entrepreneurial orientation are sustainable.

3.6 CORPORATE ENTREPRENEURSHIP AND INNOVATION

McFadzean, O'Loughlin and Shaw (2005:356) combine corporate entrepreneurship and innovation and state that corporate entrepreneurship can be defined as the effort of promoting innovation in an uncertain environment. Innovation is a process that provides added value and novelty to the business, its suppliers and customers through the development of new procedures, solutions, products and services as well as new methods of commercialisation. This definition as indicated in McFadzean, O'Loughlin and Shaw; 2005:356, is based on the work of Covin and Slevin, 1992; Knox, 2002; and Lumpkin and Dess, 1996. Within this process the principal roles of the corporate entrepreneur are to challenge bureaucracy, to assess new opportunities, to align and exploit resources and to move the innovation process forward. The corporate entrepreneur's management of the innovation process will lead to greater benefits for the business.

Stevenson and Jarillo (1990:18) indicate that Schumpeter (1934) in his classic works considered entrepreneurship as the process by which the economy as a whole goes forward. It is something that disrupts the market equilibrium or circular flow. Its essence is innovation.

Schumpeter (1934) was among the first to emphasise the role of innovation in the entrepreneurial process. According to Schumpeter, innovation includes: (1) the introduction of a new good – that is, with which consumers are not yet familiar, – or of a new quality of a good; (2) the introduction of a new method of production, one not yet tested by experience in the branch or manufacture concerned, which needs by no means to be founded on a scientific new discovery, and can exist in a new way of handling a commodity commercially; (3) the opening of a new market, that is a market of the country in question into which the particular branch or manufacture has not previously entered, whether or not this market has existed before; (4) the conquest of a new source of supply of raw materials or half-manufactured goods, again regardless of whether this source already exists or whether it first has to be created, and (5) the carrying out of the new business or any industry, such as the creation of a monopoly position or the breaking up of a monopoly position.

Drucker (1985) in Antoncic and Hisrich (2003b:13) considered innovation a specific function of entrepreneurship. In Drucker's view innovation distinguishes what is entrepreneurial from what is management. It is the Schumpeterian innovation that differentiates behaviour of entrepreneurs from non-entrepreneurial managers, making entrepreneurship and innovation almost inseparable.

Lumpkin and Dess (1996:142) state that innovativeness reflects a business's tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes. Innovativeness represents a basic willingness to depart from existing technologies or practices and venture beyond the current state of the art.

Stevenson and Gumpert (1995) in Covin and Miles (1999:48) state that innovation is the heart of entrepreneurship.

Covin and Miles (1999:48) note that innovation is the centre of the network that includes the construct of corporate entrepreneurship. Without innovation there is no corporate entrepreneurship, regardless of the presence of the other dimensions of entrepreneurial orientation.

Innovation, according to Ireland, *et al.* (2006a:10) is one of the most vital uses of shared organisational knowledge. Innovation takes place in businesses in the form of new products, new processes to create products and new administrative structures and routines to help the business operate efficiently and effectively.

Innovation does not surface in an organisational vacuum, according to Ireland, *et al.* (2006a:10). Employees throughout a business who are engaging in entrepreneurial behaviour are the foundation for organisational innovation. To develop and simultaneously nurture today's and tomorrow's competitive advantages, advantages that are grounded in innovation, businesses increasingly relies on corporate entrepreneurship.

Johnson (2001:136) claims that many people view innovation and corporate entrepreneurship as a vehicle to stimulate growth and development. If a business does not adopt a proactive attitude towards innovation and the creation of new ventures; it is unlikely to survive in an increasingly aggressive, competitive and dynamic market place.

Johnson (2001:139) indicates that corporate entrepreneurship relates to innovation and identifies various forms of innovation:

- any change in the product or service range a business takes to market;
- any change in the application of a product or service away from its original purpose;
- any change in the market to which a product or service is applied away from the originally identified market;
- any change in the way a product or service is developed and delivered away from the original operational and logistical design; and
- there is always a special category of innovation that focuses upon a business's development of its core business model away from its current or previous business model.

According to Hitt, Ireland Camp and Sexton (2001:480) innovation is considered by many scholars and managers to be critical for businesses to compete effectively in domestic and global markets. Hamel (2000) in Hitt, Ireland, Camp and Sexton (2001:480) argues that innovation is the most important component of a business's strategy. Hamel also suggests that because the competitive landscape is nonlinear, it requires managers to think in nonlinear ways.

“Continuous innovation (in terms of products, processes, technologies, administrative routines and structures) and an ability to compete proactively in global markets are the key skills that will determine corporate performance in the twenty-first century. Entrepreneurial attitudes and behaviours are necessary for businesses of all sizes to prosper and flourish. The challenge to managers is one of creating an internal marketplace for ideas within their businesses and encouraging employees to act on these ideas” (Morris, *et al.*, 2008:iv).

3.7 HOW TO FOSTER, DEVELOP AND IMPLEMENT CORPORATE ENTREPRENEURSHIP IN A BUSINESS

Hisrich, *et al.* (2008:68) define an entrepreneurially fostering environment as an environment that enhances organisational members' perceptions of entrepreneurial action as both feasible and desirable.

Morris, Van Vuuren, Cornwall and Scheepers (2009:4) state that fostering corporate entrepreneurship becomes problematic if a business's executives do not know what they are trying to achieve. The beginning point is to specify the desired corporate entrepreneurship outcomes. Morris, *et al.* (2009:5) provides the following as possible outcomes: new corporate strategies; new ventures; new business models; new markets; new products or services and new internal processes. Measurable goals need to be set to guide the entrepreneurial efforts of a business. Decisions must be made in terms of the frequency and degree of entrepreneurship in the different outcome areas. Areas must also be established in which the business will be an innovation leader versus a follower, the priority placed on products versus service innovation, the proportion of employee time devoted to new versus existing initiatives, and the amount and types of innovation to come from different levels within the business (Morris, *et al.* 2009:5).

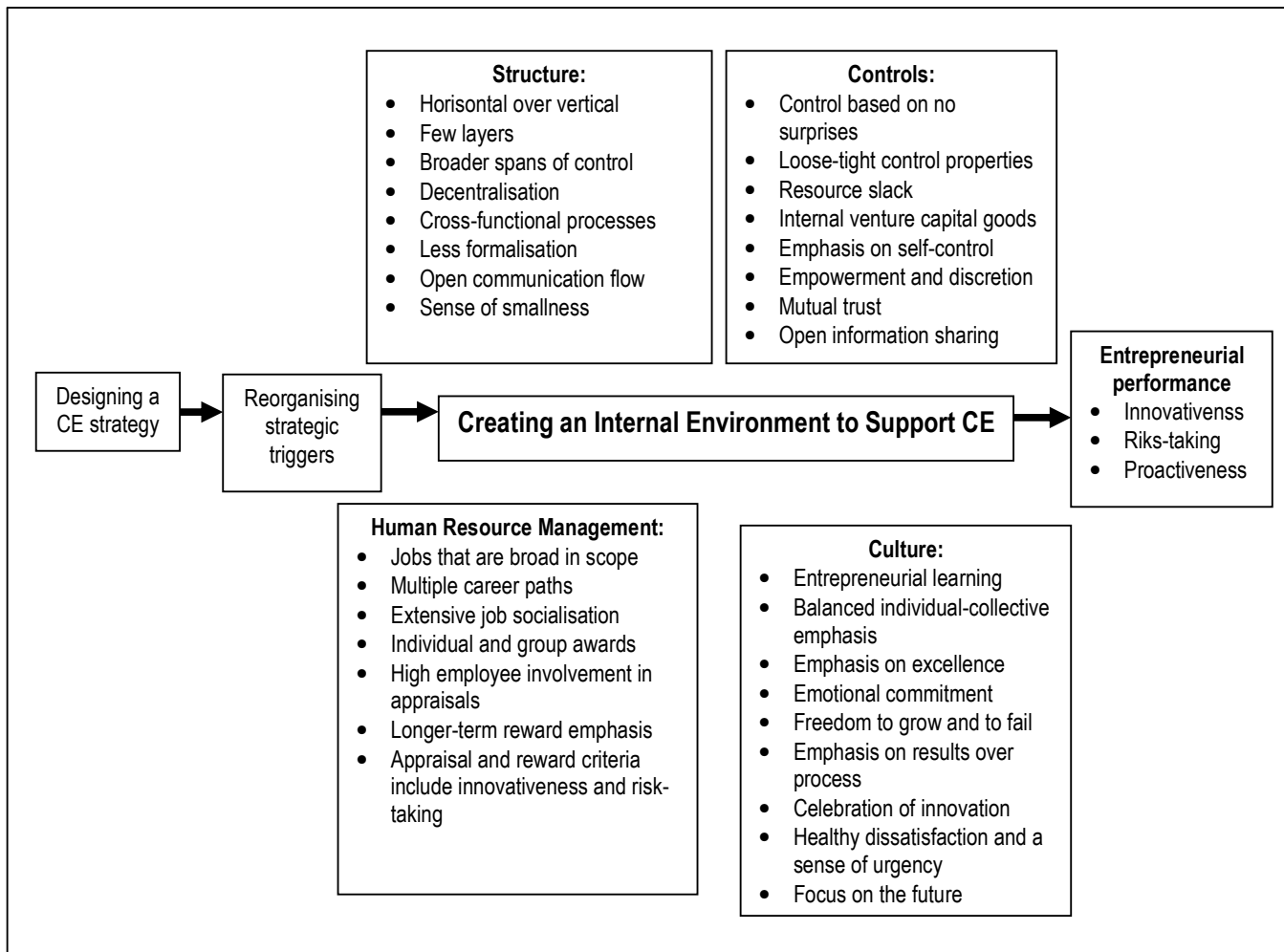
Research has identified various methods, techniques, principles and practices to foster, develop and implement corporate entrepreneurship in businesses. In this section of the literature review the main aspects of this past research will be reviewed. This research will be presented firstly by the framework developed by Ireland, *et al.* (2006a:13) on how to create sustainable corporate entrepreneurship and secondly by the corporate entrepreneurship framework developed by Echols and Neck (1998:39). Lastly the five organisational antecedents (originally identified by Kuratko, *et al.*, 1990) that can promote or impede corporate entrepreneurial activities will be discussed. Supportive research will be included in these two sections.

3.7.1 Framework for sustainable corporate entrepreneurship

The framework for sustainable corporate entrepreneurship as developed by Ireland, *et al.* (2006a:13) focuses on how to create sustainable corporate entrepreneurship where attention is given to the characteristics of an internal work environment that supports corporate entrepreneurship. These characteristics are structure, controls, human resource management systems and culture and are illustrated in figure 3.11. Other researchers that support some of the elements of this framework will also be incorporated in this discussion.

This framework indicates that corporate entrepreneurship flourishes when a business's structure has a relatively small number of layers (Ireland *et al.*, 2006a:13). A restricted number of layers results in a broader span of control which in turn creates opportunities for employees to act entrepreneurially. With fewer managerial layers, authority and responsibility are decentralised, and horizontal or lateral interactions among employees are encouraged. These structural characteristics facilitate the surfacing of ideas and innovations at lower organisational levels and foster unique and creative managerial styles. An entrepreneurially friendly organisational structure does not have highly structured job roles and is receptive to continuous changes in the nature of employees' work. The need to change job roles commonly results as employees become successful with efforts to innovate.

FIGURE 3.11 Framework for sustainable corporate entrepreneurship



Source: Ireland, *et al.* (2006a:14)

Organisational controls create value when they simultaneously provide the stability that businesses need in order to exploit current competitive advantages, together with the flexibility required for employees to act entrepreneurially. When encountering dysfunctional controls, corporate entrepreneurs try to work around them. Ireland *et al.* (2006a:15) indicate that experience shows positive controls are linked to performance measures, allow significant discretion, and are focused on generating and sharing knowledge that allows employees (including managers) to identify problems before they surface. Controls promote and nurture entrepreneurial behaviour when they are able to balance loose and tight properties. In addition, strategic controls (which are concerned primarily with verifying that the business is doing the right thing) are emphasised over financial controls (which are concerned primarily with verifying that the business is doing

things right). Emphasising strategic controls encourages employees to accept risk that is associated with effective entrepreneurial behaviour.

Ireland, *et al.* (2006a:15) state that with corporate entrepreneurship the goals of an **effective human resource management system** are formulated for employees to learn how to: embrace creative and innovative behaviour; and take reasonable levels of risk; also to use a long-term orientation to evaluate innovation-based possibilities; focus on results; work cooperatively with others; tolerate ambiguity; and assume responsibility for change.

A business's human resource management system is a valuable tool to encourage and reinforce entrepreneurial behaviour. Successful corporate entrepreneurship is promoted by entrepreneurially-friendly processes related to recruiting, selecting, training, developing and rewarding.

Ireland *et al.* (2006a:15) state that training should be continuous; less structured or standardised and focused on individualised knowledge requirements. In the corporate entrepreneurial training programs, employees should be exposed to opportunities where they can develop tolerance for risk, embrace change as a source of individual and organisational growth, and learn the realities of organisational politics. Learning the realities of organisational politics will allow employees to obtain sponsors for their innovation-based projects.

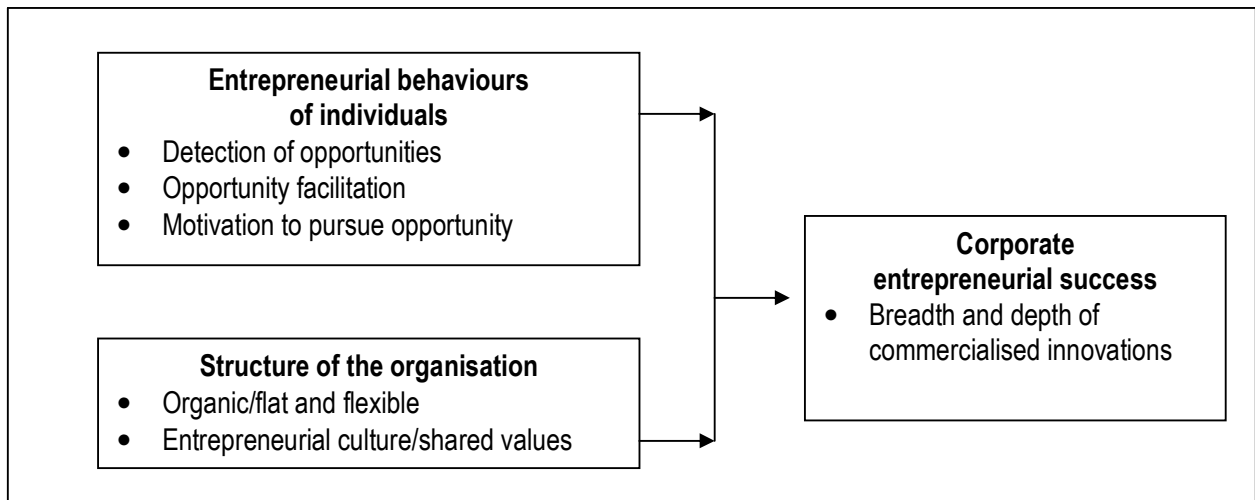
According to Ireland *et al.* (2006a:16) most **organisational cultures** are felt or experienced rather than described in words. In a business with a high degree of entrepreneurial orientation, great value is placed on viewing change, and the uncertainty it often creates, as the foundation for opportunities to innovate and improve a business's performance. In an entrepreneurial culture, the focus is on the future rather than the past, and the ability to develop and transfer knowledge is greatly valued. In an entrepreneurially-intense culture high importance is placed on the empowerment of people to allow them to act creatively and to fulfil their potential. Authority and responsibility are decentralised to employees who are closest to the action so that they can make decisions that are in the businesses best interests. Associated with authority and responsibility are

expectations that employees will strive for excellence in all that they do. Employees will also be willing to be held accountable for the outcomes of their efforts.

3.7.2 Corporate entrepreneurship framework

Echols and Neck (1998) developed a framework to support the development of corporate entrepreneurship in a business. Being able to detect and facilitate opportunities, as well as having the motivation to pursue the opportunities, establishes an entrepreneurial climate for innovative success. This framework is illustrated in figure 3:12 and indicates that behaviours of employees and the structure of a business are primary ingredients necessary for corporate entrepreneurial success. Entrepreneurial success is defined in terms of innovative capacity that enables a business to renew itself and hence survive longer.

FIGURE 3:12 Corporate entrepreneurship framework



Source: Echols and Neck (1998:41)

Echols and Neck (1998:42) state that the key to making an organisational structure entrepreneurial involves several factors, especially fostering the right climate or culture. An entrepreneurial climate that promotes the detection and facilitation of opportunities as well as fostering motivation to pursue opportunities provides an ideology to which employees can commit while facilitating the emergence of social capital. This also requires having an organisational philosophy oriented to individual roles, relationships and frontline initiatives. Relationships focusing on the importance of reputation, trust

reciprocity and mutual interdependence produce supportive entrepreneurial structures. Bartlett and Goshal (1996) in Echols and Neck (1998:42) state that entrepreneurial structures have disaggregated performance units with clear communication of employees' roles and responsibilities; are supportive; have performance-driven systems with an unusually high level of discipline; and have a clear mission and standards.

Drucker (1985) in Echols and Neck (1998:43) advises that entrepreneurial structures should be new and separately organised from the old and existing ways of a business, with a specific locus for new projects stemming from executive authority, prestige and accountability. Drucker (1985) also specified that corporate entrepreneurship can successfully be fostered by setting up new ventures separately, so that each unit can carry different policies, rules and measurements that best fit its objectives and spirit. Smith (1986) in Echols and Neck (1998:43) suggests the elimination of unnecessary levels of management and encourages teamwork and participative management styles to nurture entrepreneurship.

Levine (1991) in Echols and Neck (1998:43) indicates lessons learned from a traditional local government that built an organisational structure to foster and support entrepreneurial activity. These lessons include having demonstrated a consistent support from the Chief Executive Officer who: communicates a vision; enhances flexibility in improvements to the program but shows inflexibility to values. The CEO also provides the necessary resources to implement productivity improvements; establishes employee involvement groups/teams; and flattens the business to only a few levels to change the patterns of communication and work.

Climate and structure symbolically reinforce each other, and need each other to make possible the breadth and depth of commercialised innovations necessary to survive environmental turbulence.

Echols and Neck (1998:44) summarise the research conducted by indicating that managers should construct corporate hierarchies to be as flat as possible, and develop an entrepreneurial culture. Together these two changes should emphasise the detection of opportunities, with facilitation and motivation to pursue opportunity. Then make sure the structure, that supports entrepreneurial behaviour, fosters the following:

- front-line initiatives with clear communications;
- the creation of new organisational forms that are either separate from or subsets of other forms;
- a reduction of authoritarianism by giving up control to experts instead of basing it on seniority;
- performance-driven systems with a focus on support, facilitation and coaching;
- systematic and disciplined innovation in pursuit of a distinct mission;
- high standards (inflexibility) in terms of acceptable values;
- high energy toward creatively shaping the business while taking calculated risks;
- explicit assignments of authority;
- challenges to stretch people's skills and ways of thinking;
- measurements designed to enable assessment of different indicators of performance;
- flexibility whereby bureaucracy is minimised and ad-hoc approach is maximised;
- an emphasis on the importance of reputation, trust and mutual interdependence;
- teamwork and participative management styles; and
- celebration for the process more so than the end result.

3.7.3 Organisational antecedents

Various organisational antecedents exist that can promote or impede corporate entrepreneurial activities. Kuratko, *et al.* (2004: 82) summarise the main five organisational antecedents and all the researchers that have contributed towards identifying these antecedents in table 3.2. Kuratko, *et al.*, (1990) established top management support, autonomy/work discretion, rewards/reinforcement, resources/time availability and organisational boundaries as the underlying environmental factors required for individuals to behave entrepreneurially. Kuratko, *et al.*'s (2004:82) results were reinforced by the findings of a study of 119 chief executive officers of US-based corporations. When a business initiates corporate entrepreneurial strategy, then organisational antecedents must be present in the form of top management support, autonomy/work discretion, rewards/reinforcement, resources/time availability and organisational boundaries in order to influence an individual's decision to behave entrepreneurially. The greater the degree to which the individual perceives the existence

of reward, management support, flexible organisational boundaries, resources and autonomy, the higher the probability of the individual's decision to behave entrepreneurially.

TABLE 3.2 Organisational antecedents

Factor	Research citations
Rewards/ reinforce- ment	Scanlan, 1981; Souder, 1981; Kanter, 1985; Sathe, 1985; Block and Ornati, 1987; Fray, 1987; Sykes, 1982; Barringer and Milkovich, 1998; Covin and Miles, 1999; Kuratko, Ireland and Hornsby, 2001; Chen, Zhu and Anquan (2005)
Top manage- ment support	Souder, 1981; Quinn, 1985; Hisrich and Peters, 1986; MacMillan, Block and Narasimha, 1986; Sykes, 1989; Sathe, 1989; Sykes and Block, 1989; Stevenson and Jarillo, 1990; Damanpour, 1991; Kuratko, Hornsby, Naffziger and Montagno, 1993; Pearce, Kramer and Robbins, 1997; Lyon, Lumpkin and Dess, 2000; Antoncic and Hisrich, 2001; Kuratko, Ireland and Hornsby, 2001; Morris and Kuratko, 2002; Antoncic and Zorn, 2004; Chen, Zhu and Anquan (2005)
Resources/ time availability	Von Hippel, 1977; Souder, 1981; Kanter, 1985; Sathe, 1985; Burgelman and Sayles, 1986; Hisrich and Peters, 1986; Sykes, 1986; Katz and Gartner, 1988; Sykes and Block, 1989; Damanpour, 1991; Stopford and Baden-Fuller, 1994; Das and Teng, 1997; and Slevin and Covin, 1997.
Organisa- tional boundaries	Souder, 1981; Burgelman, 1983; Sathe, 1985; Burgelman and Sayles, 1986; Hisrich and Peters, 1986; Schuler, 1986; Sykes, 1986; Bird, 1988; Sykes and Block, 1989; Guth and Ginsberg, 1990; Covin and Slevin, 1991; Damanpour, 1991; Zahra, 1991, 1993, 1995; Brazeal, 1993; Hornsby, Naffziger, Kuratko and Montagne, 1993; Hornsby, Kuratko and Montagno, 1999; Antoncic and Hisrich, 2001; and Hornsby, Kuratko and Zahra, 2002.
Work discretion (autonomy)	Burgelman, 1983, 1984; Kanter, 1985; Quinn, 1985; Sathe, 1985; MacMillan, Block and Narasimha, 1986; Sykes, 1986; Bird, 1988; Ellis and Taylor, 1988; Sathe, 1989; Sykes and Block, 1989; Stopford and Baden-Fuller, 1994; Hornsby, Kuratko and Montagno, 1999; Zahra, Kuratko and Jennings, 1999; Morris and Kuratko, 2002; and Hornsby, Kuratko and Zahra, 2002.

Source: Adapted from Kuratko, *et al.* (2004:82)

Morris, *et al.* (2008:330) summarise the five organisational antecedents as follows:

- Managerial support refers to the willingness of top-level managers to facilitate and promote entrepreneurial behaviour, including the championing of innovative ideas and providing the resources people require for taking entrepreneurial actions.
- Work discretion/autonomy refers to top-level managers' commitment to tolerate failure, provide decision-making latitude and freedom from excessive oversight, and to delegate authority and responsibility to managers.
- Rewards/reinforcement refers to developing and using systems that reinforce entrepreneurial behaviour, highlight significant achievements and encourage pursuit of challenging work.
- Time availability refers to evaluating workloads to ensure that individuals and groups have the time needed to pursue innovations, and that their jobs are structured in ways that support efforts to achieve short- and long-term organisational goals.
- Organisational boundaries refer to precise explanations of outcomes expected from organisational work, and development of mechanisms for evaluating, selecting and using innovations.

Supporting these organisational antecedents, the literature review on how to foster, develop and implement corporate entrepreneurship also emphasises the following viewpoints and research of other researchers.

Antoncic and Zorn (2004:7) state that particular support, in terms of training and trusting individuals in the business to detect opportunities and in terms of resource availability, has been proposed to ensure a positive influence on organisational activities and behaviour.

As a way for businesses to develop key environmental factors for corporate entrepreneurial activity, Kuratko and Hodgetts (2004:63) indicate that a corporate

entrepreneurship training programme will induce the change needed in the work atmosphere.

Hisrich, *et al.* (2005:51) and Hisrich (1990:12) make the following suggestions to implement and establish a corporate entrepreneurial environment in a business. Top management commitment is necessary to establish corporate entrepreneurship in the business. Once top management has committed itself to the concept, it should be introduced throughout the business through seminars in which the aspects of corporate entrepreneurship are presented and strategies are developed to transform the organisational culture into a corporate entrepreneurial one. After the initial framework has been established and the concept embraced, corporate entrepreneurial leaders need to be identified, selected and trained. The training should focus on obtaining resources within the business, identifying viable opportunities and their markets, and developing an appropriate business plan. Along with the corporate entrepreneurial training, a mentor-sponsor system should be established. After the initial commitment and training, a group of managers interested in the programme should train and share their experiences with other members. Informational items about intrapreneurship in general and the specifics of the businesses activities should be disseminated through the businesses newsletter or some other vehicle. Hisrich, Peters and Shepherd (2005:52) point out that it is essential for concrete activities to occur within a specific period to develop ideas into marketable products and services, the basis of the new business venture units. The corporate entrepreneurial team will need to develop a business plan, obtain customer reaction and some initial intentions to buy into, and learn how to coexist within, the organisational structure during this process. Rewards need to be tied to the performance of the intrapreneurial unit. Lastly, an evaluation system that allows successful intrapreneurial units to expand and unsuccessful ones to be eliminated needs to be established. Through these efforts and by developing corporate entrepreneurial leaders and effectively managing creativity and leadership in a business, a corporate culture can slowly be changed to a corporate entrepreneurial one. In this way, a new entrepreneurial culture and self-actualisation can occur when people create something new of value and are not worried about watching their backs and minding the store.

Toftaoy and Chatterjee (2005:15) state that corporate entrepreneurship training programmes, within the business, will separate businesses from their competitors. The

corporate entrepreneurship training programme is a way of launching corporate entrepreneurial teams, via corporate entrepreneurial workshops or seminars.

Marcus and Zimmerer (2003:11) investigated the corporate performance of Fortune 500 businesses. The investigation focused on corporate entrepreneurial training programmes in Fortune 500 businesses and utilised a self-reporting technique in order to determine the presence of such programmes in the business. All the respondents indicated that the impact of corporate entrepreneurial training programmes was positive.

Chen, Zhu and Anquan (2005:538) did research on the cultivation (fostering) of corporate entrepreneurship in China. From this study it is found that cultivation of corporate entrepreneurship is considerably influenced by the senior executive's ownership of the stock in their corporation, outside director's stock ownership and the separating of the chief executive officer from the director's board. Chen, Zhu and Anquan (2005:539) also indicate that entrepreneurial abilities of the senior executives should be cultivated, which include the capacity to endure uncertain circumstances, the ability to seize opportunities and the ability to learn from failures. Top management's entrepreneurial abilities, which include the abilities of enduring uncertainties, seizing opportunities, and tolerating and learning from failures, have a positive influence on corporate entrepreneurship. Without the top management's entrepreneurial abilities, it is difficult to cultivate corporate entrepreneurship. This research also testified that the following items are related to the development of corporate entrepreneurship: staff participation, the flexibility of strategy formulating in accordance with the circumstances, strategic financial control, the enterprising strategy, the flattened organisation structure, the special department of innovation and venture, and an innovation-oriented corporate culture. A corporation's performance is improved by innovations in product, process and technique in both domestic and international ventures. Chen, Zhu and Anquan (2005:540 - 541) propose the following to cultivate corporate entrepreneurship to enhance corporate performance:

- separating the chief executive officer from the board;
- rewarding senior executives with stock right;
- attracting outside directors by rewarding them with stock ownership;
- developing capacity to endure uncertain circumstances;

- developing the ability to seize opportunities;
- developing the ability to learn from failures;
- developing senior executives' entrepreneurial personality in terms of self-efficacy and independence;
- improving the staff participation in strategic formulating;
- formulating strategy flexibly according to the circumstances;
- emphasis on strategic financial control;
- enterprising strategy;
- flattening the organisation structure;
- setting up the special department for innovation and venturing; and
- an innovation-oriented culture.

Pinchot (1985) indicates the following methods that have been used by businesses to foster corporate entrepreneurship:

- users of internal services are allowed to make their own choice of which internal vendor they wish to use;
- entrepreneurial employees are granted something similar to ownership rights in the internal enterprises they create;
- business-wide involvement is encouraged by insisting on truth and honesty in marketing and marketplace feedback;
- corporate entrepreneurial teams are treated as a profit centre rather than a cost centre;
- team members are allowed a variety of options in jobs, innovation efforts, alliances and exchanges;
- employees are encouraged to develop through training programmes;
- internal enterprises have official standing in the business;
- a system of contractual agreements between internal enterprises is defined and supported by the business; and
- a system for settling disputes between internal enterprises and between employees and enterprises is part of the corporate entrepreneurial plan.

Pinchot (2001:19-20) also recommends the following system to instil corporate entrepreneurship in a business:

- corporate entrepreneurs should be expected to assume some potential risks – for example the individual and the business enters into a risk contract in which each understands the risks assumed by all parties;
- all parties should understand how success will be measured and how profits and costs will be defined. This includes any and all aspects of transfer pricing and allocation of overhead;
- the method of allocating profits from ventures should be understood and accepted;
- contingencies should be anticipated in advance; and
- provisions should be made for the departure of the corporate entrepreneur from the business, removal of the corporate entrepreneur from the business, the removal of the corporate entrepreneur from the team, and the reintegration of the entrepreneurial units into existing business units when and if such action becomes necessary.

Pinchot (2001:20) emphasises that the business and the corporate entrepreneur must look at the contract more as a moral than a legal commitment. Corporate entrepreneurship is founded on confidence and trust.

According to Quinn in Kuratko and Hodgetts (2007:56), an expert in the innovation field found the following factors in large corporations that are successful innovators:

- atmosphere and vision - innovative businesses have a clear-cut vision of and the recognised support for an innovative atmosphere;
- orientation to the market - innovative businesses tie their visions to the realities of the marketplace;
- small, flat businesses - most innovative companies keep the total business flat and project teams small;
- multiple approaches - innovative managers encourage several projects to proceed in parallel development;

- interactive learning - within an innovative environment, learning and investigation of ideas cut across traditional functional lines in the business; and
- skunk works - every highly innovative business uses groups that function outside traditional lines of authority. Skunk works eliminates bureaucracy, permits rapid turnaround and instils a high level of group identity and loyalty.

Hisrich, *et al.* (2005:48) identified several factors for a good corporate entrepreneurial environment: a business that operates on the frontiers of technology; encourages new ideas; encourages trial and error; allows failures; has no opportunity parameters; makes resources available and accessible; has a multidiscipline teamwork approach; long time horizon; volunteer program; appropriate reward system; has sponsors and champions available; and support of top management. This is also in agreement with the antecedents identified by Kuratko, *et al.* (2004:82).

Rule and Irwin (1988:46) identified thirty three ways to encourage corporate entrepreneurship in a business. These aspects are summarised in table 3.3.

TABLE 3.3 Thirty three ways to encourage corporate entrepreneurship

- | |
|---|
| <ul style="list-style-type: none"> • in-house market research • in-house research and development • competitor tracking and assessment • market research using consultants • collaborative ventures with others • monitoring trade shows • new product screening systems • customer focus groups • suggestion box systems • objective setting and performance standards for innovation • innovation teams/task forces • dedicated new venture group • recruiting new staff to bring in innovative ideas • scenario planning • licensing-in of new technology • monitoring federal R and D activities • staff rotation program • liaison with university labs • strategic planning focused on innovation • technology forecasting • publication of innovations in company house organ • contracting for external R & D |
|---|

- training in creative thinking
- acquisition of entrepreneurial company
- creativity/innovation workshops
- bonus system linked to innovation
- accessing external venture capital
- training in entrepreneurship
- senior management innovation screening committee
- internal venture capital fund
- sabbatical programmes
- in-house innovation fairs
- external inventor relations programmes

Source: Rule and Irwin (1998:46)

Ramachandran, Devarajan and Ray (2006:91) concur that it is important for businesses to focus their energies on encouraging people who have displayed entrepreneurial qualities in corporate or other contexts to lead initiatives rather than trying to test the level of entrepreneurship in people using psychometric tests. The quality of leadership represented by the top management plays a very critical role in driving innovation in businesses and in mastering its dynamics.

A business that intends to create a corporate entrepreneurship enabling ecosystem will not only adopt an entrepreneurial strategy but also create an entrepreneurial business that considers innovation as an accepted and appropriate response to organisational problems. It will also develop appropriate practices to manage the process of creation and dissemination of knowledge generated through innovation efforts and operate effectively as a team in order to fulfil its role of recognising the value and opportunities presented by specialised knowledge. A top management team that adopts an entrepreneurial strategy and creates a milieu in the business such that this strategy can be executed displays entrepreneurial leadership. The role of the top management team in businesses that pursue an entrepreneurial strategy is to build a business setting that stimulates exchange of information between individuals and develops a culture that encourages innovation (Ramachandran, Devarajan and Ray; 2006:91).

Ramachandran, Devarajan and Ray (2006:91-92) propose the following principles that a business can follow to develop and sustain entrepreneurship:

- selective rotation of talented managers to expose them to different business territories that can stimulate perception of new opportunities;
- resource allocation at various stages;
- clear communication by the leadership about its long-term, sustained commitment to entrepreneurship; and
- learning from experiments and betting on people capabilities because not all ideas will be winners.

Morris, *et al.* (2009:18) states that there is not one specific or correct way in which to implement corporate entrepreneurship. The need is for a multifaceted and comprehensive approach that reflects the kinds of innovation the business seeks at different levels of the business. It requires a sustained commitment to an entrepreneurial future on the part of senior management. This commitment must be coupled with ongoing attempts to craft the work environment properly around a harmonious blend of the elements of strategy, structure, culture, resource control, rewards and skills so as to produce an ethic of entrepreneurship throughout the business. The crafting of a work environment is always a work in progress.

This section of the literature review addressed various methods, techniques, frameworks, principles and practices to foster, develop and implement corporate entrepreneurship in a business. Most of the research can be classified under the five organisational antecedents that need to be in place in a business. The most appropriate way to start the whole process is by means of a strategy and continuous corporate entrepreneurial training. In the next section of this chapter (paragraph 3.8), attention will be given to corporate entrepreneurship as a strategy. The whole aspect of corporate entrepreneurial training programmes will be addressed in chapter 4. The information gathered and reported in this chapter will be beneficial when it comes to the findings and conclusions of this study.

3.8 CORPORATE ENTREPRENEURSHIP AS A STRATEGY

Ireland, Kuratko and Covin (2003:1) define corporate entrepreneurship strategy as a set of commitments and actions framed around entrepreneurial behaviour and processes that

the business designs and uses to develop current and future competitive advantages in promising technological or product-market arenas. The choice of using a corporate entrepreneurship strategy as a primary means of strategic adaptation reflects the businesses decision to seek competitive advantage principally through innovation and entrepreneurial behaviour on a sustained basis. Corporate entrepreneurship strategy is a fundamental orientation toward the pursuit of opportunity and growth that exists when it is embraced throughout the business and defines the essence of the businesses functioning.

Morris, *et al.* (2008:194) define an entrepreneurial strategy as a vision-directed, business-wide reliance on entrepreneurial behaviour that purposefully and continuously rejuvenates the business and shapes the scope of its operations through the recognition and exploitation of entrepreneurial opportunity.

According to Ireland, Kuratko and Covin (2003:1) the corporate entrepreneurship strategy is not to be found at one level or place within the business. Rather, it is reflected across the business and ingrained as part of its core being, and holds across time.

Kuratko, *et al.* (2004:80) state that the formulation and implementation of a strategy aimed at achieving the businesses goals are the responsibilities of the businesses executive management, as is the evaluation of the firm's progress towards its strategic objectives. Kuratko, *et al.* (2004:80) note that research has shown a number of strategic options that are available to the business, including *diversification* (Palepu, 1985; Davis and Duhaime, 1993; Markides, 1995; Hitt, Hoskisson and Kim, 1997), *acquisition* (Hitt, Hoskisson and Ireland, 1990 and 1994), *rightsizing* (Hitt, Keats, Harback and Nixon, 1994), *turnaround* (Robbins and Pearce, 1991) and *innovation* (Dougherty and Hardy, 1996; Lawless and Anderson, 1996; Klein and Sorra, 1996).

According to Hitt, Ireland, Camp and Sexton (2001:480), strategic entrepreneurship is entrepreneurial action with a strategic perspective. Strategic entrepreneurship is the integration of entrepreneurial (e.g. opportunity seeking) behaviour and strategic (e.g. advantage seeking) perspectives in developing and taking actions designed to create wealth.

Ireland, Hitt, Camp and Sexton (2001:510) note that effective integration of entrepreneurial actions and strategic management actions facilitates a business's wealth-creating efforts. Independently, the actions involved with entrepreneurship and strategic management processes contribute to the businesses growth and success. When integrated these actions create synergy that enhances the value of its outcomes.

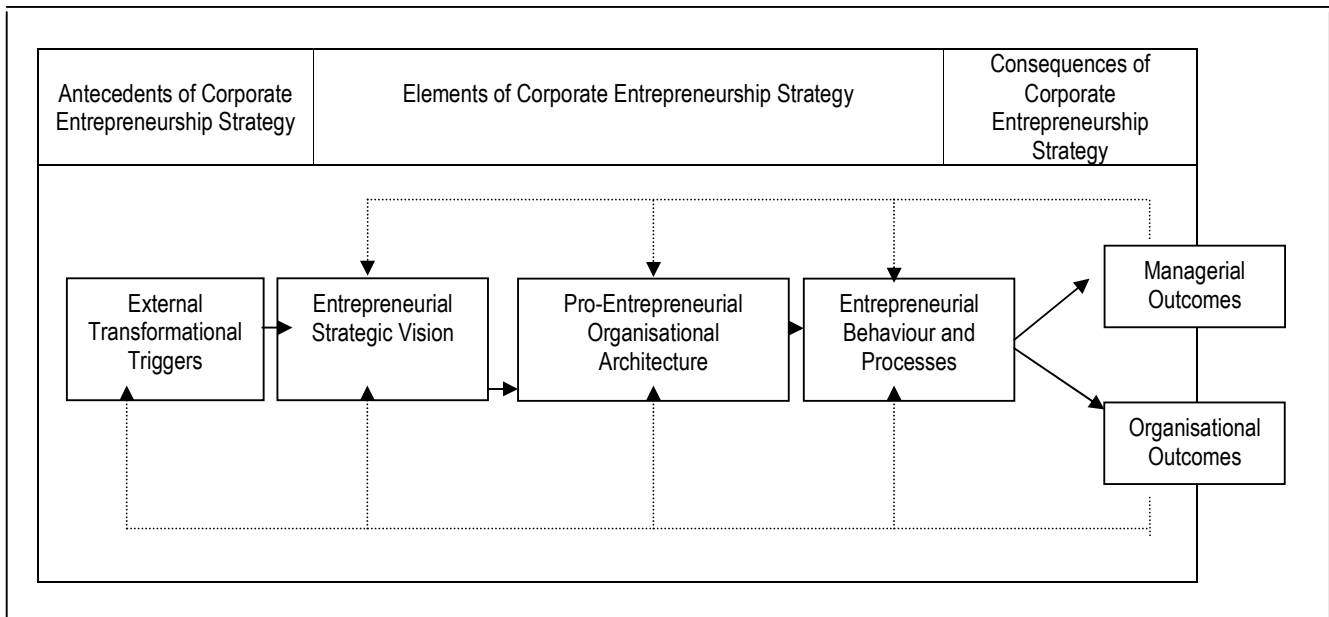
In this section a model of corporate entrepreneurship strategy will be discussed, followed by critical aspects related to corporate entrepreneurship strategy.

3.8.1 A model of corporate entrepreneurship strategy

Ireland, Kuratko and Covin (2003) developed a model illustrating how a corporate entrepreneurship strategy is manifested through the presence of three elements. This model is illustrated in figure 3.13.

According to Ireland, *et al.* (2003:1), top-level managers purposefully shape the strategic context of entrepreneurial initiatives and oversee, nurture and support attempts to use entrepreneurial behaviour as the foundation for product, process, and administrative innovations. Middle- and first-level managers are responsible for executing induced entrepreneurial initiatives and instigating autonomous entrepreneurial initiatives. Ireland, *et al.* (2003:2) proposes in the model that manager's at all organisational levels operate as innovators and as part of the overall entrepreneurial process.

FIGURE 3:13 A model of corporate entrepreneurship strategy



Source: Ireland, *et al.* (2003:6)

In this model the corporate entrepreneurial strategy is a logical response to the presence of four often-related environmental triggers: intense competition, rapid technological change, short product life cycles and evolving product-market domains. In response to one or more triggers, entrepreneurial businesses manifest corporate entrepreneurship strategies through three elements (Ireland, *et al.* (2003:2-3):

- An entrepreneurial strategic vision. An entrepreneurial strategic vision represents a commitment to innovation and entrepreneurial behaviour that is expressed in general terms. Entrepreneurial strategic vision is more a reflection of an entrepreneurial mindset – a way of thinking about business that captures the benefits of uncertainty, – than a precursor to particular commitments. Top-level managers also work to create organisational architectures in which entrepreneurial initiatives flourish without their direct involvement.
- Pro-entrepreneurship organisational architecture. This refers to the certain attributes (relating for example to structure, systems, culture and resources) that individually and collectively encourage entrepreneurial behaviour. Corporate entrepreneurship strategies are insignificant without pro-entrepreneurship organisational architectures. This is because the organisationally pervasive entrepreneurial behaviour that defines

corporate entrepreneurship strategies cannot occur unless the internal environment first elicits and then supports and nurtures it.

- Entrepreneurial behaviour and processes is any newly fashioned set of actions through which businesses seek to exploit entrepreneurial opportunities rivals have not noticed or exploited. With novelty (new resources, new customers, new markets, or a new combination of resources, customers and markets) as its defining characteristic, entrepreneurial behaviour is both a business- and an individual-level phenomenon that is framed around three key components: innovativeness, risk-taking and proactiveness.
- Entrepreneurial outcomes (Ireland, *et al.*, 2003:3) on the individual and organisational levels result from using entrepreneurial behaviour as the foundation for implementing a corporate entrepreneurship strategy. Individual managers and businesses evaluate the outcomes that have been achieved and the subsequent consequences relative to acquired costs and opportunity costs. Resulting from these evaluations are decisions regarding the status of personal entrepreneurial behaviour and the status of the corporate entrepreneurship strategy. For individual managers, the principal consequences to be evaluated concern the degree to which the business recognised and rewarded their entrepreneurial behaviour. For the business, consequences primarily concern the degree to which using a corporate entrepreneurship strategy resulted in acceptable (or better) current performance and portends the possibility of acceptable (or better) future performance.
- Managerial outcomes and consequences. The existence of an entrepreneurial strategic vision promotes awareness throughout the business of the general direction in which entrepreneurial initiatives and their associated architecture further encourages and nurtures entrepreneurial behaviour, providing a supportive context for the realisation of the vision. Without awareness, encouragement, and nurturing, entrepreneurial behaviour and its associated processes that are the final element of corporate entrepreneurship strategy will not surface or be used consistently in the business.

The managerial outcomes of individual-level entrepreneurial behaviour include things accruing to managers as a result of engaging in entrepreneurial behaviour. Three principal types of managerial outcomes associated with entrepreneurial behaviour are individual knowledge and skill development and contributions made to implementation of the corporate entrepreneurship strategy.

- Organisational outcomes and consequences. The organisational outcomes of corporate entrepreneurship strategy according to Ireland *et al.* (2003:4) include things that accrue to businesses as a direct result of implementing a corporate entrepreneurship strategy. There are two principle types of organisational outcomes associated with the implementation of the corporate entrepreneurship strategy – the organisational learning and competence development; and strategic repositioning and domain alteration. Just as individual managers can acquire knowledge and skills through their entrepreneurial behaviours, businesses can learn and develop competencies through implementing the corporate entrepreneurship strategy. The growth of internal ventures, for example, could result in the acquisition of knowledge about new markets or the emergence of new core competencies. Regarding strategic repositioning and domain alteration, the act of implementing the corporate entrepreneurship strategy could place the business in a new position within its pre-existing product-market domain(s); alter the attributes of that domain(s); and/or position the business within a new product-market domain(s).

According to Ireland, *et al.* (2003:4) the outcomes of corporate entrepreneurship strategies have consequences for businesses as well as for the future of corporate entrepreneurship strategies. For example, what the business has learned, created or otherwise achieved by implementing a corporate entrepreneurship strategy affects measures of business performance. The evaluation of performance can be based on financial criteria (e.g. sales growth rate), market criteria (e.g. stock price), innovation output criteria (e.g. new products introduced) and behavioural criteria (e.g. number of entrepreneurial opportunities identified). In turn, performance consequences affect the prospects for and focus of future corporate entrepreneurship strategies.

The model suggests that individual entrepreneurial cognitions and external environmental conditions are the initial impetus for adopting a corporate entrepreneurship strategy, and

outcomes are assessed to provide justification for the strategy's continuance, modification, or rejection.

Kuratko and Hodgetts (2007:63) state that for corporate entrepreneurship to operate as a strategy, it must run deep within the business. Top managers must drive the process. But, while top management can instigate the strategy, top management cannot dictate it. Those at the middle and lower ranks in the business have a tremendous effect on, and significant roles within, the entrepreneurial and strategic process. Without sustained and strong commitment from the lower levels of the business, entrepreneurial behaviour will never be a defining characteristic of the business, as is required by a corporate entrepreneurship strategy.

3.8.2 Critical aspects related to corporate entrepreneurship strategy

In developing a corporate entrepreneurial strategy, Kuratko and Hodgetts (2007:63-72) recommend the inclusion of the following aspects:

- Developing the vision. The vision must be clearly articulated by the businesses leaders, but the specific objectives are developed by the managers and employees of the business. Shared vision is critical for a strategy that seeks high achievement.
- Encouraging innovation. Businesses must understand and develop innovation as the key element in their strategy. Radical and incremental innovation requires an effort by top management to develop and educate employees concerning innovation and corporate entrepreneurship, a concept known as top management support. Encouraging innovation requires a willingness not only to tolerate failure but also to learn from it.
- Structuring for a corporate entrepreneurial climate. To develop employees as a source of innovations for corporations, companies need to provide more nurturing and information-sharing activities. An environment needs to be developed that will help innovative-minded people reach their full potential. Employee perception of an innovative environment is critical for stressing the importance of management's

commitment not only to the businesses people but also to the innovative projects. For businesses to promote innovation among their employees, they must give careful attention to the melding of individuals' attitudes, values, and behavioural orientations with the organisational factors of structure and reward.

- Developing individual managers for corporate entrepreneurship. As a way for businesses to develop key environmental factors for entrepreneurial activity, a corporate entrepreneurship training programme often induces the change needed in the work atmosphere.
- Developing venture teams: venture teams are referred to as a new strategy for many businesses. It is referred to as self-directing, self-managing or high-performing. A venture team is composed of two or more people who formally create and share the ownership of a new business. The team has a budget plus a leader (sometimes called the product champion or the corporate entrepreneur) who has the freedom to make decisions within broad guidelines. The unit is sometimes separated from other parts of the business – in particular, from parts involved with daily activities.

Ramachandran, Devarajan and Ray (2006:85) state that for a strategy to succeed, businesses should develop an enabling economic and political ecosystem that does not impede small or large scale deployment of resources in new ways towards creative entrepreneurial ends. Businesses have a range of options to choose from to achieve this objective. At the one end of this option spectrum is “focused entrepreneurship”, wherein specific innovation initiatives are created with the rest of the business insulated from them. At the other end is a managerial approach that leads to the creation of “business wide entrepreneurship”. Entrepreneurship in such businesses is a shared value and drives managerial behaviour in conscious and subconscious ways and creates an entrepreneurial spirit organisation-wide. The contrast between patterns of focused and organisation-wide entrepreneurship runs across every element of the business, starting with its mission and covering strategy, structure, systems, processes, and people skills and attitude. Institutionalising the elements of entrepreneurship is crucial to building a sustaining competitive business in today's business environment.

In the research conducted by Dess, Lumpkin and McKee (1999:103) on the linking of corporate entrepreneurship strategy, structure and process, the findings stated that the effectiveness and efficiency of different entrepreneurial strategies, structures and processes is best addressed through longitudinal studies rather than cross-sectional studies. Detailed field work is needed to help ensure that researchers avoid making overly simplistic assumptions about corporate entrepreneurial activities. Such research should entail fine-grained methodologies including extensive field research and case studies. Such approaches could help researchers examine strategic objectives and their role in entrepreneurial behaviour. Dess, *et al.* (1999:103) continue and indicate that field research would also help improve the quality of outcome measures. For example, longevity may serve as a useful performance measure for joint venturing activities in many situations.

3.9 CONCLUSION

The aim of this chapter was to give a literature overview of the major aspects concerning corporate entrepreneurship. The issues addressed were the definition and necessity of corporate entrepreneurship; corporate entrepreneurship conceptual models; entrepreneurial orientation; corporate entrepreneurship and innovation; how to foster, develop and implement corporate entrepreneurship in a business and lastly corporate entrepreneurship as a strategy.

The researchers in corporate entrepreneurship are in agreement that no single definition of corporate entrepreneurship exists. The concept of corporate entrepreneurship is used under many labels in addition to corporate entrepreneurship. Concepts like internal corporate entrepreneurship, intrapreneurship, corporate venturing, entrepreneurial management; strategic renewal and strategic entrepreneurship. A table summarising most of the views on the concepts of corporate entrepreneurship were given. For purposes of this research the broad definition of Sharma and Chrisman (1999:18) is adopted "Corporate entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing business, create a new business or instigate renewal or innovation within the business."

From the literature review it was very clearly stated why it is necessary for businesses to undertake corporate entrepreneurship. Businesses need corporate entrepreneurship to grow; integrate and develop an entrepreneurial spirit; create and sustain competitive advantage and to be adaptable, flexible, fast, aggressive and innovative. The benefits of instilling corporate entrepreneurship in a business can also be summarised. Businesses that instil corporate entrepreneurship can gain and sustain competitive advantage at all levels of the business; rejuvenate and revitalise the existing business; develop new products, services and processes; pursue entrepreneurial opportunities; create new businesses within existing businesses; foster strategic renewal of existing operations; improve growth and profitability; sustain corporate competitiveness; increase financial performance and create new value. Corporate entrepreneurship can affect the economy by increasing productivity, improving best practices, creating new industries and enhancing international competitiveness.

Ten conceptual models of corporate entrepreneurship were covered. Mostly these models were developed to address the various aspects, concepts, processes and phenomena of corporate entrepreneurship. Researchers also use these models to guide their research. As research on corporate entrepreneurship improves, researchers are improving and extending existing models of corporate entrepreneurship. The biggest criticism towards the development of models by researchers in the field of corporate entrepreneurship is that most have not been tested empirically.

The entrepreneurial orientation (consisting of risk-taking, proactiveness, innovativeness, competitive aggressiveness and autonomy) is used to determine how entrepreneurial a business is. Entrepreneurial orientation has been used very extensively by researchers in the field of corporate entrepreneurship.

Various methods, techniques, principles and practices utilised for the fostering, development and implementation of corporate entrepreneurship in a business were discussed. A framework for sustainable corporate entrepreneurship was given to guide this process. The antecedents for corporate entrepreneurship are very important for purposes of this study. These antecedents are managerial support, autonomy/work discretion, rewards/reinforcement, resource/time availability and organisational boundaries. One aspect in terms of fostering and developing corporate entrepreneurship

that is getting more and more attention is the aspect of corporate entrepreneurship training programmes. This aspect will be reviewed in chapter 4.

Lastly this chapter addresses corporate entrepreneurship as a strategy. A corporate entrepreneurship strategy is a set of commitments and actions framed around entrepreneurial behaviour and processes that the business designs and uses to develop current and future competitive advantages.

CHAPTER 4: CORPORATE ENTREPRENEURSHIP MEASURING INSTRUMENTS AND DEVELOPMENT PROGRAMMES

“As corporate attention switches from delayering and downsizing to business development and value creation for individual customers, enterprise, innovation and creativity will move centre stage. In many companies, passive and cynical employees are everywhere to be found, while motivated entrepreneurs are few and far between. Not everyone will have what it takes to become an intrapreneur. People may lack motivation, inspiration and drive. They may not be ready to think for themselves, make choices or take risks to the extent required by an enterprise culture. Hence, the need for relevant training and development”.

Coulson-Thomas (1999:260)

“Many HRD managers hail intrapreneurial training as the solution to a range of corporate woes, from leveraging competitiveness to a lack of challenging jobs. But what is it really?”

Kuratko and Montagno (1989:83)

4.1 INTRODUCTION

Anon (2001:28) states “...it is one thing to designate managerial competency training and/or entrepreneurial training as a priority, another to develop adequate training programmes to meet this priority, yet another to relate this in practice to the needs of the business, and yet another to provide the organisational circumstances to benefit from individual corporate entrepreneurial behaviour”.

This statement reflects on major challenges to be able to define and measure entrepreneurial competencies or attributes; to improve capability in training and education that can adequately make provision for the development; to develop appraisal systems which can more adequately identify such needs and the organisational contexts; and to define the circumstances under which entrepreneurial behaviour in businesses will benefit and will be supported by the business.

In chapter three development programmes were identified as one possible route to foster, implement and/or develop corporate entrepreneurship and innovation in a business. Various authors and researchers have supported this option (Toftoy and Chatterjee, 2005; Marcus and Zimmerer, 2003; Pinchot, 1985; Hisrich, *et al.*, 2005; Rule and Irwin, 1988; Kuratko, *et al.*, 1990).

This chapter will focus on various measuring instruments that are available and that have been used, with success, to measure components of corporate entrepreneurship. The biggest motivation in applying these measuring instruments is to identify areas of improvement or the fostering of entrepreneurship in a business.

The second section of this chapter will address various corporate entrepreneurial development programmes that have been captured in the academic literature. Specific attention will be given to the content and objectives of these development programmes. A report will be given on similar executive programmes that are offered worldwide. The various development or executive programmes will be compared in terms of similarities and differences. The findings of this comparison will be used as a frame of reference to develop a corporate entrepreneurship development programme for short-term insurance businesses in South Africa.

4.2 CORPORATE ENTREPRENEURSHIP MEASURING INSTRUMENTS

Six measuring instruments, found through a literature search in academic literature, that have been developed to assess aspects related to corporate entrepreneurship will briefly be explained.

4.2.1 Entrepreneurial Orientation

Miller and Friesen developed an instrument to determine a business's entrepreneurial orientation in 1982 (Zahra and Covin; 1995:51). The instrument has seven scale items which are measured on a seven point Likert scale. The scores on the items are averaged to produce an overall corporate entrepreneurship index. A high score on the index shows high involvement in corporate entrepreneurship activities and a low score shows low

involvement in corporate entrepreneurship activities. The index surpassed minimum internal consistency requirements.

4.2.2 ENTRESCALE

Khandwalla (1977) developed a popular questionnaire to measure various organisational dimensions that are applicable to corporate entrepreneurship (Goosen, De Coning and Smit; 2002a:42). The ENTRESCALE measuring instrument was refined by Miller and Friessen (1983) and, Covin and Slevin (1989). It was tested in various studies, including a study for cross-cultural reliability by Knight (1997) and Antoncic and Hisrich (2001). Knight (1997:213) summarises that the goal of the ENTRESCALE is to determine entrepreneurship at the organisational level reflecting the innovative and proactive disposition of management.

The ENTRESCALE includes the corporate entrepreneurial orientation as seen in research and development activities, leadership and proactiveness. It also explores activities such as the number of marketed new lines of products and services. It assesses not only management's orientation (external posture) towards corporate entrepreneurship, but also what management favours and how management acts, especially in terms of the external environment and the competition. It does not address adequately the internal orientation towards corporate entrepreneurship (Goosen, De Coning and Smit, 2002a:42).

The ENTRESCALE is a nine item scale that examines eight items reflecting the innovative and proactive disposition of management at a given business, according to Knight (1997:213). According to Knight (1997:214) the ENTRESCALE has been found to possess strong reliability and validity in numerous studies (e.g. Covin and Slevin, 1989; Khandwalla, 1977; Miles and Snow, 1978).

4.2.3 Corporate Entrepreneurial Assessment Instrument (CEAI)

Kuratko, *et al.*, (1990:49) developed an instrument that is useful in diagnosing the degree of the corporate entrepreneurship culture in a business. Based on an analysis of the most consistent elements in literature, a multidimensional scale consisting of five factors was hypothesised to summarise the major sub-dimensions of the concept of corporate

entrepreneurship in businesses (Kuratko, *et al.*, 1990:53). The five dimensions are management support for corporate entrepreneurship, reward and resource availability, organisational structure and boundaries, risk-taking, and time availability. Reference is also made to the origin of these five dimensions in chapter 3, table 3.2.

The CEAI was originally known as the Intrapreneurial Assessment Instrument (IAI) and initially had 28 items that were constructed around a hypothesised five factors. The IAI was developed together with a corporate entrepreneurial development programme (this development programme will be discussed in paragraph 4.3).

Each of the factors identified by Kuratko, *et al.*, (1990:53) is an aspect of the business over which management has some control. The five factors are briefly explained according to Hornsby, Kuratko and Zahra (2002:259).

- Management support: The extent to which the management structure itself encourages employees to believe that innovation is, in fact, part of the role set for all members of the business. Some of the specific conditions reflecting management support would be: quick adoption of employee ideas, recognition of people who bring ideas forward, support for small experimental projects, and seed money to get projects off the ground.
- Autonomy/work discretion: Workers have discretion to the extent that they are able to make decisions about performing their own work in the way that they believe is most effective. Businesses should allow employees to make decisions about their work process and avoid criticising employees for making mistakes when being innovative.
- Rewards/reinforcement: Rewards and reinforcement enhance the motivation of individuals to engage in innovative behaviour. Businesses must be characterised by providing rewards contingent on performance, providing challenge, increasing responsibility and making the ideas of innovative people known to others in the organisational hierarchy.
- Time availability: The fostering of new and innovative ideas requires that individuals have time to incubate these ideas. Businesses must moderate the workload of people,

avoid putting time constraints on all aspects of a person's job and allow people to work with others on long-term problem solving.

- Organisational boundaries: These are boundaries, real and imagined, that prevent people from looking at problems outside their own jobs. People must be encouraged to look at the business from a broad perspective. Businesses should avoid having standard operating procedures for all major parts of jobs and should reduce dependence on narrow job descriptions and rigid standards of performance.

The CEAI has been developed and expanded and now consists of 78 questions that need to be answered on a 5-point Likert scale (Morris, *et al.*, 2008:331).

Hornsby, *et al.* (2002:269) indicates that the CEAI has practical implications for managers. The CEAI can be used as an assessment tool for evaluating corporate development needs in entrepreneurship and innovation. Determining these training needs can set the stage for improving managers' skills and increasing their sensitivity to the challenges of building and supporting a corporate entrepreneurship programme.

Morris, *et al.* (2008:335) also states that the CEAI can be used to provide a basis for determining ways in which controllable factors within the work environment influence employee actions, together with insights regarding the relative importance of various factors in different industry, market and organisational contexts.

The CEAI has been proven to be both valid and reliable.

4.2.4 Factor based instrument to measure corporate entrepreneurship

Goosen, De Coning and Smit (2002:39) developed a factor based instrument to measure corporate entrepreneurship. The model consists of three key factors or primary building blocks, namely proactiveness, innovativeness and management. Proactiveness and innovativeness represent an outward posture and management an inward posture. The two key factors projecting outwards were taken from the well-researched work of Kwandalla (1977), Knight (1997), Miller and Friesen (1983), Covin and Slevin (1989) and Antoncic and Hisrich (2001). These two factors encompass changes to product lines,

changes to products, research and development leadership, new techniques, the businesses competitive posture, risk-taking propensity, environmental boldness and the decision-making style relating to competition.

The third key factor, management, was added by Goosen, De Coning and Smit (2002:42). This factor represents management's influence on corporate entrepreneurship internally, especially in terms of structures and processes, and internal relations. The key factor, management, represents ten dimensions of corporate entrepreneurship namely: goals; creativity and innovation; systems; rewards; intra-capital and communication; staff input; intrapreneurial freedom; a problem solving culture; Intrapreneurship championing; and staff empowerment. This instrument has also been found to be both reliable and valid.

4.2.5 Intrapreneurial Intensity Index (III)

Hill and Moerdyk (2003:1) developed the Intrapreneurial Intensity Index (III) that can be used to ascertain the intensity of corporate entrepreneurship present in a large business. The instrument can provide an overall view of the businesses ability as well as identify the specific areas in the business that requires change or modification in order to become entrepreneurial. The III consists of six elements: task innovation index; intrapreneurial employee index; structural flexibility index; the incentive policies index; the intrapreneurial leadership index; and the intrapreneurial culture index. Each of the sub-indexes uses a Likert scale and consists of various question items designed to measure each of the six constructs. This South African developed questionnaire was tested and found to be both valid and reliable. Together with this instrument, a means of scoring and interpreting the results was also developed. The frequency of responses for each sub-index was assessed, based on the responses emerging from the sample of six intrapreneurial businesses and two non-entrepreneurial businesses.

The III (Hill and Moerdyk, 2003:6) can be used to provide an overall view of the organisation's entrepreneurial ability, as well as to identify the specific areas in the organisation that possibly require change or modification in order to become more entrepreneurial. The instrument identifies areas in a business that requires change or modification in order to survive in tomorrow's corporate environment (Hill and Moerdyk, 2003:6).

4.2.6 Corporate Entrepreneurial Health Audit

The corporate entrepreneurial health audit forms the basis of this research and will be discussed in more detail than the other instruments discussed so far.

Ireland, *et al.* (2006b:21) state that a corporate entrepreneurship strategy is an important path that a business can take to make it possible for employees to engage in entrepreneurial behaviours, using knowledge as the foundation for continuous and successful innovations. Creating a work environment where all employees are encouraged and are willing to innovate in their jobs is at the heart of an effective corporate entrepreneurship strategy. A business needs to develop an internal work environment capable of cultivating employees' interest in, and commitment to, creativity and innovation. Ireland, *et al.* (2006b:21) developed a corporate entrepreneurial health audit as a tool that can be used to diagnose and address the extent to which a business is capable of fostering sustainable entrepreneurial behaviour as the path to improved performance. Measurement at the organisational level can be used to: benchmark and track organisational-wide entrepreneurial performance; establish norms and draw industry comparisons; formulate entrepreneurial goals; develop strategies; and assess relationships between entrepreneurial actions and organisational performance variables over time (Morris, *et al.*, 2008:326).

The entrepreneurial health audit consists of three steps. Firstly the businesses entrepreneurial intensity needs to be measured. The entrepreneurial performance of a business at a given point in time is reflected in its entrepreneurial intensity score. Entrepreneurial intensity is concerned with the degree and frequency of entrepreneurship occurring within a business (Ireland, *et al.*, 2006b:22). As previously indicated in chapter 3 the degree of entrepreneurship refers to the proactiveness, innovativeness and risk-taking in the business. Frequency involves the measuring of the number of new innovative products, processes and services over some defined time period.

The entrepreneurial intensity index can be used to measure the businesses entrepreneurial intensity. The instrument consists of 21 items. The first 12 items measure a business's degree of entrepreneurship and the remaining items the frequency of entrepreneurship. The instrument has been proven to be valid and reliable (Ireland, *et al.*,

2006b:22). The instrument can be used to evaluate not only the whole businesses entrepreneurial intensity, but also that of different parts of the business.

The second step in the entrepreneurial health audit is to diagnose the climate for corporate entrepreneurship. Determining the climate for corporate entrepreneurship can assist to determine the underlying reasons why a given level of entrepreneurial intensity is being achieved. According to Ireland, *et al.* (2006b:24) the CEAI can be used to assess, evaluate and manage the businesses internal work environment in ways that support entrepreneurial behaviour and the use of a corporate entrepreneurship strategy. When using the CEAI to inventory the businesses current situation regarding entrepreneurship, managers identify parts of the businesses structure, control systems, human resource management systems, and culture that inhibit, and those parts that facilitate entrepreneurial behaviour as the foundation for successfully implementing a corporate entrepreneurial strategy. The CEAI is discussed in paragraph 4.2.3.

The CEAI has been shown to be psychometrically sound as a viable means for assessing areas requiring attention and improvement in order to reach the goals sought when using a corporate entrepreneurship strategy. Very importantly, Ireland *et al.* (2006b:28) state that low scores of the CEAI suggest the need for training and development activities to enhance the businesses readiness for entrepreneurial behaviour as well as successful use of a corporate entrepreneurship strategy.

The final step in the entrepreneurial health audit involves determining the degree to which a corporate entrepreneurship strategy and the entrepreneurial behaviour through which it is implemented, are understood and accepted by affected parties (Ireland *et al.*, 2006:28). Commitment to any strategy increases when the people involved are fully aware of the outcomes being sought by using that strategy. Ireland *et al.* (2006b:28) state that key decision makers must find ways to explain the purpose of using a corporate entrepreneurial strategy to those from whom entrepreneurial behaviours are expected. The readiness of each actor to display entrepreneurial behaviour should be realistically assessed. Actions to enhance entrepreneurial skills of employees should then be set in motion. These commitments and processes help to shape a common vision around the importance of a corporate entrepreneurship strategy and the entrepreneurial behaviour that is critical to its successful use. Ireland, *et al.* (2006b:29) suggest the development of

a training programme to communicate the value of entrepreneurial behaviour that the business is requesting of the relevant parties, as the foundation of a successful corporate entrepreneurial strategy. According to Ireland, *et al.* (2006b:29), a corporate entrepreneurial development programme consists of the following components: introduction to entrepreneurship; entrepreneurial breakthroughs; creative thinking; idea development process; barriers, facilitators and triggers to entrepreneurial thinking and venture planning. The detailed content of this programme will be discussed in paragraph 4.3.

Only six measuring instruments were discussed, each measuring an aspect of corporate entrepreneurship. It would be interesting to use more than one measuring instrument on the same sample to determine whether the results would be similar. These measuring instruments are used widely by researchers in the field of entrepreneurship and corporate entrepreneurship but the biggest concern is that the results and effects of these measuring instruments are not made available in research. There is also a lack of case studies in this regard. For purposes of this research it was decided to make use of existing measuring instruments (as adopted in the corporate entrepreneurial health audit). These instruments have been proved to be reliable and valid and have never been applied in South African short-term insurance businesses.

4.3 CORPORATE ENTREPRENEURSHIP DEVELOPMENT PROGRAMMES

Toftoy and Chatterjee (2005:15) state that corporate entrepreneurship development programmes within the business, will separate businesses from their competitors. The corporate entrepreneurship development programme is a way to launch corporate entrepreneurial teams, via corporate entrepreneurship workshops and seminars.

The academic literature is very poor in terms of recording of corporate entrepreneurship development programmes and what they should include. In this section, firstly the two corporate entrepreneurship development programmes cited in the academic literature will be discussed. Secondly a comparison will be made between a few popular executive

programmes in corporate entrepreneurship found in various parts of the world. Lastly general aspects with regard to development programmes will be noted.

4.3.1 Corporate entrepreneurship development programmes cited in academic literature

The corporate entrepreneurship development programme mostly cited and used is the one developed by Kuratko, *et al.* (1990:54). This development programme was developed over 12 years and received an award from the American Society for Training and Development (ASTD). The programme consists of six four-hour modules, each designed to move participants to the point of being able to support entrepreneurship in their own work area. The modules address the following topics:

- Introduction to Entrepreneurial Management. This consists of a review of management and organisational behaviour concepts, definitions of corporate entrepreneurship and related concepts, as well as a review of several corporate entrepreneurial cases.
- Thinking creatively. This module attempts to define and stimulate personal creativity. It involves a number of creativity exercises and has participants develop a personal creative enrichment programme.
- Idea development process. Participants at this point are given the opportunity to generate a set of specific ideas on which they would like to work. The process includes examining a number of aspects of the corporation including structural barriers and facilitators. Additionally participants determine needed resources to accomplish their projects. Participants are instructed to meet in groups and utilise evening time to flush out entrepreneurial ideas that they will present the next day.
- Assessing entrepreneurial culture. The entrepreneurial assessment instrument is provided and described, which assesses the level of entrepreneurial culture within the business. Participants complete the survey and results are fed back to all

participants. Areas for improvement are addressed during the remaining seminar topics.

- Barriers and facilitators to entrepreneurial thinking. The most common barriers to innovative behaviour are reviewed. Participants complete several exercises which help them deal with barriers in the work place. In addition, video case histories are shown which depict actual corporate entrepreneurs that have been successful in dealing with corporate barriers.
- Action planning. During this time each participant is asked to complete a personal action plan that sets a goal, establishes a work team, assesses current conditions, determines necessary resources, develops a step by step timetable for project completion, and a method of project evaluation. Participants can also be assigned to groups for this activity. Top management is encouraged to provide support for the projects, evaluate the completion and reward entrepreneurial activity.

To determine the outcome of this training intervention, Kurtako, Montagno and Hornsby (2001:205) conducted a study on low- to mid-level manager. The research study included three steps. Firstly the Intrapreneurship Assessment Instrument (IAI) (previously referred to in paragraph 4.2.3) was administered to all the participants to obtain a baseline on the participants' perceptions of the businesses culture. Secondly, the participants took part in all the phases of the development programme. Finally, the IAI was re-administered four months after the training. A control group who completed the IAI on both occasions but did not participate in the training was utilised to provide an unbiased comparison of the development programme results. The results of the research study showed a significant increase in all the factors following the completion of the Corporate Entrepreneurship Development Programme. Important observations made from this study include the following: this development programme cannot be conducted only once, it must be repeated in the business with as broad an audience as possible; the development programme's value and its effectiveness are limited because of the lack of free time to develop ideas that are critical; and a reward system must be in place. Top management needs to create an integrated strategy for the change effort.

This programme was designed based on a review of the literature on corporate entrepreneurship, and represents an attempt to operationalise the factors discussed in the literature review (Kuratko, *et al.*, 1990:54).

When this development programme was being developed, Kuratko and Montagno (1989:83) also noted that to gain success from this development programme, potential corporate entrepreneurs need to be identified early in their careers, corporate entrepreneurial projects need to be sponsored, both diversity and order in a business's strategic objectives need to be established, allowing experimentation and tolerating failure, developing new managerial approaches and innovative administrative arrangements so that corporate entrepreneurs and the business can cooperate effectively.

Toftoy and Chatterjee (2005:15) support the content of this development programme and add that the following topics could also be included: researching the specific target market, competitor analysis, ways of developing funding support, selling tips and organising a corporate entrepreneurial team. Toftoy and Chatterjee (2005:15) also support the notion to validate the effectiveness of the development programme by means of assessment instruments like the CEAI.

Koen (2001:214) developed a corporate entrepreneurial development course for students in the Masters of Technology Management course taught at Steven Institute of Technology. The course is divided into four parts and taught for 2.5 hours over a 14 week period. The course syllabus is illustrated in table 4.1.

The principal purpose of part I of this syllabus is to allow students to learn the key factors that separate successful from unsuccessful corporate ventures. Students evaluate the key findings from 10 studies done in corporate venturing. This foundation helps students to understand the key issues associated with successful corporate ventures. In order to reinforce these concepts, students are required from the first case to evaluate both a successful and an unsuccessful venture in their business. Part II focuses on the organisational and cultural factors, as well as management behaviour, that play a vital role in determining venture success. Both successful and unsuccessful businesses are reviewed. In case II the students evaluate the processes and organisational structure in their own business for attempting a venture. The reason behind this is to enable the

students to get a better understanding of the obstacles and hurdles which might be encountered.

TABLE 4.1 Course syllabus of a corporate entrepreneurial development programme for the Masters of Technology Management course taught at Steven Institute of Technology

Lecture	Topic	Lecture	Case presentation or simulation
1	Introduction and course overview	•	
Part I – Foundation			
2 and 3	Corporate venture lessons	•	
4	Case I – Students evaluate a successful and unsuccessful venture in their company		•
Part II – Organisational and cultural factors			
5	Venture businesses in established companies	•	
6	Organisational cultural factors which affect ventures	•	
7	Case II – Students evaluate the venture process and organisational structure in their own company		•
8	Comparison of Intrapreneuring (starting projects in large businesses) to high technology entrepreneurship (starting your own high technology business)	•	
Part III – The simulation			
9	The business plan	•	
10	Orientation to the simulation	•	
11	Case III – students prepare a business plan for simulation and run the simulation		•
Part IV – The Business venture			
12	Case IV – students prepare a preliminary presentation of their venture		•
13 and 14	Final presentation of the business venture		•

Source: Koen (2001:217)

In part III students get the experience of developing a business plan for a business simulation. In part IV students in teams of 3 to 4 develop an actual business venture for a business. All ventures require an executive champion within the business who is typically a senior management executive, a supporter of the project and capable of directly or indirectly influencing access to social assets, capital assets, knowledge assets and funding by the start-up. Students are required to complete and present the business plan

to the executive champion and a multi-company executive review panel at the conclusion of the course.

The success of this course was amazing, with start-up funding approved for seven of the thirteen business ventures developed (Koen, 2001:216).

The focus of these two corporate entrepreneurship development programmes is totally different. The development programme of Kuratko, *et al.* (1990) focuses on the total entrepreneurial development of a business, idea development and the business plan for new ventures. The development programme of Koen does not focus on entrepreneurial development in total but only on corporate venturing. The outcome of both programmes is to come up with venture plans for new ventures in the existing business.

4.3.2 Comparing popular executive programmes in corporate entrepreneurship

From an Internet search with the key words: corporate entrepreneurship development programme; intrapreneurship training programme; corporate venturing training programme, executive development training programme and innovation and growth training programme several training programmes were identified that were not part of a tertiary institution's formal programmes. Ten corporate entrepreneurship development programmes were analysed and compared in terms of their course name, duration of the course, content and who should attend the course. These comparisons are tabulated in table 4.2. From these comparisons the following similarities and differences are noted in table 4.3.



TABLE 4.2 Comparing Corporate Entrepreneurship Development Programmes

Institute	Course name	Duration	Content	Who attend
Australian Graduate School of Management	Growth through Corporate Entrepreneurship and Innovation	3 days	<ul style="list-style-type: none"> • Pre-programme work: participants prepare a problem to be discussed – help structure participants’ plan of attack • Identify opportunities and setting strategy (define corporate entrepreneurship; entrepreneurial strategy) • Manage the corporate venture (structuring the venture; monitoring the venture) • Entrepreneurial people in a corporate environment (being an entrepreneur in a corporate environment; corporate venture review diagnostic) • Business plans • Six months later: seize new opportunities and convert them into revenue; balance innovation with current operations; review corporate entrepreneurship development programme 	Anyone in a business that wants to be more entrepreneurial
Auckland University of Technology	The Corporate Entrepreneur	2 day seminar and/or in-house training	<ul style="list-style-type: none"> • An introduction to corporate entrepreneurship • The entrepreneurial process • Inspiring an entrepreneurial culture • Creativity and innovation • Opportunity recognition, evaluation and development • Assessing risk in new opportunities • Developing the business plan • Turning opportunity into success 	Any functional or general manager responsible for developing and implementing strategy at any level
Babson College	Entrepreneurial strategies for innovation and growth	Six modules (each 2 to 3 hours)	<ul style="list-style-type: none"> • The essentials of entrepreneurship • Processes, outcomes and behaviours • Identifying and shaping opportunities • Corporate venturing • The corporate entrepreneurship business planning process • A systematic approach 	From upper management to the newest recruit



Haas School of Business UC Berkeley	Open Innovation and Corporate Entrepreneurship Executive Program	5 days	<ul style="list-style-type: none"> • Concepts of Corporate Entrepreneurship • Strategic innovation and renewal • Assessing your businesses entrepreneurial orientation • Entrepreneurial initiative • Key concepts and current strategies • Opportunity recognition • Intellectual property • Culture for innovation • Case study analysis • New product development • New product innovation management • Venture capital planning 	Middle to Senior managers
Indian Institute of Management Calcutta	Corporate Entrepreneurship	3 days	<ul style="list-style-type: none"> • Characteristics of corporate entrepreneurship • Generating ideas and identifying opportunities • Evaluating and assessing viability of opportunities • Developing business plan at corporate level • Identifying cultural factors that may be barriers or enablers of corporate entrepreneurship • Sustaining entrepreneurial commitment and reducing organisational uncertainties 	Senior executives and managers
University of Southern California	Corporate Entrepreneurship: Instilling the entrepreneurial spirit in your business	2 days	<ul style="list-style-type: none"> • What does it mean to be entrepreneurial • Is entrepreneurship inside a corporation an oxymoron? • Promoting an entrepreneurial culture in your business • Identifying and preparing for risks in an entrepreneurial business • Leading with an entrepreneurial spirit • Creating an entrepreneurial business model • Recognising opportunities for growth with an entrepreneurial lens 	Managers and executives who would like to develop a climate of entrepreneurship in their businesses Executives who need to encourage staff to take on new roles and challenges Professionals form different backgrounds



Pinchot and company	Business Innovation Accelerator	4 weeks	<ul style="list-style-type: none"> • How innovation actually happens • Nature of the Intrapreneur • Who are our customers? • Competitive strategy • Value proposition • How to write a business plan • Risk assessment • Venture capital 	Intrapreneurial teams
Technical University of Eindhoven and Philips Research	Corporate Entrepreneurship and Open Innovation	5 days	<ul style="list-style-type: none"> • How to organise and leverage the corporate setting to start and grow new, significant, globally competitive businesses • How to generate successful start-ups in an open innovation setting • How to use new business development and venturing as a tool in strategy making processes and corporate transformations • Starting a venture • Marketing, sales and finance • Setting up a business plan • Building a team • Environment scanning for new ideas • Create and recognise new opportunities for innovation • How to organise the businesses to optimally embrace, assimilate and integrate new technologies and business ideas • Negotiation • Leadership • Global sales 	Managers responsible for building new businesses based on breakthrough technologies; corporate research and development; new business development; and internal external venturing
University of Pretoria	Corporate Venturing and Business Building	5 days	<ul style="list-style-type: none"> • Identifying and analysing opportunities • Turning an opportunity into a focused strategy and well-defined initiatives • Formulating an “elevator pitch” and developing and selling a business idea • Attracting top talent and other key resources • Developing products and services • Building capabilities the business requires to exploit an early-stage opportunity • Evolving the strategy, business and leadership model as the business grows 	Senior and middle level managers



			<ul style="list-style-type: none"> • Building and managing high-performance teams • Recognising risk, and creating and measuring value 	
University of Pretoria	Corporate Entrepreneurship Development Programme (CEDP)	6 months	<ul style="list-style-type: none"> • The nature of Entrepreneurship in established companies and the development of an entrepreneurial vision • Supportive environment and an entrepreneurial orientation in established firms • Performance motivation, creativity, innovation and opportunity identification • Corporate venturing • Intrapreneurial marketing and finance • Strategic Corporate Entrepreneurial growth 	Middle level managers

TABLE 4.3 Similarities and differences of corporate entrepreneurship development programmes

Similarities of corporate entrepreneurship development programmes	Differences of corporate entrepreneurship development programmes
<ul style="list-style-type: none"> • Content similarities in all ten identified development programmes: <ul style="list-style-type: none"> ○ Generating ideas (this implies creativity), identification, evaluation and development of opportunities ○ Turning opportunities into success • Content similarities in four or more development programmes: <ul style="list-style-type: none"> ○ Corporate venturing ○ Risk assessment ○ Developing a business plan ○ Inspiring an entrepreneurial culture 	<ul style="list-style-type: none"> • Course names are different • Duration of courses varies from 2 days to 6 months • The participants in the courses vary from anyone in the business, to functional and general managers (middle managers) to senior executives, to intrapreneurial teams • Content differences: <ul style="list-style-type: none"> ○ Venture capital ○ Identifying customers and developing a competitive strategy ○ Intrapreneurial marketing and finance ○ Building and managing high performance teams ○ Creating and measuring value ○ Attracting top talent and other key resources ○ The entrepreneurial process ○ Identifying cultural barriers or enablers of corporate entrepreneurship ○ New product development ○ Environment scanning ○ Negotiation ○ Leadership ○ Global sales

4.3.3 General aspects with regard to development programmes

From the identified corporate entrepreneurship development programmes compared in table 4.3, study results from only one development programme could be found in the literature. Thornberry (2003:329) from Babson College, reports on the results and lessons learned from six years (1996 – 2002) of corporate entrepreneurship developments for approximately 1000 managers. Babson College have created an experimental Entrepreneurial Orientation Survey which allows them to assess the type of change in behaviour from a pre- to post programme perspective.

The major findings were as follows (Thornberry, 2003:330):

- Pockets of entrepreneurial activity can develop and thrive in cultures that are not in themselves entrepreneurial (successful ventures can develop in non-entrepreneurial businesses with the right kind of tactical interventions).
- A lot of ordinary corporate citizens can learn to act as corporate entrepreneurs with the right education, development and support (the people are helped to develop an idea that they themselves are turned on to).
- Catalytic coaching and the business planning process were the two most important educational tools for the development of new business opportunities. Catalytic coaching pushes managers from an iterative focus to a platform focus.
- Entrepreneurs can come from anywhere in the business – it is difficult to predict who will be the entrepreneur and who not. When experience, creativity tools, coaching and a person's own confidence and desire collide with market knowledge, customer intimacy information and technological changes, entrepreneurial opportunities are identified.
- Decoupling idea creation and opportunity identification from implementation – any corporate entrepreneurship process must first be framed around the question of whether a business wants to develop corporate entrepreneurship processes or corporate entrepreneurs.
- A little difference can make a big difference. Not every manager needs to be an entrepreneur to help a business spawn significant new business opportunities.

Businesses need to be realistic about how much corporate entrepreneurship is enough.

Pinchott (1987:19) indicates that developing people in acquiring corporate entrepreneurial skills is as important as knowing whom to hire. Though most people imagine that entrepreneurs are born and not made, results show that entrepreneurs can successfully be trained. Pinchott uses volunteers in the Pinchott Intrapreneur School. In this way a selected group of people are trained who are courageous enough to volunteer for corporate entrepreneurial roles. Training succeeds partly because it gives people permission to use a part of themselves that their supervisors have been trying to beat out of them for quite some time. Most corporate entrepreneurs are missing skills for which training can help.

Kenney and Mutjaba (2007:75) state that leaders of successful businesses like Du Pont have recognised that entrepreneurially inclined employees can be valuable contributors to a business's success if their skills are nurtured. Converting employees with entrepreneurial aptitude into corporate entrepreneurs can deliver exceptional value to stakeholders.

Erkkila (2000) in Kenney and Mutjaba (2007:77) states that 93% of scholars believe that entrepreneurial aptitude can be developed through education and training. Some facets of entrepreneurship (business planning) may be more teachable than others (opportunity recognition). There seems to be accord within the academic community that virtually all employees can be taught to be more innovative.

Kenney and Mutjaba (2007:77) have put together a list of ten most important considerations for executives and human resource managers who may be considering developing a corporate entrepreneurship development programme:

- The business should do a forensic analysis of its culture to determine whether it has an entrepreneurial orientation. It may be appropriate to have a consultant perform this analysis as the results of a self-administered test may not be valid. (This is in contradiction with the work of Kuratko, *et al.*, 1990).

- If it is expected of people to act as entrepreneurs, the people need to be paid as entrepreneurs. Entrepreneurs are not necessarily motivated by money, but will expect to be compensated fairly for the value created for stakeholders.
- There must be alignment between the goals of the business and the corporate entrepreneur. The vision of the venture should be clearly written, responsibilities ascribed to the appropriate stakeholders, and clear and measurable objectives must be determined.
- The corporate entrepreneur must be sufficiently intrinsically motivated, otherwise he/she may not have the commitment to accomplish the objectives.
- Bureaucracy is the biggest impediment to corporate entrepreneurship. A commitment to helping the corporate entrepreneur by establishing a flatter organisational chart will be helpful.
- Training should be continuous and not overly structured.
- Corporate entrepreneurship training should be conducted within every department of the business.
- The business, and training, should remain flexible. There is a positive correlation between learning and entrepreneurship. The lessons learned in a failed venture could prove valuable in the success of a subsequent venture.
- Senior management must train aspiring entrepreneurs to make a valid business case for their proposed venture before submitting it for consideration.
- Entrepreneurship is best demonstrated through experiential learning methodologies, training exercises should contain hands-on components.

From the research conducted by Kenney and Mujtaba (2007:81) it was found that rather than training all aspiring corporate entrepreneurs within a business, it would be more appropriate to identify corporate entrepreneurial candidates and provide ongoing, unstructured training that will nurture their talents. This will then create a culture that nurtures the holistic development of corporate entrepreneurship, rather than expecting new venture creation as a result of formal training.

Kenney and Mutjaba (2007:86) concluded from the research conducted by them that employees should feel empowered to propose new corporate entrepreneurial ventures for collaboration, but the business should have a carefully designed process for identifying

and selecting the opportunities it pursues. Allowing corporate entrepreneurs to launch the venture off-site, and develop a culture free from that of its parent business will result in increased employee commitment for the new venture. There must also be congruence between the mission of the business and the intrinsic motivation of the aspiring corporate entrepreneur.

Garavan and O’Cinneide (1994a:5) listed the most commonly cited objectives of entrepreneurship education and development programmes:

- to acquire knowledge relevant to entrepreneurship;
- to acquire skills in the use of techniques, in the analysis of business situations, and in the synthesis of action plans;
- to identify and stimulate entrepreneurial drive, talent and skills;
- to undo the risk-averse bias of many analytical techniques;
- to develop empathy and support for all unique aspects of entrepreneurship;
- to devise attitudes towards change; and
- to encourage new start-ups and other entrepreneurial ventures.

Garavan and O’Cinneide (1994a:6) note that entrepreneurship education and development programmes are frequently of very short duration compared to other educational programmes concerned with helping people embark on a major career.

Garavan and O’Cinneide (1994a:5) have suggested that longitudinal research designs, using control groups to compare participants with individuals who did not have entrepreneurial educational experience, are needed to examine the lasting effects of entrepreneurship education and training interventions.

In the research conducted by Henry, Hill and Leitch (2005:165) it is pointed out that one area in which relatively little research has been conducted is that of assessing the impact of educational and training initiatives. This is surprising, given the fact that the development and running of courses and programmes is potentially expensive in terms of time and money, to both participants and sponsors. Researchers have observed that one of the most efficient means by which to evaluate programmes is to assess the extent to

which the programme's objectives have been met. It is vital that entrepreneurship educators and trainers have a complete understanding of the objectives that need to be achieved from a course or programme from the outset, as this will have ramifications for its accurate assessment.

4.4 CONCLUSION

The aim of this chapter was to give an overview of corporate entrepreneurship measuring instruments as well as corporate entrepreneurship development programmes. In chapter three, corporate entrepreneurship development programmes were identified as a possibility to foster, develop and implement corporate entrepreneurship in a business. Before corporate entrepreneurship development programmes can be undertaken, a business must determine its level of corporate entrepreneurship and involvement of corporate entrepreneurship activities.

In this chapter, six measuring instruments were discussed: entrepreneurial orientation; ENTRESALE; corporate entrepreneurship assessment instrument; factor based instrument; the intrapreneurial intensity index and the corporate entrepreneurship health audit. For purposes of this research study the corporate entrepreneurship health audit will be applied in the short-term insurance industry in South Africa.

Two corporate entrepreneurship development programmes found in the academic literature were discussed. The academic literature is very poor in terms of records of corporate entrepreneurship development programmes and what they should include. A comparison was made between ten popular corporate entrepreneurship executive programmes found worldwide. These programmes were compared in terms of similarities and differences (Table 4.3). By investigating existing corporate entrepreneurship development programmes it will be used as a frame of reference to develop a corporate entrepreneurship development programme for the short-term insurance businesses in South Africa.

Lastly, general aspects with regard to corporate entrepreneurship development programmes were discussed. From the identified corporate entrepreneurship development programmes, only from the Babson College training programme could

results be found in the literature. Reflections on the effectiveness and results from corporate entrepreneurship training programmes are also an aspect that is very poorly addressed in academic literature. Future research can be explored regarding the assessment of development programmes as approaches, methods and theoretical frameworks can be useful in the application.

CHAPTER 5: RESEARCH DESIGN AND METHODOLOGY OF THE STUDY

“As organisations aggressively pursue the future, managers must continually assess the actual levels of entrepreneurial activity occurring within the organisation.”

Morris, *et al.* (2008:323)

5.1 INTRODUCTION

Assessing corporate entrepreneurial activities in a business forms part of the starting point to facilitate change and innovation in existing businesses. The management question that needs to be addressed is: Can corporate entrepreneurship and innovation levels be assessed in South African short-term insurance businesses?

This research is based around this management question and the most important objective of this research is to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses. To be able to address this question a literature review was necessary as well as empirical research. The literature review was dealt with in chapters 2 to 4. This chapter focuses on the research design and methodology used to address the management question.

This study made use of a formal research design to test the hypotheses formulated. This chapter presents the research problem, objectives of the study and the hypotheses. The research methodology is presented in terms of the research design strategy, sampling design, data collection and lastly data analysis and presentation. This process was illustrated in figure 1.1. The research proposal was dealt with in chapter 1 in which the research problem and questions were stated. Chapter 2, 3 and 4 dealt with the literature review. Chapter 6 will address the data analysis and presentation of results, and lastly chapter 7 will report the findings of the study.

5.2 RESEARCH PROBLEM

From the literature review (addressed in chapters 1, 3 and 4) it is evident that to develop and nurture businesses current and future competitive advantages, advantages that are grounded in innovation, businesses increasingly rely on corporate entrepreneurship. Corporate entrepreneurship represents the framework for the facilitation of ongoing change and innovation in established businesses (Morris and Kuratko, 2002). There is a significant amount of written consensus regarding corporate entrepreneurship as a means for promoting and sustaining global corporate competitiveness and economic growth. This consensus focuses mainly on international businesses and not on businesses in South Africa. The management dilemma that then exists (particularly in South Africa) is how to foster and implement corporate entrepreneurship in businesses and/or industries to sustain this competitive advantage and improve performance.

The purpose of this study is to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

The management question that needs to be addressed is: Can corporate entrepreneurship and innovation levels be assessed in South African short-term insurance businesses?

From this management question the following research questions are formulated:

- Can the model of Kuratko, *et al.* (2004) for sustaining corporate entrepreneurship be applied in South African short-term insurance businesses? Will the health audit instrument (Ireland, *et al.*, 2006a) be able to determine the entrepreneurial intensity and the entrepreneurial culture in South African short-term insurance businesses?
- Will it be possible, from the results of the health audit, to develop a corporate entrepreneurial development programme for South African short-term insurance businesses?
- How can a corporate entrepreneurial development programme be used to develop and sustain corporate entrepreneurship in South African short-term insurance businesses?

- How can a corporate entrepreneurial development programme be used to address the gaps between the various business unit levels in South African short-term insurance businesses?
- What will be the content of a corporate entrepreneurial development programme for South African short-term insurance businesses?

Limited empirical research is available on corporate entrepreneurship in South Africa. No formal study has been conducted in South Africa where the Health Audit of Ireland, *et al.* (2006) has been used. A few research studies did make use of the Entrepreneurial Performance Index and the Corporate Entrepreneurship Assessment Instrument individually. There is also no record of any formal research conducted on corporate entrepreneurship amongst the short-term insurance businesses in South Africa.

5.3 RESEARCH OBJECTIVES

The primary and secondary objectives of the study are presented below.

5.3.1 Primary objective

The primary objective of this research is to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

5.3.2 Secondary objectives

In order to achieve this primary objective, various secondary objectives are formulated. The secondary objectives of the study are:

To determine by means of a literature study:

- how entrepreneurship and corporate entrepreneurship relate to one another;
- the link between corporate entrepreneurship and innovation;
- the importance and value of corporate entrepreneurship;
- how to foster, develop and implement corporate entrepreneurship;
- how to sustain corporate entrepreneurship and innovation;

- the conceptual models that exist for corporate entrepreneurship;
- the methods for measuring entrepreneurial activity; and
- the design, content and structure of a corporate entrepreneurial development programme.

To determine by means of a case study design:

- how to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses, by means of a corporate entrepreneurial health audit instrument.

5.4 HYPOTHESES

This study stated hypotheses rather than propositions. Cooper and Schindler (2008:50), as well as Coldwell and Herbst (2004:86), refer to a proposition as a statement about concepts that may be judged as true or false if it refers to observable phenomena. When a proposition is formulated for empirical testing it is called a hypothesis. Zikmund (2003:43) also states that a proposition is a statement concerned with the relationships among concepts; an assertion of a universal connection between events that have certain properties. Babbie (2008:45) gives a more practical explanation: "Hypothesis is a specified testable expectation about empirical reality that follows from a more general proposition. It is a statement of something that ought to be observed in the real world if the theory is correct." Zikmund (2003:44) continues and agrees that a hypothesis is an unproven proposition or supposition that tentatively explains certain facts or phenomena – a proposition that is empirically testable.

The hypotheses stated in this study can be referred to as relational hypotheses. Relational hypotheses specify a relationship between two or more variables (Coldwell and Herbst, 2004:86; and Cooper and Schindler, 2008:51).

When stating hypotheses, statistical hypotheses are generally stated in the null form (Zikmund, 2003:499). The null and alternative hypotheses are further clarified. A null hypothesis (H_0) refers to a statement about a status quo asserting that any change from what has been thought to be true will be due entirely to random error. An alternative

hypothesis (H_a) is a statement indicating the opposite of the null hypothesis. Cooper and Schindler (2008:523) state that the null hypothesis is used for testing. In this regard, only the null hypothesis related to this study will be stated. The hypotheses formulated for this study was stated in chapter one. The hypotheses were seen as important by senior management in each short-term insurance business.

5.4.1 Hypothesis testing

The purpose of hypothesis testing is to determine which of the null or alternative hypotheses is correct. Zikmund (2003:500) refers to the significance level that is a critical probability in choosing between the null and alternative hypothesis. The level of significance determines the probability level that is to be considered too low to warrant support of the null hypothesis. Because no statement about a sample can be made with complete certainty, there always exist a chance that an error will be made. Researchers refer to these types of errors as Type I or Type II errors. A summary of these types of errors according to Zikumund (2003:504) is presented in table 5.1.

TABLE 5.1 Type I and Type II errors in hypotheses testing

State of null hypotheses in the population	Decision	
	Accept H_0	Reject H_0
H_0 is true	Correct – no error	Type I error
H_0 is false	Type II error	Correct – no error

Source: Zikumund (2003:504)

Table 5.1 indicates that the null hypothesis can be either true or false and the statistical decision will be either to accept or to reject the hypothesis. When a Type I error (α) is committed, a true null hypothesis is rejected. This means it is stated that a statistically significant difference exist when in reality one does not exist. A Type II (β) error is made if the alternative hypothesis is true but the researcher indicates that the H_0 should not be rejected.

Zikmund (2003:504) states that in business problems, Type I errors are generally more serious than Type II errors and there is a greater concern with determining the significance level alpha (α) than with determining (β).

The hypothesis testing will be presented in chapter 6.

5.5 RESEARCH METHODOLOGY

The research methodology presented in this section focuses on the research design strategy, the methods and procedures for the collection, and measurement and analysis of data used in the study.

5.5.1 Research design strategy

According to Cooper and Schindler (2008:81), the research design is the blueprint for fulfilling objectives and answering questions. Phillips (1971:93) in Cooper and Schindler (2008:146) indicates that the research design constitutes the blueprint for collection, measurement and analysis of data.

The research is designed as a formal study. The goal of a formal research design is to test the hypotheses or answer the research questions posed (Cooper and Schindler, 2008:140). The formal study consists of a literature review and an empirical study. The literature review aims to survey the background on corporate entrepreneurship in terms of:

- the concept corporate entrepreneurship;
- the relationship between corporate entrepreneurship and innovation;
- the importance and value of corporate entrepreneurship;
- how to foster, develop and implement corporate entrepreneurship;
- sustaining corporate entrepreneurship and innovation; and
- conceptual models for corporate entrepreneurship and methods for measuring entrepreneurial activity.

The literature review provides an insight and understanding into the research problem as well as the necessary background to guide the empirical part of the study.

The empirical part of the study focuses on the assessment of corporate entrepreneurial and innovative levels in South African short-term insurance businesses. The assessment is done by means of a corporate entrepreneurial health audit instrument developed by Ireland, *et al.* (2006). The empirical method is embedded in a case study design. Cooper and Schindler (2008:153) indicate that case studies place more emphasis on a full contextual analysis of fewer events or conditions and their interrelations. In a case study the emphasis on detail provides valuable insight for problem solving, evaluation and strategy.

5.5.1.1 Purpose of the study

The purpose of the study is to make use of a corporate entrepreneurial assessment instrument, the Health Audit Instrument, developed by Ireland, *et al.* (1996), to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses. The purpose is to develop a corporate entrepreneurial development programme that can be used to implement and foster corporate entrepreneurship in South African short term insurance businesses.

This study will also inform and provide proof to other South African businesses of the value of assessing businesses in terms of the businesses corporate entrepreneurial and innovative mindset which could assist in sustaining a competitive advantage.

5.5.1.2 Time dimension

The time dimension of the study is cross-sectional. Cooper and Schindler (2008:149) state that cross-sectional studies are carried out once and represent a snapshot of one point in time. Bryman and Bell (2007:55) agree with this explanation and also add that in a cross-sectional design relationships are examined between variables. There is no time ordering to the variables, because the data on them are collected more or less simultaneously and the researcher does not manipulate any of the variables.

5.5.1.3 Topical scope

Topical scope refers to the depth and breath of a study (Cooper and Schindler, 2008:147). In the topical scope the research can be based on statistical studies or case studies. In this study the empirical method is embedded in a case study design. Cooper and Schindler (2008:153) state that a single well designed case study can provide a major challenge to a theory and provide a source of new hypotheses and constructs simultaneously.

5.5.1.4 The research environment

Research designs differ as to whether they occur under actual environmental conditions (field conditions) or under staged or manipulated conditions (laboratory conditions) (Cooper and Schindler, 2008:150).

This research will be conducted in a field environment in the South African short-term insurance industry.

5.5.1.5 Participants perceptions

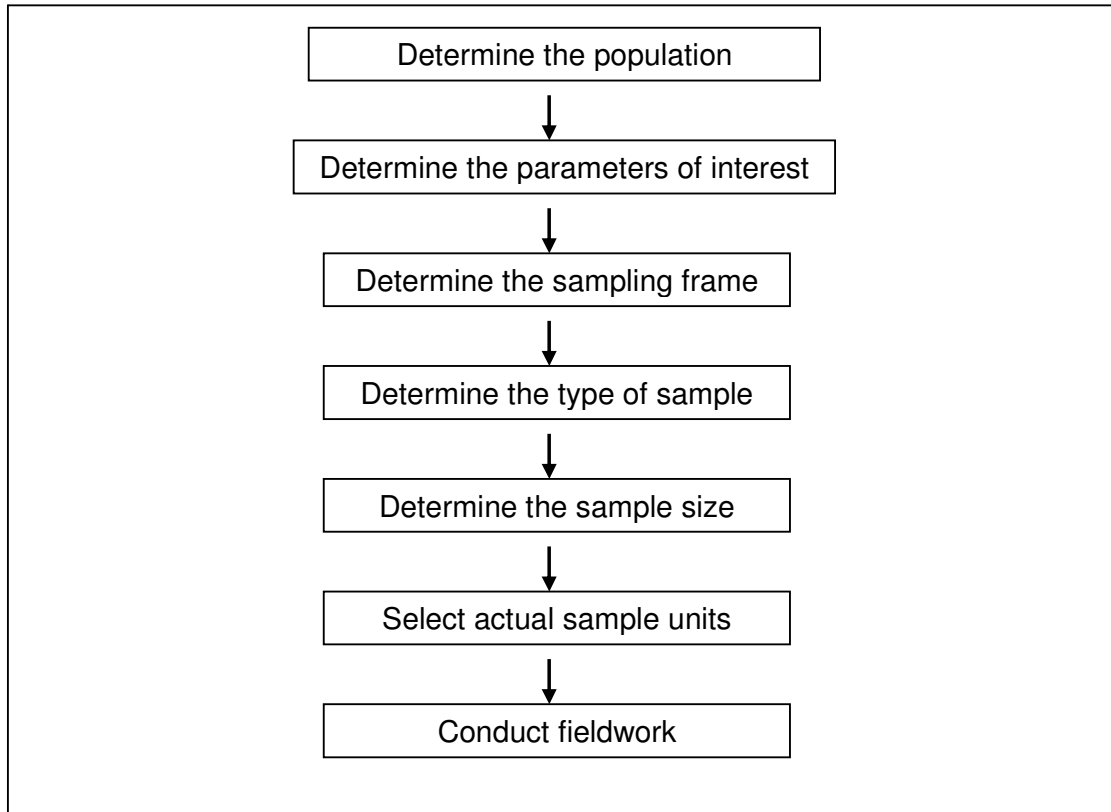
Cooper and Schindler (2008:151) emphasise that the usefulness of a design may be reduced when people in a disguised study perceive that research is being conducted. The participants in the South African short-term insurance businesses who completed the questionnaires might have perceived deviations as research-induced, as they knew research was being conducted. Cooper and Schindler (2008:151) state that participants' perceptions serve as a reminder to classify one's study by type, to examine validation strengths and weaknesses, and to be prepared to qualify results accordingly.

5.5.2 Sampling design

Zikmund (2003:369) indicates that the process of sampling involves any procedure using a small number of items or parts of the whole population to make conclusions regarding the whole population.

Before a conclusion can be made of a sample a researcher needs to make decisions on several stages in the selection of a sample. These stages are summarised in Figure 5.1, according to Cooper and Schindler (2008:183) and Zikmund (2003:372).

FIGURE 5.1 Stages in the selection of a sample



Source: Cooper and Schindler (2008:183-203) and Zikmund (2003:372)

Cooper and Schindler (2008:179); Zikmund (2003:369) and Diamantopoulos and Schlegelmilch (2000:10) refer to population as the total collection of elements about which one wishes to make some inferences. In this study the population is all the employees in the South African short-term insurance industry. The reason for selecting this population is that no research has been done in South Africa on the short-term insurance industry in terms of corporate entrepreneurship and innovation.

Parameters of interest according to Cooper and Schindler (2008:186) are summary descriptors of variables of interest in the population. For this study the parameters of interest are as follows:

- The selected employees from different short-term insurance businesses must be employed in the South African short-term insurance industry.
- The employees must be full time employees in South African short-term insurance businesses.
- The full time employees must include employees from top management level to normal workers in all the various business units across the different insurance businesses in the South African short-term insurance industry.

Sampling frame refers to a list of elements from which a sample may be drawn (Zikmund, 2003:373; Cooper and Schindler, 2008:186; Babbie, 2008:221). An e-mail list of all the qualifying employees in the South African short-term insurance is used as the sample frame for this study.

When choosing the type of sample a distinction needs to be made between a probability or non-probability sample. According to Coldwell and Herbst (2003:79), Cooper and Schindler (2008:192); Zikmund (2003:379) and Bryman and Bell (2007:182), a probability sample is a sample that has been selected using random selection so that each unit in the population has a known chance of being selected. A non-probability sample is a sample that has not been selected using a random selection method. It implies that some units in the population are more likely to be selected than others.

Table 5.2 gives a brief summary of the various sampling designs.

This study will make use of a non-probability purposive or judgmental sample. Saunders, Lewis and Thornhill (1997:145) state that a purposive or judgemental sample will best enable one to answer the research questions and meet one's objectives. This form of sample is often used when working with small samples, such as in case study research.

Bryman and Bell (2007:195) indicate that when it comes to sample size, the larger the better. The biggest benefit from a large sample is that as sample size increases, sampling error decreases. The sample size for this study is 1 900 which includes employees in the South African short-term insurance industry.

TABLE 5.2 Types of sampling designs

Element selection	Representation bias	
	Probability	Non-probability
Unrestricted	<p>Simple random [Each population element has an equal chance of being selected into the sample.]</p>	<p>Convenience [The sampling procedure used to obtain those units or people most conveniently available.]</p>
Restricted	<p>Systematic [Selects an element of the population at a beginning with a random start and following the sampling fraction selects every kth element.]</p> <p>Cluster [Population is divided into internally homogeneous subgroups. Some are randomly selected for further study.]</p> <p>Stratified [Divides population into subpopulations or strata and uses simple random on each stratum. Results may be weighted and combined.]</p> <p>Double [Process includes collecting data from a sample using a previously defined technique. Based on the information found, a subsample is selected for further study.]</p>	<p>Purposive or Judgement [An experienced individual selects the sample based upon some appropriate characteristic of the sample members.]</p> <p>Quota [The researcher classifies the population by pertinent properties, determines desired proportion of sample from each class, and fixes quotas for each interviewer.]</p> <p>Snowball [Initial respondents are selected by probability samples; additional respondents are obtained by referral from initial respondents.]</p>

Source: Cooper and Schindler (2008:184, 199); Zikmund (2003:392 – 393)

A very important factor in terms of sample size is the non-response rate. Bryman and Bell (2007:196) as well as Saunders, Lewis and Thornhill (1997:129) indicate that the most common reason for non-response is the refusal to participate, but with no particular reason.

Bryman and Bell (2007:196) suggest that the response rate be calculated as follows:

$$\frac{\text{Number of usable questionnaires}}{\text{Total sample} - \text{minus unsuitable or uncontactable members of the sample}} \times 100$$

If this formula is used the response rate for this research study is:

$$\frac{386}{1900} \times 100 = 20.3 \%$$

Saunders, Lewis and Thornhill (1997:131) state that estimating the likely response rate from a sample to which one will be sending a questionnaire or interviewing is more difficult.

In terms of the heterogeneity and homogeneity, Bryman and Bell (2007:196) state that when the sample is mostly homogenous the amount of variation will be less. The more heterogeneous the sample the larger the sample needs to be. The sample of this study is relatively homogeneous (employees from five insurance businesses in the South African short-term insurance industry) and according to Zikmund (2003:424) a small sample is required in this instance.

5.5.2.1 Sample error

Most statistical researchers indicate that a researcher must take note of sample error when selecting the sample. Babbie (2008:217) defines a sample error as: "...the degree of error to be expected in probability sampling". The formula for determining sampling error contains three factors: the parameter, the sample size and the standard error.

Coldwell and Herbst (2004:76) indicate that sampling error gives an idea of the precision of the statistical estimate. A low sampling error means that there is less variability or range in the sampling distribution. The sampling error can be based on the standard deviation. The greater the sample standard deviation, the greater the standard error (and the sampling error).

Zikmund (2003:379) states that non-sampling errors can occur. Non-sampling error results from some imperfect aspect of the research design that causes response error or from a mistake in the execution of the research; error that comes from such sources as sample bias, mistakes in recording responses, and non-responses from persons who were not contacted or who refused to participate. From this research study the non-sampling error that is most applicable due to the non-responses of participants is as indicated in paragraph 5.5.2.

5.5.3 Data collection

Data can be collected in the form of primary or secondary data. Primary data according to Zikmund (2003:175) refers to data gathered and assembled specifically for the research project at hand. Primary data can amongst others be collected by means of questionnaires, surveys, checklists, interviews, documentation review, observation, focus groups and case studies (Coldwell and Herbst, 2004:48-49). Secondary data refers to data that have been previously collected for some purpose other than the one at hand (Zikmund, 2003:136). Zikmund (2003:158 – 167) identifies various forms of secondary data: major indexes (e.g. business periodicals index and the general business file ASAP); reference guides; census data; statistical data; market data; industry data; corporate directories and international sources. Cooper and Schindler (2008:282) add to this list of secondary data sources the following: encyclopaedias, textbooks, handbooks, magazines and newspaper articles.

For the literature section of this study data are collected by means of a literature search using secondary data such as journals, textbook, databases and the Internet. This literature is presented in chapters 2, 3 and 4.

To collect the primary data for this study (assessing the corporate entrepreneurial and innovative levels in the South African short-term insurance industry) a self-administered questionnaire was used. The responses will be anonymous and this data source will be respected in the study. This was the only way in which data could be accessed. There was an agreement between the respective businesses to treat the anonymity as highly confidential.

The complete questionnaire was electronically distributed to the sample by means of electronic mail. A covering letter and the electronic questionnaire (Annexure A) were included in the e-mail.

Saunders, Lewis and Thornhill (1997:244) state that questionnaires can be used for descriptive or explanatory research. Explanatory or analytical research will enable one to examine and explain relationships between variables, in particular cause and effect relationships.

5.5.3.1 Instrument used to collect the primary data

The entrepreneurial health audit instrument developed by Ireland, *et al.* (2006) is used to conduct the assessment for this research study. A detailed discussion of this audit was done in chapter 4. The entrepreneurial health audit instrument makes use of two questionnaires to gather the necessary data.

Firstly the businesses level of entrepreneurial intensity is determined by means of the Entrepreneurial Performance Index (EPI) of Morris (1998). The EPI consists of 21 questions. The first 12 questions determine the degree of entrepreneurship in terms of innovativeness, risk-taking and proactiveness and the other 9 questions determine the frequency of entrepreneurship. Together these 21 questions determine a businesses entrepreneurial intensity level. Although the EPI has been developed in the USA it has been proved as a reliable and valid instrument in a South African context as well.

Secondly the businesses internal work environment is examined to understand the factors accounting for the degree of entrepreneurial intensity the business has at a specific point in time. The Corporate Entrepreneurship Assessment Instrument (CEAI) of Kuratko, *et al.*,

was used to collect this information. Kuratko, *et al.*, developed the CEAI in 1990. The instrument consists of 78 five point likert-style questions ranging from strongly agree to strongly disagree. The desired outcome of the CEAI is to assess a level of corporate entrepreneurship intensity and recognition of corporate entrepreneurship by management within a business. Six distinct internal organisational factors are addressed: management support; work discretion; organisational boundaries; rewards/reinforcement; time availability; and specific climate variables. Although the CEAI has been proved as a reliable and valid instrument in the USA it has also been proved reliable and valid in a South African context.

In addition to these two questionnaires a section is also included to obtain biographical information from the respondents in the sample. Eight biographical questions were asked. These questions included: race, age, ethnicity, highest educational qualification, years in business, insurance business, current job level and years in present job.

5.5.3.2 Measurement of the research instrument

Cooper and Schindler (2008:221) state that measurement in research consists of assigning numbers to empirical events in compliance with a set of rules.

Diamantopoulos and Schlegelmilch (2003:23) indicate that different measurement rules result in different types of measurement scales. A key distinction between different types of measurement scales is according to the level of measurement that these scales provide. Four major types of measurement scales can be distinguished (Diamantopoulos, 2003:24; Zikmund, 2003:299; Cooper and Schindler, 2008:223; Bryman and Bell, 2007:357).

Table 5.3 gives a summary of the four major types of measurement scales.

The complete questionnaire consists of three sections. Section A collects biographical information and consists of eight questions obtaining nominal data. Section B aims to measure the businesses entrepreneurial intensity.

TABLE 5.3 Types of measurement scales

	Nominal	Ordinal	Interval	Ratio
Equivalence	Yes	Yes	Yes	Yes
Order	No	Yes	Yes	Yes
Equal intervals	No	No	Yes	Yes
Absolute zero	No	No	No	Yes
Typical usage	Store types; product categories; geographical locations	Occupation; social class; business preference; attitudes	Index numbers; temperature; calendar time; attitudes	Scales, costs, age, number of customers
Numerical operation	Counting	Rank ordering	Arithmetic operations on intervals between numbers	Arithmetic operations on actual qualities
Descriptive statistic	Frequency and percentage in each category, mode	Median, range, percentile ranking	Mean, standard deviation, variance	Geometric mean, coefficient of variation

Source: Zikmund (2003:297); Cooper and Schindler (2008:223); Diamantopoulos and Schlegelmilch (2003:24)

The degree of entrepreneurship is measured through questions 1 to 12 which consist of a 5 point Likert scale obtaining ordinal data. Questions 13 – 21 measure the frequency of entrepreneurship and consist of 5 point Likert scale questions, 2 questions where the respondents had to state an exact number (ordinal data) and 1 question where the relevant aspects relevant to the respondent had to be indicated (ordinal data).

Section C measures the perception of corporate entrepreneurial culture in the business. This section consists of 78 questions divided into 6 sub-sections. All 78 questions are 5 point-likert scale questions (ordinal data).

5.5.3.3 Characteristics of a sound measurement instrument

Researchers (e.g. Cooper and Schindler, 2008: 231; Zikmund, 2003:300-301; Bryman and Bell, 2007:291; Babbie, 2008:160), indicate that a measuring instrument is sound if it is valid and reliable. Validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration, in other words does it measure what it intends to measure. Reliability refers to whether a particular technique, applied repeatedly to the same object, yields the same result each time.

5.5.3.4 Validity of the measurement instrument

In determining validity the answer can be organised according to measure-relevant types. Cooper and Schindler (2008:231) indicate an accepted classification of three major forms of validity: (1) content validity, (2) criterion-related validity, and (3) construct validity. Table 5.4 gives a summary of the validity estimates.

The Entrepreneurial Performance Index (EPI) and the Corporate Entrepreneurship Assessment Instrument (CEAI) have been compiled and used in previous research. Both questionnaires have been found to be valid (Morris and Sexton, 1996; Kuratko, *et al.*, 1990:54 – 55).

5.5.3.5 Reliability of the measuring instrument

As indicated previously reliability is concerned with whether the measure is reliable to the degree that it supplies consistent results.

Cooper and Schindler (2008:237-239) state that three dimensions underlie the concept of reliability – stability, equivalence and internal consistency.

A measurement has stability if consistent results with repeated measurements of the same person with the instrument can be secured. Cooper and Schindler (2008:238) suggest extending the interval between test and retest as a possible remedy for stability. In this research this was not possible as the instrument was completed once over a period of two months.

TABLE 5.4 Summary of validity estimates

Type	What is measured	Methods
Content	Degree to which the content of the items adequately represents the universe of all relevant items under study	Judgemental or panel evaluation with content validity ratio
Criterion-related	Degree to which the predictor is adequate in capturing the relevant aspects of the criterion.	Correlation
<ul style="list-style-type: none"> • Concurrent • Predictive 	<p>Description of the present; criterion data are available at same time as predictor scores.</p> <p>Prediction of the future; criterion data are measured after the passage of time.</p>	
Construct	Answers the question, "What accounts for the variance in the measure?" Attempts to identify the underlying construct (s) being measured and determine how well the test represents it (them).	Judgemental; Correlation of proposed test with established one; Convergent-discriminant techniques; Factor analysis; Multitrait-multimethod analysis

Source: Cooper and Schindler (2008:232)

Equivalence is concerned with variations at one point in time among observers and samples of items. A good way according to Cooper and Schindler (2008:238) to test for the equivalence of measurements by different observers is to compare each observer's scoring of the same event.

Internal consistency refers to the degree to which the measuring instrument items are homogeneous and reflect the same underlying construct(s).

Table 5.5 gives a summary of the reliability estimates according to Cooper and Schindler (2008:237).

TABLE 5.5 Summary of reliability estimates

Type	Coefficient	What is measured	Methods
Test-retest	Stability	Reliability of a test or instrument inferred from examinee scores. Same test is administered twice to same respondents.	Correlation
Parallel forms	Equivalence	Degree to which alternative forms of the same measure produce the same or similar results.	Correlation
Split-half KR20 Cronbach's alpha	Internal consistency	Degree to which instrument items are homogeneous and reflect the same underlying construct(s).	Specialised correlational formulas

Source: Cooper and Schlinder (2003:237)

The Cronbach alpha (α) is most frequently used by researchers to determine a measuring instrument's reliability. According to Bryman and Bell (2007:164), Cronbach alpha calculates the average of all possible split-half reliability coefficients. A computed alpha coefficient will vary between 1 (denoting perfect internal reliability) and 0 (denoting no internal reliability). The figure 0.80 is typically employed as a rule of thumb to denote an acceptable level of internal reliability, though many writers accept a slightly lower figure. Eiselen, Uys and Potgieter (2005:114) state that the closer the alpha value (α) is to 1 the better the internal consistency (reliability) of the scale.

The Cronbach alpha test done for this research study indicates an alpha value of 0.9525. This means that the reliability of the measuring instruments is sound.

Cooper and Schindler (2008:239) indicate that reliability can be improved by the following:

- minimise external sources of variation;
- standardise conditions under which measurement occurs;
- improve investigator consistency by using well-trained, supervised and motivated persons to conduct the research;

- broaden the sample of measurement questions used by adding similar questions to the data collection instrument or adding more observers or occasions and observational study; and
- improve internal consistency of an instrument by excluding data from analyses drawn from measurement questions eliciting extreme responses.

As the Cronbach alpha for this study is sound it is not necessary to make use of any of these suggestions.

A factor analysis and item analysis was executed to confirm the validity and reliability of the measuring instruments used in this study. In the next two paragraphs factor and item analysis will be discussed in more detail.

5.5.3.6 Factor analysis

Zikmund (2003:586) clarifies a factor analysis as a type of analysis used to discern the underlying dimensions of regularity in phenomena. Its general purpose is to summarise the information contained in a large number of variables into a smaller number of factors. The statistical purpose of a factor analysis is to determine linear combinations of variables that aid in investigating the interrelationships. Factor analysis is executed on variables to strengthen the reliability of the research questionnaires.

Eiselen, *et al.* (2005:104) state that the factor analysis analyses the correlations between pairs of variables and identifies groups of variables in such a way that variables in the same group are highly correlated with one another but essentially uncorrelated with the variable in another group. This technique yields a loading matrix indicating the loading of each variable on each factor. A large loading (positive or negative) implies that the variable contributes a great deal to the factor. The closer the loading is to 0, the less the variable contributes to the factor. In other words by looking at the loading matrix, for each variable, the factor to which it contributes most can be determined. This enables the formation of groups of variables. Once it is established which questions form a group or contribute most to a factor, by considering the wording of the individual questions in that factor, a name is given to that underlying dimension. Eiselen, *et al.* (2005:105) state that

factor analysis helps the researcher to reduce the number of questions to a few interpretable factors or dimensions and enables the researcher to describe the results of a survey in a concise manner by concentrating on the factors rather than the individual questions.

To assist with the identification of the questions contributing most to a factor, the loading matrix can be rotated without changing or altering results. Rotation is used to assist with the interpretation or identification of the variables making up a factor.

Several criteria exist, according to Eiselen, *et al.* (2005:108), that can be used to determine the ideal number of factors. One of these criteria is the eigenvalue. This criterion states that the number of factors to be used is equal to the number of factors with eigenvalues larger than 1.

5.5.3.7 Item analysis

Another method to determine the reliability of a scale is by means of an item analysis (Eiselen, *et al.*, 2005:112). In item analysis one is interested in how well the responses of each item in a factor or scale of items correspond to those of the other items and to the scale as a whole.

An item analysis was conducted for the measuring instrument of this study on Section C, sub-sections 1 to 5.

5.5.4 Data processing and analysis

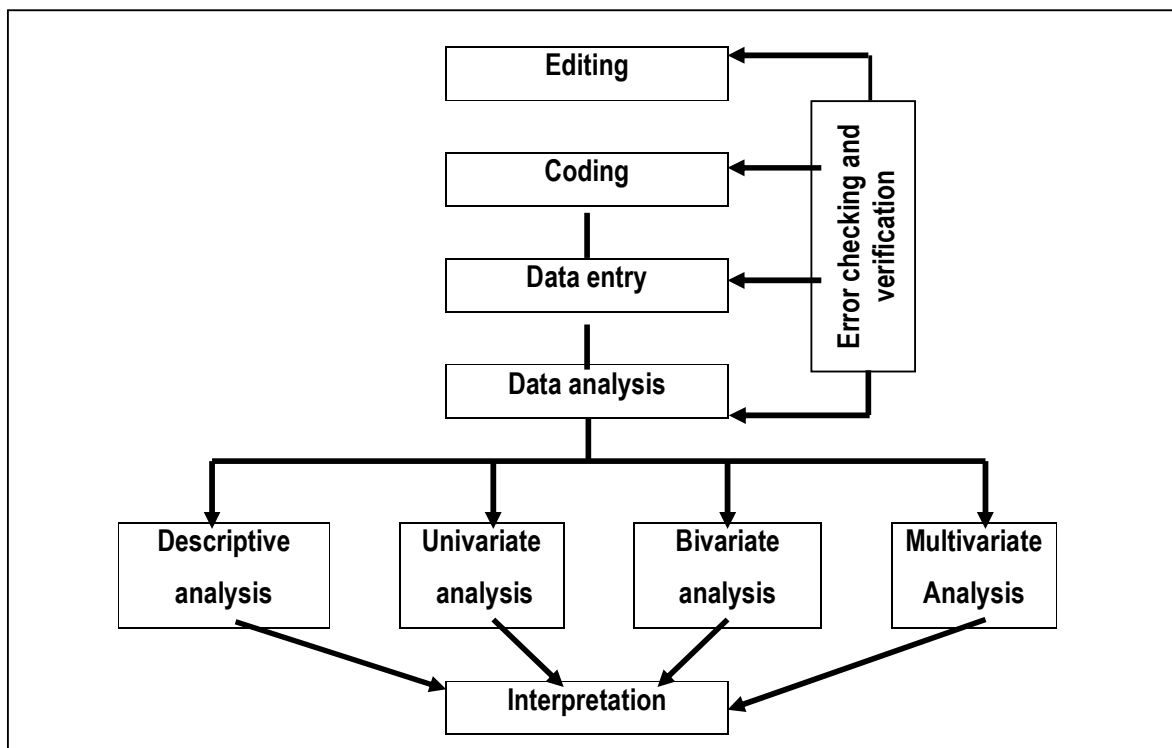
The process of analysis begins after the data have been collected. Figure 5.2 gives an illustration of all the various aspects involved in the data processing and analysis.

Editing detects errors and omissions, corrects them when possible, and certifies that minimum data quality standards have been achieved (Cooper and Schindler, 2008:455). Coding involves assigning numbers or other symbols to answers so the responses can be grouped into a limited number of classes or categories (Cooper and Schindler, 2008:456

and Zikmund, 2003:457). Data entry converts information gathered by secondary or primary methods to a medium for viewing and manipulation.

After the editing for this study was done, the questionnaires were processed by the Department of Statistics at the University of Pretoria. After the verification and correcting of errors the data were ready for further analysis. For data analysis purposes the SPSS (Statistical Package for the Social Sciences) was used to compile the descriptive and inferential statistics.

FIGURE 5.2 Stages in the data analysis



Source: Zikmund (2003:453)

5.5.4.1 Descriptive statistics

Zikmund (2003:402) describes descriptive statistics as statistics used to describe or summarise information about a population or sample. Zikmund (2003:473) also states that descriptive analysis is the transformation of raw data into a form that will make them easy to understand and interpret; rearranging, ordering and manipulating data to provide

descriptive information. Calculating averages, frequency distributions and percentage distributions are the most common ways of summarising data. Descriptive statistics are presented through the use of tables and graphics in chapter 6 of this study.

5.5.4.2 Inferential statistics

Inferential statistics, according to Zikmund (2003:402), are the statistics used to draw inferences or make judgements about a population on the basis of a sample. Diamantopoulos and Schlegelmilch (2000:65) state that when the focus of analysis is on estimation or hypothesis-testing, the sample is used to draw inferences about the population. This process was formally known as statistical inference and the various techniques that are employed are commonly known as inferential statistics. Cooper and Schindler (2008:534) summarise the various techniques to choose from for the inferential statistics.

Based on the distribution of the descriptive statistics obtained from the study, the following techniques were used to perform the inferential analysis: frequency distribution, cross-frequency tabulation, item analysis, factor analysis, chi-square test, One-Way Analysis of Variance (ANOVA), Post-Hoc test; *t*-test and Pearson's Correlation Coefficient.

- **Chi-square test**

Diamantopoulos and Schlegelmilch (2000:154) refer to a chi-square (X^2) test as a test to use when one wants to compare a set of observed frequencies (frequencies calculated from the empirical data reflecting the actual distribution of the variable concerned in the sample) with a set of theoretical frequencies. Cooper and Schindler (2008:536) indicate that when one uses the chi-square technique, one tests for significant differences between the observed distribution of data among categories and the expected distribution based on the null hypothesis. In the one-sample case, a null hypothesis is established based on the expected frequency of objects in each category. Then the deviations of the actual frequencies in each category are compared with the hypothesised frequencies. The greater the difference between them, the less is the probability that these differences can be attributed to chance.

TABLE 5.6 Recommended statistical techniques by measurement level and testing situation

Measurement level	One-sample case	Two sample case		k-Sample case	
		Related samples	Independent samples	Related samples	Independent samples
Nominal	<ul style="list-style-type: none"> • Binomial • Chi-square one-sample 	<ul style="list-style-type: none"> • McNemar 	<ul style="list-style-type: none"> • Fisher exact test • Chi-square two-samples test 	<ul style="list-style-type: none"> • Cochran Q 	<ul style="list-style-type: none"> • Chi-square for k-samples
Ordinal	<ul style="list-style-type: none"> • Kolmogorov-Smirnov one-sample test • Runs test 	<ul style="list-style-type: none"> • Sign test • Wilcoxon matched paired test 	<ul style="list-style-type: none"> • Median test • Mann-Whitney U • Kolmogorov-Smirnov • Wald-Wofowitz 	<ul style="list-style-type: none"> • Friedman two-way ANOVA 	<ul style="list-style-type: none"> • Median extension • Kruskal-Wallis one-way ANOVA
Interval and ratio	<ul style="list-style-type: none"> • t-test • Z-test 	<ul style="list-style-type: none"> • t-test for paired samples 	<ul style="list-style-type: none"> • t-test • Z-test 	<ul style="list-style-type: none"> • Repeated-measures ANOVA 	<ul style="list-style-type: none"> • One-way ANOVA • n-way ANOVA

Source: Cooper and Schindler (2008:534)

Bryman and Bell (2007:370) state that a chi-square value means nothing on its own. It can only be meaningfully interpreted in relation to its associated level of statistical significance.

Bryman and Bell (2007:368) indicate that the test for statistical significance allows the analyst to estimate how confident he or she can be that the results derived from a study based on a randomly selected sample are generalisable to the population from which the sample was drawn. When examining statistical significance in relation to the relationship between two variables, it also tells about the risk of concluding that there is in fact a relationship in the population when there is no such relationship in the population. A

statistical significance is solely concerned with the confidence researchers can have in their findings.

The level of statistical significance is the level of risk that one is prepared to take by inferring that there is a relationship between two variables in the population from which the sample was taken when in fact no such relationship exists. The maximum level of risk that is conventionally taken in business and managerial research is to say that there are up to 5 chances in 100 that might be falsely concluding that there is a relationship when there is not one in the population which the sample was taken. The significance level is denoted by $p < 0.05$ (p means probability).

The chi-square was used in this study for one-sample cases to test for differences.

- **One-Way Analysis of Variance (ANOVA)**

The statistical method for testing the null hypothesis that the means of several populations are equal, is analysis of variance (ANOVA). According to Cooper and Schindler (2008:546) ANOVA uses a single-factor, fixed-effect model to compare the effects of one factor on a continuous dependent variable. Zikmund (2003:529) describes the ANOVA as the analysis of the effects of one treatment variable on an interval-scaled or ratio-scaled dependent variable – the technique to determine whether a statistically significant difference in means occurs between two or more groups. The variances are compared to draw inferences about the means.

Cooper and Schindler (2008:547) state that the test statistic for ANOVA is the F ratio. The mean square is formulated by means of the F ratio. If the null hypothesis is true, there should be no difference between the populations, and the ratio should be close to 1. If the population means are not equal, the F ratio should be greater than 1. The F distribution determines the size of ratio necessary to reject the null hypothesis for a particular sample size and level of significance.

Together with the F -statistic a p-value is calculated. If the p-value < 0.05 , the null hypothesis is rejected. If the p-value is ≥ 0.05 the null hypothesis is not rejected because the means of all the groups are the same (Eiselen, *et al.*, 2005:120).

Zikmund (2003:535) states that in ANOVA, if the observed statistic is greater than the test value for some level of significance, the hypothesis that there is no significant difference in the means of the sample groups may be rejected.

- **Post-Hoc test**

Eiselen, *et al.* (2005:121) state that if the null hypothesis of equal population means is rejected, it is only known that at least two groups have a different population mean, but not which groups are different. In order to determine which groups are different, additional hypothesis tests need to be conducted. These tests are referred to as multiple comparison or Post-Hoc tests. Post-Hoc tests test if each pair of means is the same. The Post-Hoc tests differ from the individual *t*-tests because they adjust the p-value to take account of the fact that multiple *t*-tests are performed.

- ***t*-test**

According to Zikmund (2003:535), the *t*-test is appropriate when the population standard deviation is unknown. The *t*-test is chosen when the sample is small. Zikmund (2003:524) defines a *t*-test as a technique used to test the hypothesis that the mean scores on some interval-scale variable are significantly different for two independent samples or groups. To use the *t*-test for difference of means, it is assumed that the two samples are drawn from normal distributions.

5.5.4.3 Test for association and correlation

Eiselen, *et al.* (2005:85) state that two variables are associated or correlated if they occur together in a patterned way. The stronger the association between two variables, the more likely it can be guessed correctly.

Cooper and Schindler (2008:571) summarise the commonly used measures of association in table 5.7.

TABLE 5.7 Commonly used measures of association

Measurement	Coefficient	Comment on uses
Interval and ratio	Pearson (Product moment correlation coefficient)	For continuous linearly related variables
	Correlation ratio (eta)	For non-linear data or relating a main effect to a continuous dependent variable
	Biserial	One continuous and one dichotomous variable with an underlying normal distribution
	Partial correlation	Three variables; relating two with the third's effect taken out
	Multiple correlation	Three variables; relating one variable with two others
	Bivariate linear regression	Predicting one variable from another's scores
Ordinal	Gamma	Based on concordant-discordant pairs
	Kendall's tau b	P – Q based: adjustment for tied ranks
	Kendall's tau c	P – Q based; adjustment for table dimensions
	Somer's d	P – Q based: asymmetrical extension of gamma
	Spearman's rho	Product moment correlation for ranked data
Nominal	Phi	Chi-square based for 2 x 2 tables
	Cramer's V	Chi-square based; adjustment when one table dimension > 2
	Contingency coefficient C	Chi-square based: flexible data and distribution assumptions
	Lambda	PRE-based interpretation
	Goodman & Kruskal's tau	PRE-based with table marginal's emphasis
	Uncertainty coefficient	Useful for multidimensional tables
	Kappa	Agreement measure

Source: Cooper and Schindler (2008:571)

Eiselen, *et al.* (2005:96) state that the Pearson's r is used to determine the extent of linear association between two continuous variables. Pearson's r can be used provided certain assumptions are met. The assumptions are:

- the association between the two variables is linear;
- both variables are normally distributed; and
- the variances of the two variables are equal.

Theoretically, Pearson's r , can take on values between -1 and +1, where -1 refers negative, decreasing linear relationships, 0 refers to no linear relationship, and a value of 1 refers to a perfect positive or increasing linear relationship.

Eiselen, *et al.* (2005:99) further note that a correlation can also be interpreted as an effect size. A correlation of smaller than 0.1 (or > -0.1) is considered insubstantial or negligible, while a correlation between 0.1 and 0.3 (or between -0.3 and -0.1) is considered to be small (e.g. a small effect) and a correlation between 0.3 and 0.5 (or -0.5 and -0.3) is moderate (e.g. a moderate effect). If the correlation coefficient is 0.5 or larger (or ≤ -0.5), the correlation is considered to be large (e.g. a large effect). The conclusion can be made that the closer the correlation is to 1 (or -1) the stronger the relationship between the two variables.

5.6 CONCLUSION

This chapter provided a description of the research methodology applied in this study. The description was done according to the research process (as illustrated in figure 5.1). The research problem was shortly summarised, thereafter the objectives were stated as well as the hypotheses. Thirty seven hypotheses were formulated. The main objective is to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

The research design used to test these hypotheses was a formal case study design. The corporate entrepreneurial health audit instrument of Ireland, *et al.* (2006) was used to assess the corporate entrepreneurial and innovative levels in South African short-term

insurance businesses. From this assessment the ultimate objective is to develop a corporate entrepreneurial programme to implement and foster corporate entrepreneurship in South African short term insurance businesses.

The sampling size was 1900. The study made use of a non-probability purposive sample. The response rate was 20,3 %. Data were collected by means of a literature review and a self-administering questionnaire. The statistical techniques that precede the actual results presented in chapter 6 were explained and verified. Apart from the descriptive statistics (frequency distribution, mean, standard deviation and cross frequency tabulation), inferential statistics were also used. The statistical tests used to test the hypotheses are factor analysis, item analysis, chi-square test, One-Way-Analysis of Variance (ANOVA), Post-Hoc tests, *t*-test and Pearson's Correlation Coefficient.

The next chapter explains and interprets the most significant results as found by executing the above techniques.

CHAPTER 6: FINDINGS OF THE RESEARCH STUDY

“There is relatively little field research on the successes or failures of large organisations that have tried to instil corporate entrepreneurship systematically within their walls. Therefore, it is recommended that future research needs to be conducted to determine the successes and failures of corporate intrapreneurship training programmes and to establish what the contribution is towards the creation of an entrepreneurial orientation”.

Thornberry (2003:333)

6.1 INTRODUCTION

The literature study revealed the necessity for businesses to stimulate, foster and develop corporate entrepreneurship in a business. Various methods and techniques were identified to stimulate, foster and develop corporate entrepreneurship in an existing business. The literature also indicated that before a business can implement corporate entrepreneurship the business must firstly determine the current levels of entrepreneurship. The corporate entrepreneurial health audit is an instrument developed by Kuratko, Montagno and Morris (2006) that assists in this regard. The three steps of the health audit consist of the following: firstly the businesses entrepreneurial intensity needs to be measured; secondly the climate for corporate entrepreneurship in the business is diagnosed; and thirdly the degree to which a corporate entrepreneurship strategy and the entrepreneurial behaviour through which it is implemented are understood and accepted by affected parties. For this research the entrepreneurial intensity was measured with the Entrepreneurial Performance Index (EPI) and the climate for corporate entrepreneurship by the Corporate Entrepreneurship Assessment Instrument (CEAI). The development programme will be compiled from the gaps identified by these two measuring instruments.

This health audit forms the basis of this research where it has been applied and tested in short-term insurance businesses in South Africa. This chapter focuses on summarising

and interpreting the research findings and descriptive statistics, based on the responses from the respondents who completed the quantitative research questionnaires.

The first section of this chapter reports on the demographic profile of the respondents by means of descriptive statistics. The second section focuses on reporting the validity and reliability of the instruments used in this research study. Thirdly, this chapter will focus on the performance of respondents in terms of the entrepreneurial intensity of the business and the significant differences in several variables of the degree and frequency of entrepreneurship. Fourthly, the results of the respondents' perception of their workplace and their businesses will be presented. The significant differences of the respondent's are reported by means of the Chi-square, One-Way Analysis of Variance (ANOVA) tests, Post Hoc test, Pearson's Correlation Coefficient and lastly the *t*-test.

6.2 DESCRIPTIVE STATISTICS

Eiselen, *et al.* (2005:50) state that a descriptive statistic summarises some aspect of values making up the variable. Calculating averages, frequency distributions and percentage distributions are the most common ways of summarising data according to Zikmund (2003:473). The descriptive statistics of this study will be presented through frequencies and percentages by means of tables and graphics. The sample consisted of 1900 employees in the South African short-term insurance industry and 386 questionnaires were returned. This gives a response rate of 20,3 %. In the discussion of the various descriptive statistics some frequencies were omitted because of non-responses.

Descriptive statistics will be provided on the gender of respondents, age, ethnicity, highest education qualification, how many years the respondents have been with the business, the distribution of respondents in the various business units of the business, the current management levels and how many years the respondents have been in their current job.

TABLE 6.1 Gender of respondents

Gender	Frequency (n)	Percentage
Male	138	36.41
Female	241	63.59
Total	379	100

FIGURE 6.1 Gender of respondents

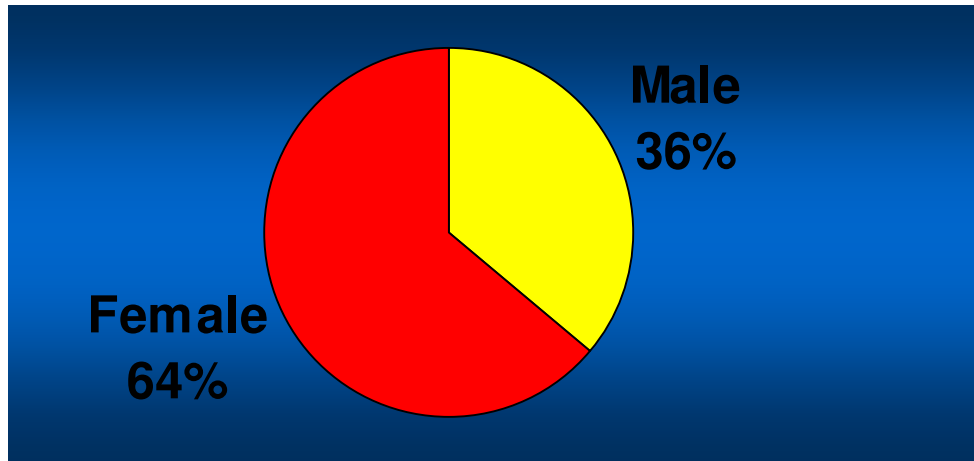
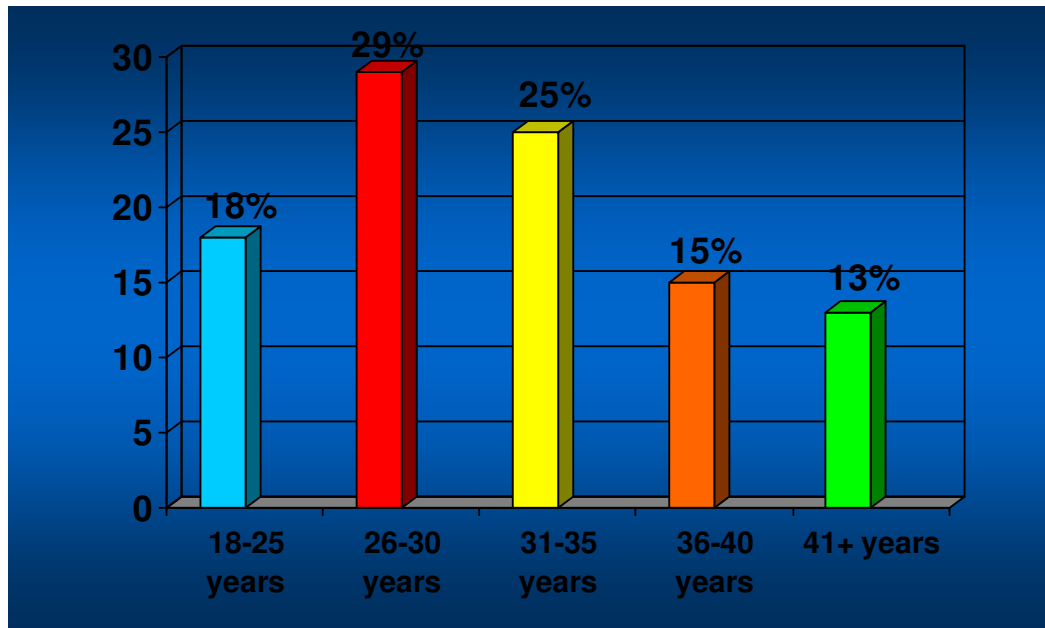


Table 6.1 and figure 6.1 indicate that 36% of the respondents were males and 64% females.

TABLE 6.2 Average ages of respondents

Average of age	Frequency (n)	Percentage
18 – 25 years	70	18.13
26 – 30 years	112	29.02
31 – 35 years	96	24.87
36 – 40 years	57	14.77
41 years and older	51	13.21
Total	386	100

FIGURE 6.2 Average ages of respondents

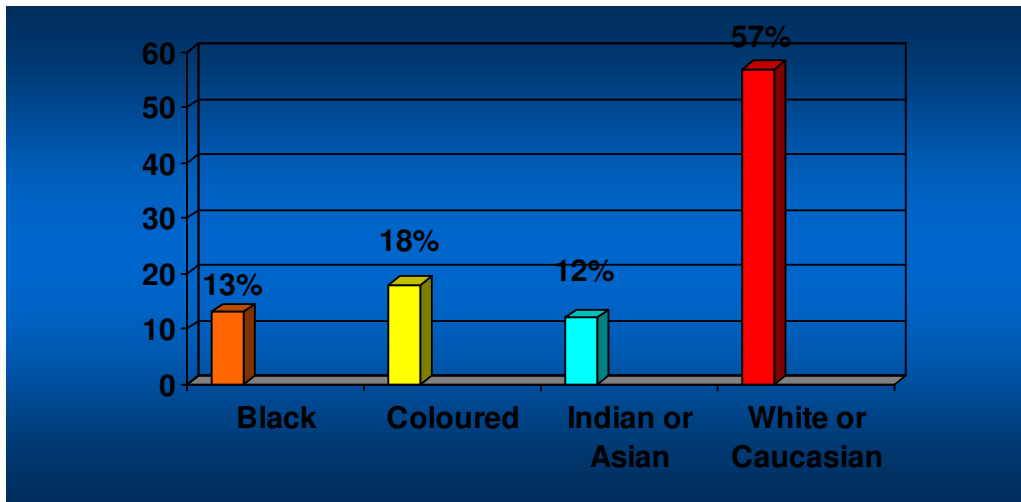


There were not sufficient respondents in each age category (as indicated in the questionnaire) therefore the categories had to be regrouped as indicated in table 6.2 and figure 6.2. From this table and figure it can be noted that most of the respondents fall in the age category of 26 to 30 years. The second largest group falls between the ages of 31 and 35 years (25%). Collectively the age distribution of the respondents indicates that 28% of the respondents are older than 36 years and 72% younger. This means that the respondents consist mostly of very young people.

TABLE 6.3 Ethnic groups of respondents

Ethnic groups	Frequency (n)	Percentage
Black	49	12.83
Coloured	67	17.54
Indian or Asian	45	11.78
White or Caucasian	221	57.85
Total	382	100

FIGURE 6.3 Ethnic groups of respondents

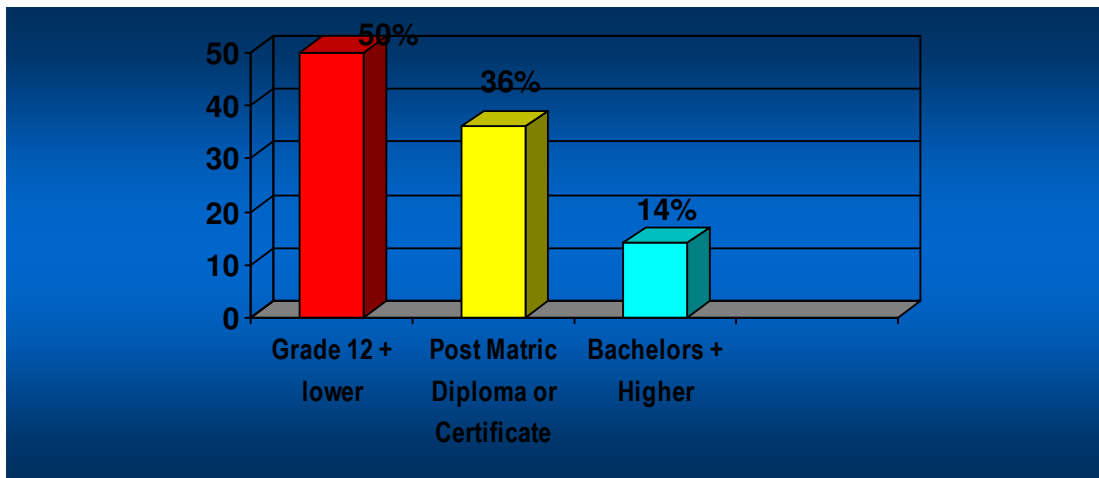


From table 6.3 and figure 6.3 the respondents from the white or Caucasian ethnic group were 57%. The second biggest group was the coloureds (18%) followed by the blacks (13%) and lastly the Indian or Asians (12%).

TABLE 6.4 Educational qualifications of respondents

Educational qualification	Frequency (n)	Percentage
Grade 12 or lower	195	50.52
Post Matric Diploma or Certificate	137	35.49
Bachelor Degree(s) and/or Post Graduate Degree(s)	54	13.99
Total	386	100

FIGURE 6.4 Educational qualifications of respondents

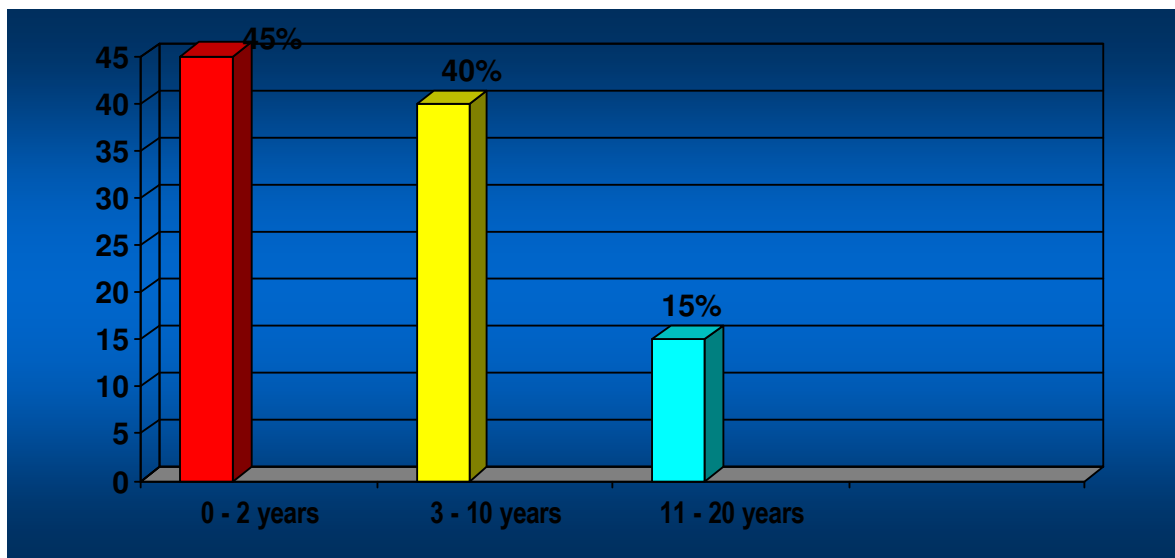


The questionnaire originally categorised the various qualifications into five different groups, but there were not sufficient numbers in this format. The categories were adjusted to only three. From the statistics on the highest educational qualification it can be seen that 50% of respondents have a qualification of Grade 12 or lower. If the other two categories are grouped together it can be deduced that 50% of the respondents have a post matric qualification.

TABLE 6.5 How many years have the respondents been with the insurance business

Quantity of years with business	Frequency (n)	Percentage
0 – 2 years	176	45.60
3 -10 years	153	39.63
11 – years and more	57	14.77
Total	386	100

FIGURE 6.5 How many years have the respondents been with the insurance business



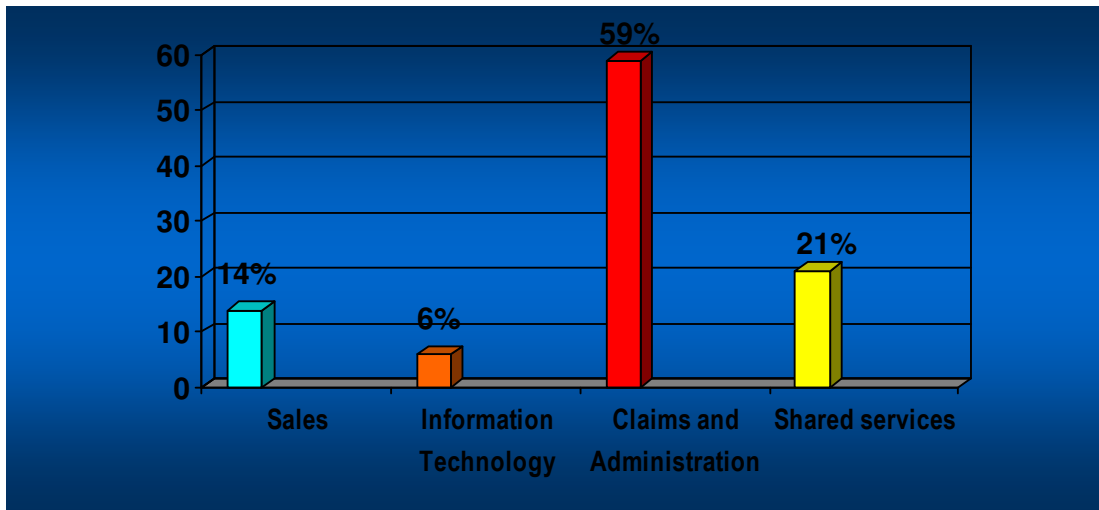
Originally the categories for the number of years the respondents have been with the insurance were grouped in nine categories. Again, because of insufficient responses in each category, the categories were reduced to three. From table 6.5 and figure 6.5 it can be seen that most respondents (55%) have been with the business between 3 to 10 years.

Because a huge number of respondents fall in the category “0 to 2 years” it would be a good indication to compare this with the businesses staff turnover. This could be included as a possibility for future research and comparisons.

TABLE 6.6 Distribution of respondents in the various business units of the insurance businesses

Business unit level	Frequency (n)	Percentage
Sales	52	13.48
Information Technology	25	6.48
Claims and Administration	228	59.06
Shared Services	81	20.98
Total	386	100

FIGURE 6.6 Distribution of respondents in the various business units of the insurance businesses



On the original questionnaire a distinction was made between all the various business units in the insurance businesses. The responses were grouped into four broad categories: sales, information technology, claims and administration and shared services. The **sales category** includes direct sales, brokers and commercial sales. **Claims and administration** includes all the employees from the claims and administration departments as well as top management, legal employees, client services and the ombudsman. The **shared services** category includes financial services, operations,

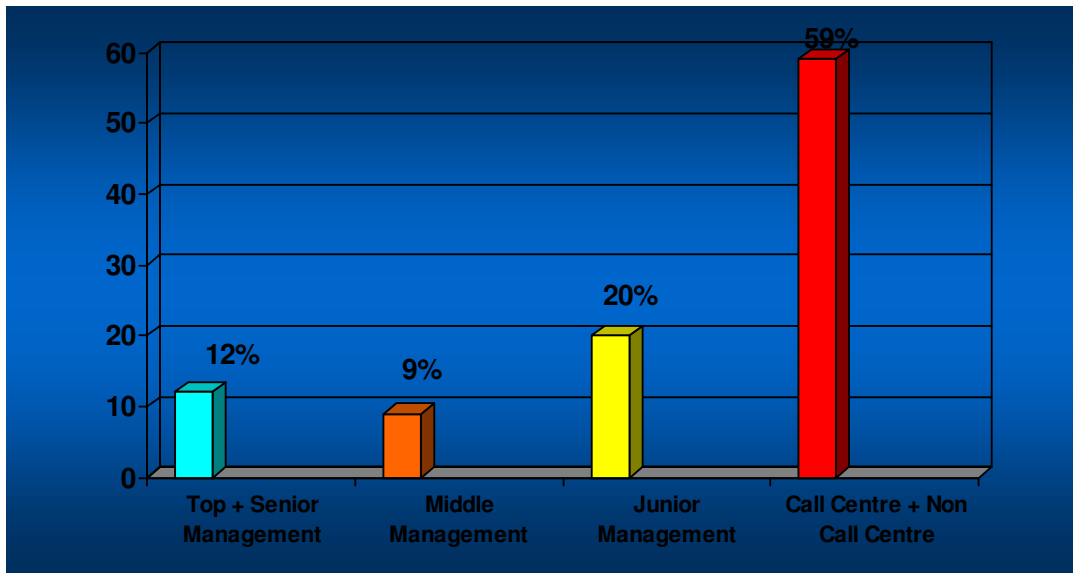
human resources, and risk and assurance. The **information technology** group includes all the employees working with computer related aspects, information systems and information technology.

Most respondents are allocated in the claims and administration business unit. This makes sense because the bulk of an insurance businesses staff will form part of claims and administration.

TABLE 6.7 Current management levels of the respondents

Current job level	Frequency (n)	Percentage
Top and Senior Management	47	12.18
Middle Management	36	9.33
Junior Management	77	19.94
Call Centre and Non-Call Centre staff	226	58.55
Total	386	100

FIGURE 6.7 Current management levels of the respondents



From the original questionnaire the Junior Management and Supervisory categories were grouped together. The **top management** category includes the director and general managers. The **middle management** category includes the Business managers; Human Resources managers; Project managers; Development managers; Senior Brand

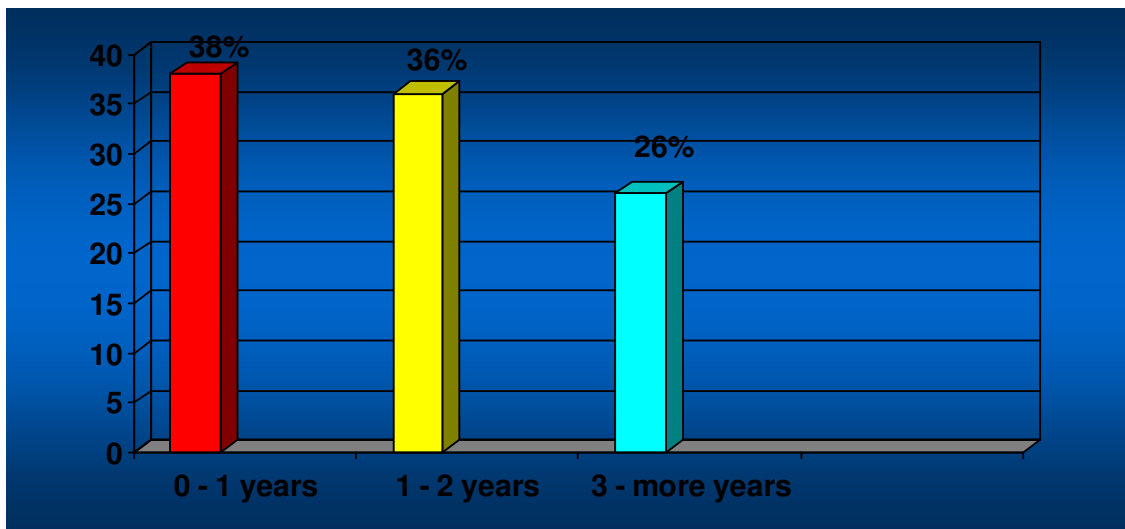
managers; and Assistant General managers. The **junior manager** category includes Team managers; Sales managers; Marketing managers; Team Leaders; Brand managers; Office managers; and Supervisors. Lastly the **Call Centre and non-Call Centre** employees includes the following: Sales Consultants; Contact Centre Consultants; Message Centre Consultants; Sales Administrators; Loss Adjustors; Claims Consultants; Personal Assistants, Programmers and Media Planners.

From table 6.7 and figure 6.7 the majority representation (59%) is from employees in the Call Centre and general workers from the Non-Call Centre category. The responses from the top management and junior management level correspond with the compilation of businesses in general. The middle management level, in terms of the other levels, is under-represented with only 36%.

TABLE 6.8 How many years have the respondents been in their current job

Years in present job	Frequency (n)	Percentage
0 – 12 months	149	38.60
1 – 2 years	138	35.75
3 – more years	99	25.65
Total	386	100

FIGURE 6.8 How many years have the respondents been in their current job



In the original questionnaire there were nine categories but because there were not sufficient responses in all the categories it had to be re-grouped into three categories. Table 6.8 and figure 6.8 indicate that 38% of the respondents have been in their current jobs for less than 12 months, 36 % of the respondents have been in their current position for one to two years and the remainder (26%) for three years or more.

When the time in current job is compared with time that the respondents have been in the business, there is a direct correlation. 45% of respondents indicated that they have been with the business for less than two years and 38% respondents indicated that they have been in their current job for less than a year. 55% of respondents indicated that they have been working in the business for 3 years or more and 26% respondents indicated that they have been in their current position for more than 3 years. This means that the employees in the insurance businesses, although they have been with their business for a number of years, are not stagnating in the same positions and are either promoted or are moving from one business unit to another.

The **outstanding characteristics** resembling the profile of the respondents are as follows:

Female, between the age of 26 and 30 years; from the white or caucasian ethnic group; with an educational qualification of grade 12 or lower, that has been with the insurance business for less than 2 years; working in the claims or administrative section of the business and forms part of the call centre or non-call centre level and is less than 6 to 12 months in her present position.

6.3 Validity and reliability of the measuring instrument

The Entrepreneurial Performance Index (EPI) and the Corporate Entrepreneurship Assessment Instrument (CEAI) have been used widely in various research projects and in various countries. In all international research studies where these instruments have been used it was proved that both instruments are valid and reliable. Studies conducted in South Africa also confirm the validity and reliability (Bauwmeester, 2005; Gantsho, 2006;

Scheepers, 2007; Nyanjom, 2007). Based on these premises it can be stated that the two instruments used in this study are valid and reliable.

To add further support to the validity and reliability of the CEAI, a factor analysis was conducted.

TABLE 6.9 Rotated factor analysis of the CEAI

Variable descriptor		Factor loadings				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
C9	People are encouraged to take calculated risks	0.890				
C10	Individual risk takers are recognised	0.808				
C11	“risk taker” is regarded as a positive attitude	0.806				
C12	Business supports small and experimental projects	0.614				
C13	Desire of people to generate new ideas across the departmental and functional boundaries	0.566				
C6	Senior managers encourage innovators to bend rules	0.556				
C8	Several options exist in the business to get financial support for innovative projects	0.551				
C48	Business rewards employees who take risks	0.535				
C31	Several options exist in business to get financial support for innovative projects	0.509				
C32	Successful innovative projects get additional rewards	0.442				
C30	New innovative ideas are followed by promotion	0.320				
C59	Organisational structure is flexible	0.325				
C76	Businesses environment encourages openness about ways to improve operations	0.392				
C74	Innovation and risk taking are core values in the business	0.468				
C49	Jobs are broadly defined	0.395				
C14	People are encouraged to talk about ideas for new projects	0.472				
C75	New ideas receive quick feedback	0.304				
C5	If working on projects, making decisions without going through red tape is allowed	0.461				
C4	Innovative ideas receive management encouragement	0.406				
C7	Top managers are experienced with the innovation process	0.485				
C46	Job description specifies standards of performance		0.582			
C34	Level of work performance is clear		0.577			
C33	Work performance is discussed frequently		0.540			
C52	Annual performance appraisals include employee innovativeness		0.532			
C72	Business has an urgency for change and innovation		0.300			
C69	Business has a culture of reward for the tried and true		0.370			



C57	Managers are encouraged to “micromanage” employees and projects	0.311		
C28	Get special recognition if work performance is good	0.374		
C67	Organisational structure is clearly defined and delineated	0.484		
C26	Rewards depend on work on the job	0.375		
C51	Creative potential of employees is developed	0.447		
C50	Employees can pursue multiple career paths	0.318		
C27	Job responsibilities are increased if individuals are performing well	0.352		
C54	Business balances incentives for individual initiative with incentives for team collaboration	0.314		
C70	Business celebrates innovative achievements	0.383		
C22	Individual gets to decide what to do on job	0.808		
C20	Freedom to decide what to do on job	0.778		
C21	Own responsibility to decide how job gets done	0.759		
C23	Have autonomy to decide what to do on job	0.718		
C15	Freedom to be own boss	0.574		
C18	Business provides freedom to use own judgement	0.570		
C19	Individuals get the chance to do something that makes use of their abilities	0.424		
C17	Business gives opportunity to be creative	0.500		
C42	Follows standard operating procedures to do major tasks		0.323	
C61	Red tape and slow approval are problems in the business		0.425	
C53	More concern with process than with performance		0.379	
C16	Mistakes made on job are punished and get harsh criticism		0.403	
C56	Bureaucratic system takes entrepreneurial ability away		0.337	
C58	Too many levels in the business		0.428	
C60	Rigid chain of command limits ability to experiment with new ideas		0.487	
C73	Business has motto: “ if it is not broken, don’t fix it”		0.423	
C3	Top management is aware and receptive of ideas and suggestions		0.439	
C2	New ideas for improvement are encouraged		0.415	
C37	Have right time and work load to do everything well			0.759
C36	Enough time to get everything done			0.738
C39	Work with time constraint on job			0.465
C40	There is time for long-term problem solving			0.446
C38	Job is structured with little time to think of wider organisational problems			0.417
C35	Work load keeps from spending time on developing new ideas			0.385
C41	Employees with good ideas get free time for development of ideas			0.334

In table 6.10 the variance of each factor is indicated.

Table 6.10 Variance explained by the factor (VP)

Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Total
7.237	4.907	3.876	2.919	2.522	21.461
All Eigen values >1					

The Eigen values, which determine the number of factors when factor loading is done, are indicated in table 6.10. The Eigen values have to be greater than or equal to one in order to be included as a factor when loading is done on variables.

Although the cumulative variances explained (VP) in table 6.10 are not on such a high level, it is still believed that there is a stable factor structure present. This is supported by the Eigen values that are all above 1 and it is the opinion of the researcher that this is on an acceptable level.

From the factor analysis the factors are labelled as follow:

- Factor 1 = Managerial support for corporate entrepreneurship and innovation
- Factor 2 = Rewards
- Factor 3 = Work discretion
- Factor 4 = Organisational boundaries
- Factor 5 = Time availability

To confirm the reliability and accuracy of the CEAI, the Cronbach alpha values were calculated for the five factors. Table 6.11 summarises these values. As can be seen from this table the Cronbach alpha values are relatively high. Nunally (1978) recommended that 0.500 is an acceptable threshold for an acceptable alpha score. It can be deduced that the accuracy is on an acceptable level and supports the fact that the CEAI is reliable.

TABLE 6.11 Cronbach alpha values of the CEAI factors

Factor	Description	Cronbach alpha value
Factor 1	Management support	0.9222
Factor 2	Rewards/reinforcements	0.7936
Factor 3	Work discretion	0.8700
Factor 4	Organisational boundaries	0.6591
Factor 5	Time availability	0.7119

The overall alpha value of these factors is 0.9252.

6.4 Results of the short term insurance businesses entrepreneurial intensity

As indicated in chapters 3 and 4, a business's entrepreneurial performance at a given point in time is reflected in its entrepreneurial intensity score. Entrepreneurial intensity is concerned with the degree and frequency of entrepreneurship occurring within a business (Ireland, *et al.*, 2006b:22). The degree of entrepreneurship refers to the proactiveness, innovativeness and risk-taking in the business. Frequency involves the measuring of the number of new innovative products, processes and services over some defined time period.

The Entrepreneurial Performance Index (EPI) can be used to measure the businesses entrepreneurial intensity. The instrument can be used to evaluate the overall businesses entrepreneurial intensity but also the entrepreneurial intensity of different parts of a business. The instrument consists of 21 items. The first 12 items measure a business's degree of entrepreneurship and the remaining items the frequency of entrepreneurship.

Firstly, the influence of various dependent variables (relating to the degree of entrepreneurship) on certain independent variables (years in business, business unit level and management level) will be reflected in table 6.12.

Secondly, table 6.13 will address the results of the businesses degree of entrepreneurship. Thirdly, the results of the frequency of entrepreneurship will be

presented. Tables 6.14 to 6.16 will present the results of various independent variables on the dependent variables: number of product improvements/revisions introduced by individuals in the business; new product improvements/revisions compared to competitors; and the number of new product introductions that did not previously exist in the market (“new market”). Fourthly, tables 6.17 to 6.21 will address the results of the businesses frequency of entrepreneurship in terms of various dependent and independent variables.

From table 6.12 the results of the influence of the dependent variables on certain independent variables, where there is a statistical significant difference will be discussed one at a time.

6.4.1 The relationship of the rate of new product/service introductions compared to competitors (DV) and the years in working in the business (IV)

Table 6.12 indicates that there is a statistical significant difference between the years that the employees have been working in the insurance business and the high rate of new product/service introductions compared to competitors. The years working in the insurance business are divided between less than two years, three to ten years and eleven and more years. The statistics indicate that the perceptions of employees that have been working for less than two years in their businesses, differ significantly from those of the employees that have been working longer in their businesses.

In terms of the stated hypothesis the following can be deduced:

Hypothesis Ho1 is rejected: There is no statistical difference in terms of the years that the employees have been working in South African short-term insurance businesses and the perceptions on the rate of new products/service introductions compared to competitors.



TABLE 6.12 The influence of various dependent variables (relating to the degree of entrepreneurship) on certain independent variables

Dependent variables	Independent variables													
	Years: business – mean scores				Business unit level – mean scores					Management level – mean scores				
	≤ 2 years	3-10 Years	≥ 11 years	P value (ANOVA)	Sales	IT	Claims & Admin	Shared Services	P value (ANOVA)	Top	Middle	Lower	Call & non Call Centre	P value (ANOVA)
A	b	c		a	b	c	d		a	b	c	d		
High rate of new product/service introductions compared to competitors	3.8 a<b a<c	4.0	4.2	0.0009***	3.9	3.8	3.9	3.9	0.8989	4.0	4.1	4.1	3.8	0.1966
Emphasis on continuous improvement in methods of production and/or service delivery	3.9	3.9	4.3	0.3153	3.9 a<c	3.7	4.1 c<d	3.7	0.0063***	4.0	4.1	4.1	3.9	0.2834
Risk-taking by executives in exploring new opportunities	3.2	3.3	3.5	0.2763	3.4	3.2	3.3	3.3	0.6972	3.1 a<b a<c a<d	3.6	3.5	3.3	0.0161***
A “live and let live” philosophy in dealing with competitors	3.2	3.3	3.3	0.0742	3.1	3.3	3.3	3.3	0.9464	2.8 a<c a<d	3.0 b<d	3.3	3.4	0.0069***
Seeking of unusual, novel solutions by senior management to problems	3.4	3.3	3.8	0.1410	3.3	3.3	3.5	3.4	0.5225	3.5	3.8	3.5	3.3	0.3539
Top management philosophy that emphasises proven products and services	3.2	3.4	3.4	0.2221	3.3	3.2	3.3	3.4	0.7815	3.4	3.2	3.3	3.3	0.4777
Top-level decision-making is characterised by:														
Cautious, pragmatic, step-at-a-time adjustments to problems	3.3	3.2	3.1	0.3350	3.4 -	2.8 -	3.2 -	3.3 -	0.0245***	3.0	2.9 b<c b<d	3.3	3.3	0.0310***
Active search for big opportunities	3.7 a<c	3.6 b<c	4.1	0.0045***	3.9	3.7	3.7	3.6	0.4270	3.8	3.9	3.8	3.6	0.1531
Rapid growth as the dominant goal	3.5	3.4	3.5	0.6733	3.6	3.6	3.4	3.6	0.7762	3.7	3.4	3.4	3.5	0.4850
Large, bold decisions despite uncertainties of the outcomes	2.8 a<b	3.0	3.0	0.0417***	3.0	2.9	2.9	3.1	0.8100	2.9	3.1 b<c	2.7 c<d	3.0	0.0452***
Compromises among conflicting demands of stakeholders	3.0 a<b a<c	3.2	3.3	0.0070***	3.0	3.2	3.1	3.2	0.8181	3.2	3.0 b<d	3.0 c<d	3.2	0.0101***
Steady growth and stability as primary concerns	3.6	3.6	3.9	0.5773	3.9	3.3	3.7	3.7	0.3157	3.7	3.8	3.8	3.6	0.2386

p*** statistical significance at the 5% level

Symbols with < indicate that there is a significant difference at the 5% level

6.4.2 The relationship of the perceptions that top level decision-making is characterised by an active search for big opportunities (DV) and the years in working in the business (IV)

As can be seen on table 6.12 there is a significant statistical difference between the years that the employees have been working in their businesses and the perceptions that top level decision-making is characterised by an active search for big opportunities in the businesses. On further analysis of the differences between the years in their businesses it can be seen that the employees that have been working in their businesses for eleven years and more are of the opinion that top level decision making is characterised by an active search for big opportunities in the businesses.

With regard to the stated hypothesis it can be deduced that:

Hypothesis Ho2 is rejected: There is no statistical difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by an active search of big opportunities in South African short-term insurance businesses.

6.4.3 The relationship of the perceptions that top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes (DV) and the years in working in the business (IV)

Table 6.12 indicates that there is a significant statistical difference between the years that the employees have been working in their business and the perceptions that top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes. When looking at the further analysis it is clear that there is a difference between the employees working for two years and less in their businesses and the employees that have been working for three years and more in their businesses. The employees that have been working for three years or more in their business indicate that top management makes large, bold decisions despite uncertainties of the outcomes.

In terms of the stated hypothesis it can be deduced that:

Hypothesis Ho3 is rejected: There is no statistical difference in terms of the years that the employees have been working in South African short-term insurance businesses and the perceptions that top level decision-making is characterised by large bold decisions despite uncertainties of the outcomes.

6.4.4 The relationship of the perceptions that top level decision-making is characterised by compromises among conflicting demands of stakeholders (DV) and the years in working in the business (IV)

The stakeholders include the owners, government, management, customers, employees and suppliers. Table 6.12 indicates that there is a significant statistical difference between the years that the employees have been working in their businesses and the perceptions that top level decision-making is characterised by compromises among the conflicting demands of stakeholders. Again with further analysis it is clear that the perceptions of employees that have been working in their businesses for two years and less are different from those of the employees that have been working for longer in the business.

In terms of the stated hypothesis the following can be deduced:

Hypothesis Ho4 is rejected: There is no statistical difference in terms of the years that the employees have been working in South African short-term insurance businesses and the perceptions that top level decision-making is characterised by compromises among the conflicting demands of owners, government, management, customers, employees and suppliers are made by a business.

In summary when looking at the analysis of the influence of the various dependent variables (discussed in paragraphs 6.4.1 to 6.4.4) on the independent variable years in business, there is a constant outcome that the perceptions of employees that have been working in their businesses for two years and less differs significantly from those of the employees that have been working for their businesses for three years and longer. There are not significant differences between the employees that have been working for their businesses between three and ten years, and for eleven and more years.

6.4.5 The relationship of the emphasis on continuous improvement in methods of production and/or services delivery (DV) and the business units (IV)

The business unit levels are divided between sales, information technology, claims and administration, and shared services. Table 6.12 indicates that there is a significant statistical difference between how the insurance businesses are characterised in terms of the emphasis on continuous improvement in methods of production and/or service delivery relative to the various business units.

With further analysis there is also proof that there is a significant difference between the employees from the sales business unit and the employees from the claims and administration business unit. There is also a significant difference between the employees from claims and administration and the shared services business unit.

The perceptions of the employees from the sales, and the claims and administration business units are more positive towards how their s are characterised by an emphasis on continuous improvement in methods of production and/or service delivery.

Concerning these variables, the results indicate that Claims and Administration employees' perception is more positive with regard to the emphasis on continuous improvement in methods of production and/or service delivery, than are the other business units.

A possible reason for this finding is because the sales employees and the claims and administration employees are mostly responsible for service delivery, and are therefore more positive in this regard.

In terms of the stated hypothesis, the following can be deduced:

Hypothesis Ho5s rejected: There is no statistical significant difference between the business unit levels and the emphasis that South African short-term insurance businesses places on continuous improvement in methods of production and/or service delivery.

6.4.6 The relationship of top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems (DV) and the business units (IV)

From table 6.12 it can be deduced that there is a significant statistical difference between business units and that top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

What is interesting from the further analysis is that no significant statistical relationship can be found amongst the various business units. When comparing the mean scores it can be seen that the sales employees' perceptions are higher than those of the other business unit employees in terms of how top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

Regardless of this, in terms of the stated hypothesis it can be deduced that:

Hypothesis Ho6 is rejected: There is no statistical significant difference between the business unit levels in South African short-term insurance businesses and how the top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

6.4.7 The relationship of risk-taking by executives in exploring new opportunities (DV) and the management levels (IV)

The management levels are divided between top-, middle- and lower management as well as employees in the Call and non-Call Centre. Just for clarity (as indicated previously) the employees that resort under the category Call and non-Call Centre include the following employees: consultants, personal assistants, programmers and media planners.

Table 6.12 indicates that there is a significant statistical difference between the different management levels perceptions on risk-taking by executives in exploring new opportunities. In terms of the industries' executives taking risks in exploring new opportunities, the top management's perception differs significantly from the other management levels. The other management levels indicate that their businesses top and

senior managers take a lot of risks in exploring new opportunities. This could be that the other management levels are not involved in exploring these new opportunities, and therefore they might perceive it as more risky.

With regard to the hypothesis it can be deduced that:

Hypothesis Ho7s rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how the executives take risks in exploring new opportunities.

6.4.8 The relationship of a “live and let live” philosophy in dealing with competitors (DV) and the management levels (IV)

A significant statistical difference is shown in table 6.12 between the various management levels and the way in which the businesses are characterised by a “live and let live” philosophy in dealing with competitors.

After more rigorous analysis of these two variables it is clear that top management’s perceptions differ significantly from lower management’s as well as from the employees of the call and non-call centre. The perceptions of the middle management also differ significantly from those of the employees from the call and non-call centre. Overall there is a difference between the top and middle management’s perceptions and the rest of the employees in their businesses. Lower management and the call and non-call centre employees are of the opinion that the businesses’ has a “live and let live” philosophy in dealing with competitors. In this regard top management disagrees with this philosophy.

In terms of the stated hypothesis, the following can be deduced:

Hypothesis Ho8s rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the “live and let live” philosophy in dealing with competitors.

6.4.9 The relationship of how top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustment to problems (DV) and the management levels (IV)

Table 6.12 indicates that there is a significant statistical difference between the employees' perceptions in the different management levels in their businesses and the way in which top-level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustment to problems.

With further analysis it is clear that middle management's perceptions differ significantly from lower management and the employees from the call and non-call centre. There is no significant difference between top and middle management's perceptions.

It can be deduced, from the stated hypothesis that:

Hypothesis Ho9s rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

6.4.10 The relationship of how top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes (DV) and the management levels (IV)

Table 6.12 shows that there is a significant statistical difference between the perceptions of the employees on the various management levels on how top level decision-making in their businesses is characterised by large, bold decisions despite uncertainties of the outcomes.

From a more rigorous analysis it can be indicated that there is a significant statistical difference between middle management and lower management, as well as between lower level management and the call and non-call centre employees. There is no difference between top and middle management in terms of their perception that top management makes bold decisions despite uncertainties of the outcomes. The means of the different

management levels indicate that top level management disagrees that large, bold decisions are made despite uncertainties of the outcomes.

It can be deduced that:

Hypotheses Ho10 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance and how top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes.

6.4.11 The relationship of how top level decision-making is characterised by compromises among conflicting demands of stakeholders (DV) and the management levels (IV)

There is a significant statistical difference between the various management levels on the perceptions that top level decision-making is characterised by compromises among conflicting demands of stakeholders (owners, government, customers, employees and suppliers).

With further analysis there is also a statistical difference between middle and lower management, as well as between lower management and the employees from the call and non-call centre. There is no statistical significant difference between top level management and any of the other employees. This could be that top management is of the opinion that they do not make compromises, and that all the stakeholders are treated equally, but middle and lower management employees disagree in this regard.

From the stated hypothesis it can be deduced that:

Hypotheses Ho11 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by compromises among conflicting demands of owners, government, management, customers, employees and suppliers.

From all the dependent variables and independent variables listed in table 6.12 there are only statistical differences between a few variables (as discussed in paragraphs 6.4.1 to

6.4.11). It is interesting that there are not more statistical differences between the various business units and the management levels. The researcher expected that there would be significant statistical differences in terms of how the insurance businesses are characterised by the seeking of unusual, novel solutions by senior management to problems, as well as the emphasis on continuous improvement of production and/or service delivery in terms of the years that the employees have been working in their businesses and the various management levels.

Next the degree of entrepreneurship as a component of entrepreneurial intensity will be reported on in table 6.13.

The degree of entrepreneurship is measured on a 5-point Likert scale ranging from 1 – strongly disagree to 5 – strongly agree. On the premises of this scale it can be concluded that the business has a moderate degree of entrepreneurship because the average mean scores are around 3 to 4 out of 5. In chapter 7 this finding will be elaborated on with regard to the shortcomings of the degree of entrepreneurship.

In terms of the stated hypothesis it can be deduced that:

Hypothesis Ho12 is accepted. The degree of entrepreneurship in South African short-term insurance businesses is not high.

The frequency of entrepreneurship refers to how many entrepreneurial events take place in a given period of time (Morris, *et al.*, 2008:69).

The EPI uses 9 questions to determine a business's frequency of entrepreneurship. With these 9 questions there is a clear distinction between the products, services and processes. For purposes of this study the products and services questions are combined, because of the nature of the businesses, therefore only 5 questions were used to determine the frequency of entrepreneurship.

TABLE 6.13 Results of the variables of the degree of entrepreneurship

	Variable	N	1	2	3	4	5	Mean	Standard deviation
1	A high rate of new product/service introductions, compared to competitors (including new features and improvements)	385	1	4	18	51	26	3.96	0.82
2	An emphasis on continuous improvements in methods of production and/or service delivery	386	1	5	11	54	29	4.04	0.83
3	Risk-taking by key executives in seizing and exploring chancy growth opportunities	383	3	10	42	36	9	3.37	0.90
4**	A “live and let live” philosophy in dealing with competitors	384	4	12	40	37	7	3.32	0.91
5	Seeking of unusual, novel solutions by senior management to problems via the use of “idea people”, brainstorming, etc.	385	3	15	28	42	12	3.46	0.98
6**	A top management philosophy that emphasises proven products and services, and the avoidance of heavy new product development costs	385	1	14	41	34	10	3.37	0.88
Top level decision-making that is characterised by:									
7**	Cautious, pragmatic, step-at-a-time adjustments to problems	385	3	20	30	41	6	3.27	0.94
8	Active search for big opportunities	383	3	6	25	49	17	3.72	0.91
9	Rapid growth as the dominant goal	373	2	10	32	42	14	3.53	0.93
10	Large, bold decisions despite uncertainties of the outcomes	382	3	28	40	22	7	3.00	0.95
11**	Compromises among the conflicting demands of owners, government, management, customers, employees and suppliers	380	2	16	48	29	5	3.18	0.82
12	Steady growth and stability as primary concerns	381	2	7	25	50	16	3.71	0.88
**Questions 4, 6, 7 and 11 are reversed									

The results on the frequency of entrepreneurship will be presented as follows:

- number of new products/service that the insurance business introduced during the past two years (2007 – 2009) – table 6.14 and figure 6.9;
- number of new processes that the insurance businesses implemented during the past two years (2007 – 2009) – table 6.15 and figure 6.10;
- number of new product improvements or revisions that the individual respondents introduced during the past two years (2007 – 2009) compared to previous years – table 6.16 and figure 6.11;

- number of new product introductions compared with major competitors in the industry – table 6.17 and figure 6.12; and
- degree to which new product introductions include products that did not previously exist in the market – table 6.18 and figure 6.13.

Further analysis was also conducted in terms of the frequency of entrepreneurship and is presented as follows:

- the influence of various independent variables (number of years in the insurance business, business unit, management level, and years in current job) on the dependent variable product improvements/revisions introduced by individuals in their business – table 6.19;
- the influence of various dependent variables (number of years in the insurance business, business unit, management level, and years in current job) on the dependent variable new product improvements/revisions compared to competitors in the industry – table 6.20; and
- the influence of various independent variables (number of years in the business, business unit, management level, and years in current job) on the dependent variable number of new product introductions that did not previously exist in the market (“new market”).

TABLE 6.14 Number of new products/services that the insurance business introduced during the past two years (2007 – 2009)

Number of new products/services introduced by the business	Frequency (n)	Percentage
0 – 5	141	38
6 – 10	51	14
> 10	12	3
Don't know	167	45
Total	371	100

FIGURE 6.9 Number of new products/services that the insurance business introduced

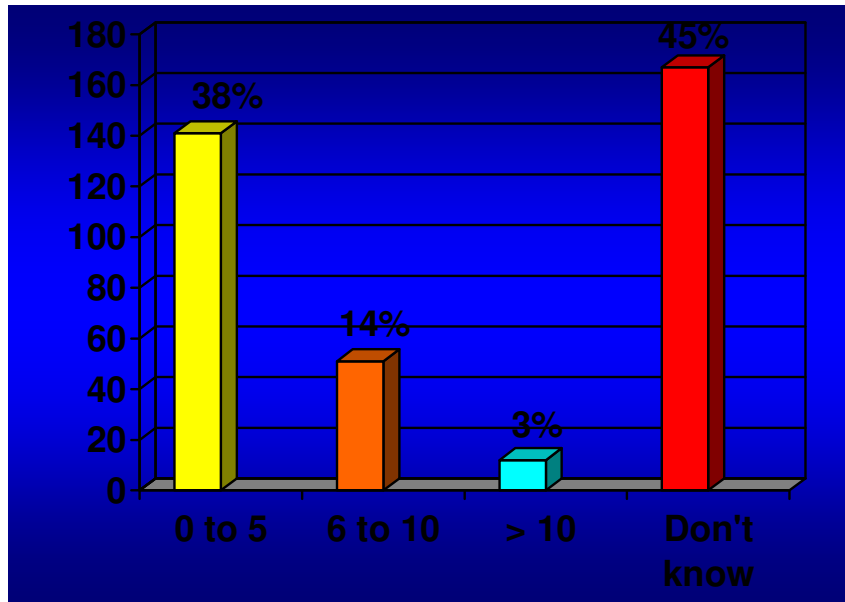


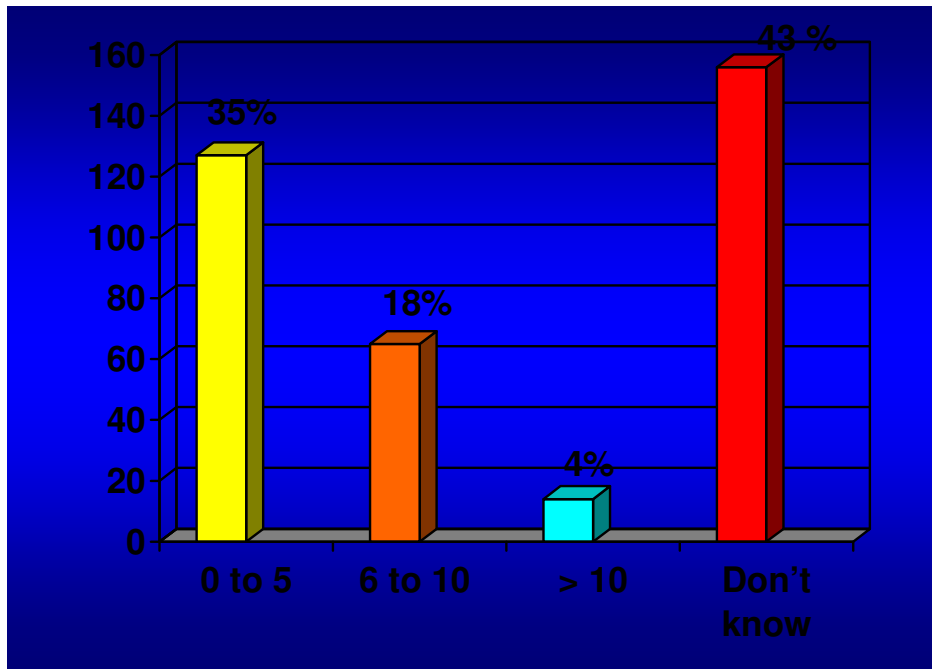
Table 6.14 and figure 6.9 indicate that 45 % of the respondents don't know how many products or services their businesses introduced during the past two years. A large number of respondents (45%) indicated that they had been working for their business for less than 2 years (refer to table 6.5 and figure 6.5). These relatively new employees may not be aware of all the products and services offered by their business. A possible reason for this is that these new products/services introduced in the insurance business are not clearly communicated throughout the business and/or that a culture regarding new product innovation is not present in their businesses.

From the results presented in table 6.15 and figure 6.9 it can be deduced that most of the new products and services introduced during the last two years (2007 to 2009) range between 0 – 5.

TABLE 6.15 Number of new processes that the insurance business implemented during the past two years (2007 – 2009)

Number of new processes implemented by the business	Frequency (n)	Percentage
0 – 5	127	35
6 – 10	65	18
> 10	14	4
Don't know	156	43
Total	362	100

FIGURE 6.10 Number of new processes that the insurance business implemented during the past two years (2007 – 2009)



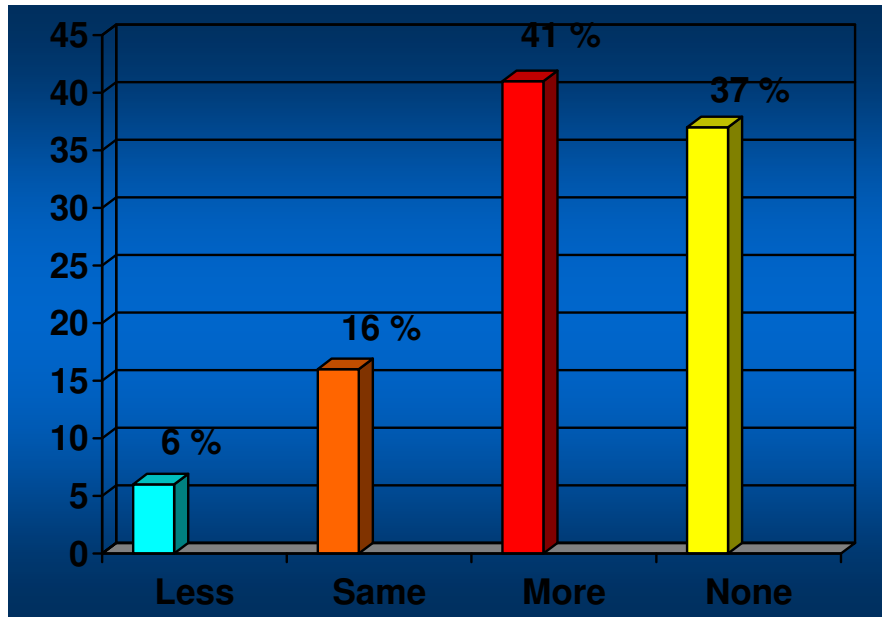
The results of the number of new processes implemented by the insurance business in the last two years is almost the same as the number of new products and services introduced by the business over the same period of time. As can be seen in table 6.15 and figure 6.10 43 % of the respondents don't know how many new processes were implemented by their business. Thirty five per cent of the respondents indicated that between 0 and 5 new processes were implemented and 18% of the respondents indicated that 6 to 10 new

processes were implemented. The same argument as offered with regard to table 6.14 and figure 6.9 can be used for the implementation of new processes.

TABLE 6.16 Number of new product improvements or revisions that the individual respondents introduced during the past two years (2007 – 2009) compared to previous years

Number of new product improvements/revisions of individual respondents introduced	Frequency (n)	Percentage
Less	23	6
Same	56	16
More	147	41
None	132	37
Total	358	100

FIGURE 6.11 Number of new product improvements or revisions that the individual respondents introduced during the past two years (2007 – 2009) compared to previous years



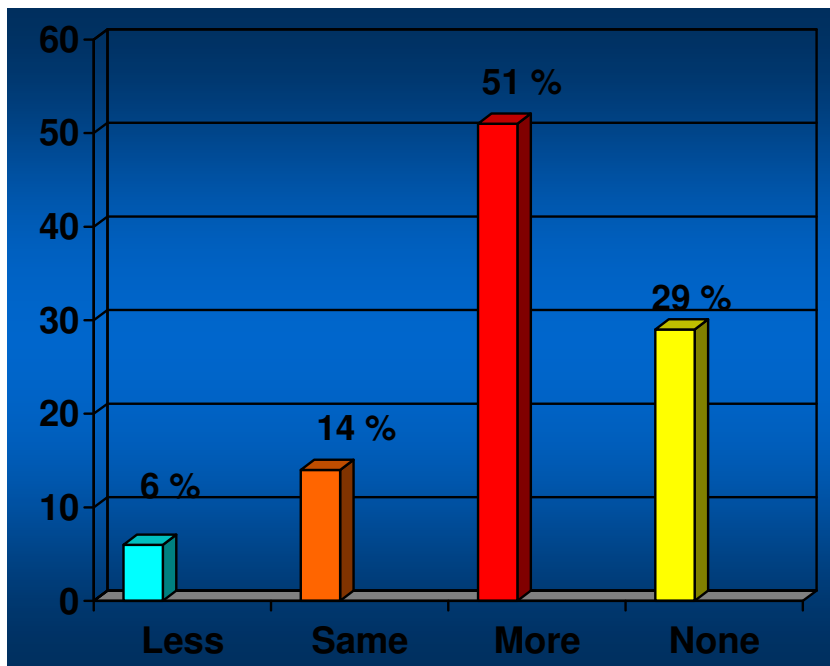
From table 6.16 and figure 6.11 it is evident that 41% of respondents indicated that as an individual they introduced more product improvements or revisions during the last two years (2007 to 2009) compared to previous years. This is a good sign especially when

compared to the 6% of respondents that had less new improvements or revisions than the previous two years. It is not a good sign that 37% of the respondents had no new product improvements or revisions. This finding is in contradiction with the findings as presented in table 6.12. In table 6.12 it was indicated that the businesses can be characterised by a high rate of new products/services but in this statistic it is indicated that the individual respondents did not have a high number of new product improvements.

TABLE 6.17 Number of new product introductions compared with major competitors in the industry

Number of new product introductions compared with major competitors	Frequency (n)	Percentage
Less	23	6
Same	20	14
More	188	51
None	107	29
Total	368	100

FIGURE 6.12 Number of new product introductions compared with major competitors in the industry

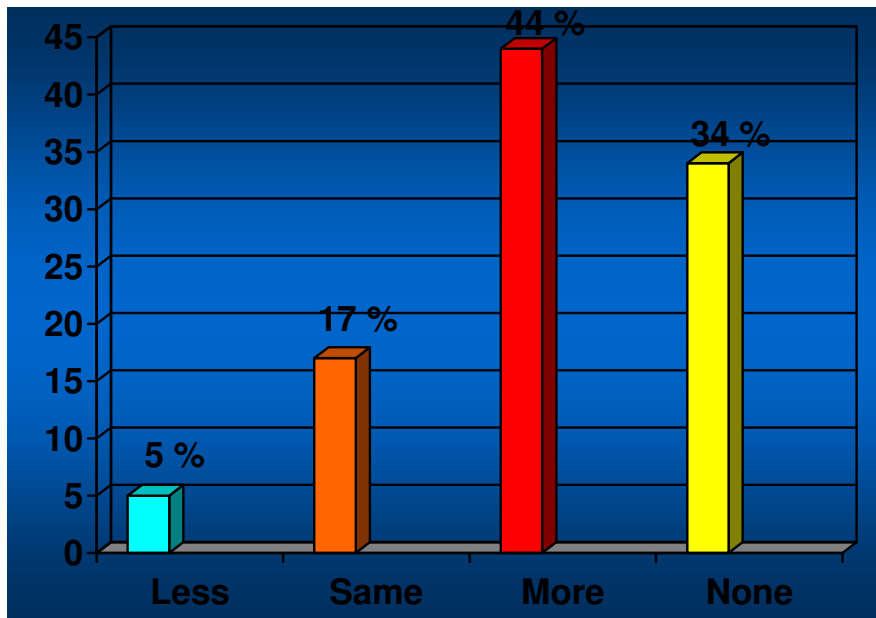


The majority of the respondents (51%) according to table 6.17 and figure 6.12 indicated that their business compared well with their businesses' major competitors in the industry.

TABLE 6.18 Degree to which new product introductions include products that did not previously exist in the market

Degree to which new product introductions include products that did not previously exist in the market	Frequency (n)	Percentage
Less	19	5
Same	63	17
More	163	44
None	124	34
Total	369	100

FIGURE 6.13 Degree to which new product introductions include products that did not previously exist in the market



It is very important for any business to introduce new products or services to a market and also to determine the effect of these products or services that did not exist previously in the market. Table 6.18 and figure 6.13 show that the insurance businesses introduced 44 % more new products or services to the market that did not previously exist in the market. These findings contradict the findings as illustrated in table 6.14 and figure 6.9 where

respondents indicated the number of new products and services that their businesses introduced during the past two years (2007 – 2009). In table 6.14 it was indicated that between 0 to 5 new products and services were introduced. This could hardly be 44 % more than what previously existed in the market.

From the results presented in terms of the frequency of entrepreneurship a few contradictions exist and it indicates that the overall frequency of entrepreneurship is not very high. In terms of the stated hypothesis it can be deduced that:

Hypothesis Ho13 is accepted. The frequency of entrepreneurship in South African short-term insurance businesses is not high.

The degree and frequency of entrepreneurship need to be combined to determine the entrepreneurial intensity. Because the degree and frequency of entrepreneurship is not high, the following can be deduced of hypothesis Ho14.

Hypothesis Ho14 is accepted: The entrepreneurial intensity in South African short-term insurance businesses is not high.

To analyse the frequency of entrepreneurship more rigorously the influence of various independent variables on dependent variables was determined. The results of this analysis are presented in tables 6.19 to 6.21.

TABLE 6.19 The influence of various independent variables on the dependent variable: product improvements/revisions introduced by individuals in the business

Independent variables	1 – 2 Less		3 Same		4 – 5 More		6 None		Chi-square P-value
	N	%	N	%	N	%	N	%	
Number of years in the business									0.0300***
< 2 years	8	5	25	16	54	34	70	45	
3 – 10 years	8	6	21	14	66	45	52	35	
≥ 11 years	6	11	10	19	27	51	10	19	
Business unit									0.0264***
Sales	4	10	6	15	19	49	10	26	
Information Technology	0	0	3	13	14	58	7	29	
Claims and Admin	16	8	36	17	68	32	89	43	
Shared Services	3	4	9	12	42	54	23	30	
Management level									0.0850
Top management	3	8	12	32	16	42	7	18	
Middle management	3	9	4	11	18	51	10	29	
Lower management	3	4	8	11	31	43	30	42	
Call and non-Call centre	12	6	31	15	80	39	84	40	
Years in current job									0.0573
< 1 year	6	4	21	16	44	33	64	47	
1 – 2 years	10	8	21	17	60	47	36	28	
≥ 3 years	7	7	13	14	42	45	32	34	
p*** statistical significance at the 5 % level									

According to the results presented in table 6.19 there is a significant statistical correlation between the product improvements/revisions introduced by the individuals in their businesses in terms of the number of years that the individuals have been employed in their businesses and in the different business units. The individuals that have been employed within their businesses for three years and more have more product improvements/revisions compared to the individuals that have been employed for less than two years in the business. The individuals that have been employed in their businesses for eleven years and more have the most number of new products improvement/revisions. These findings support the findings as indicated in table 6.12.

The individuals employed in the claims and administration department have the lowest number of new product improvements/revisions in their businesses. This makes sense because the claims and administrative employees only deal with the administration side of the short-term insurance. The claims and administrative employees do not get into contact with the target markets on the same level as the other employees. The information technology and shared services employees introduced the most new product improvements/revisions.

There is no significant statistical correlation between the number of product improvements/revisions introduced by the individuals in their businesses and the management levels and the years in their current job.

From the stated hypotheses in this regard the following can be deduced:

Hypothesis Ho15 is rejected: There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions.

Hypothesis Ho16 is accepted: There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions.

Hypothesis Ho17 is rejected: There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions.

Hypothesis Ho18 is accepted: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the number of product improvements/revisions.

TABLE 6.20 The influence of various independent variables on the dependent variable: new product improvements/revisions compared to competitors in the industry

Independent variables	1 – 2 Less		3 Same		4 – 5 More		6 None		Chi-square P-value
	N	%	N	%	N	%	N	%	
Number of years in the business									0.0199***
< 2 years	10	6	23	14	69	42	61	38	
3 – 10 years	10	7	20	13	82	55	38	25	
≥ 11 years	2	4	7	13	37	68	8	15	
Business unit									0.4968
Sales	4	10	6	15	17	41	14	34	
Information Technology	0	0	2	8	11	46	11	46	
Claims and Admin	15	7	26	12	117	54	58	27	
Shared Services	4	5	13	17	38	49	22	29	
Management level									0.0158***
Top management	6	15	7	17	22	55	5	13	
Middle management	2	6	6	17	20	55	8	22	
Lower management	1	1	7	9	47	64	19	26	
Call and non-Call centre	13	6	28	13	97	46	74	35	
Years in current job									0.2408
< 1 year	7	5	14	10	67	48	51	37	
1 – 2 years	9	7	22	16	69	52	33	25	
≥ 3 years	7	8	13	14	52	55	22	23	
p*** statistical significance at the 5 % level									

Table 6.20 indicates that there is a significant statistical difference between the perceptions of employees and those of the different management levels, on new product improvements/revisions compared to competitors, in terms of the number of years that the employees/managers have been employed by their businesses. The employees that have been working for eleven years and more, and lower management employees, indicated that their businesses compared favourably in terms of new product improvements/revisions and their major competitors in the industry. When comparing these results with table 6.12 there is confirmation of the fact that the employees that have been working in their

businesses for more than eleven years state that their business compares favourably with new products compared to their competitors in the industry.

With regard to the stated hypotheses the following can be deduced:

Hypothesis Ho19 is rejected: There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions compared with competitors.

Hypothesis Ho20 is accepted: There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions compared with competitors.

Hypothesis Ho21 is accepted: There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions compared with competitors.

Hypothesis Ho22 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the number of product improvements/revisions compared with competitors.

In table 6.21 there is a significant statistical difference between the perceptions of the number of new product introductions by their businesses that did not previously exist in the market in terms of the number of years that employees have been employed in the business, the management levels, and the years that the employees have been working in their current job.

TABLE 6.21 The influence of various independent variables on the dependent variable: number of new product introductions that did not previously exist in the market (“new market”)

Independent variables	1 – 2 Less		3 Same		4 – 5 More		6 None		Chi-square P-value
	N	%	N	%	N	%	N	%	
Number of years in the business									0.0001***
< 2 years	5	3	35	22	48	29	75	46	
3 – 10 years	7	5	23	15	82	54	39	26	
≥ 11 years	6	11	5	9	33	61	10	19	
Business unit									0.7383
Sales	2	5	8	19	15	37	16	39	
Information Technology	1	4	4	17	10	42	9	37	
Claims and Admin	15	7	36	17	94	43	71	33	
Shared Services	1	1	11	14	40	51	26	34	
Management level									0.0058***
Top management	4	10	11	27	20	50	5	13	
Middle management	1	3	9	25	18	50	8	22	
Lower management	4	5	9	12	41	54	22	29	
Call and non-Call centre	8	4	33	16	82	39	88	41	
Years in current job									0.0044***
< 1 year	6	4	23	17	48	34	62	45	
1 – 2 years	7	5	28	21	60	45	38	29	
≥ 3 years	6	6	11	12	55	58	23	24	
p*** statistical significance at the 5 % level									

The employees that have been working in their businesses for eleven years and more, have the highest perception of the number of new product introductions that did not previously exist in the market. This confirms previous results as indicated in table 6.12.

The employees in the Call and non-Call centre indicated that they do not have a lot of knowledge about the comparison of new product introduction that did not previously exist in the market. All the other management levels (top, middle and lower management) indicated that their business has more new product introductions that include products that did not previously exist in the market.

The employees that have been in their current job for less than a year have no knowledge about the degree of new product introductions that include products that did not previously exist in the market.

From table 6.21 it can be concluded that the following hypotheses are rejected and accepted.

Hypothesis Ho23 is rejected. There is no statistical significant difference between the years in South African short-term insurance businesses and the number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho24 is rejected. There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho25 is accepted. There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho26 is rejected. There is no statistical significant difference between the management levels in South African short-term insurance business and the number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”).

6.5 Results of the respondents' perception of the workplace and insurance business

The CEAI was used to determine the perception of employees in the workplace of the business. The CEAI distinguishes five distinctive organisational antecedents which form the dependent variables of this study. These five antecedents are: managerial support, work discretion, rewards/reinforcements, time availability and organisational boundaries. These antecedents and the CEAI were discussed in chapter 3. A summary of the meaning of these antecedents (from chapter 3) is as follows:

- Managerial support refers to the willingness of top-level managers to facilitate and promote entrepreneurial behaviour, including the championing of innovative ideas and providing the resources people require for taking entrepreneurial actions.
- Work discretion/autonomy refers to top-level managers' commitment to tolerate failure, provide decision-making latitude and freedom from excessive oversight and to delegate authority and responsibility to managers.
- Rewards/reinforcement refers to developing and using systems that reinforce entrepreneurial behaviour, highlight significant achievements and encourage pursuit of challenging work.
- Time availability refers to evaluating workloads to ensure that individuals and groups have the time needed to pursue innovations and that their jobs are structured in ways that support efforts to achieve short- and long-term organisational goals.
- Organisational boundaries refer to precise explanations of outcomes expected from organisational work and development of mechanisms for evaluating, selecting and using innovations.

Hypotheses 27 to 36 are formulated in relation to these dependent variables and various independent variables. The one-sample chi-square test is carried out to indicate significant differences of the variables of interest posed in this study and is a determinant of accepting

or rejecting the null hypotheses 27 to 36. The significance level calculated for each of these variables provides information about the reliability of that correlation and provides a means to improve the reliability of the measure by indicating how free it is of errors from other causes.

The level of significance used in this study is 0.05. This measure indicates $p > 0.05$ and implies that there are no differences. Conversely measures of $p < 0.05$ reveal that a statistical significance has been observed suggesting the real difference to have occurred from the causes. It will be on this basis that the study will examine and draw its conclusions on the reflected results.

TABLE 6.22 Overall ANOVA in terms of biographical variables and the dependent variables

Factors	Mean Square	F Value	Pr Value
Management support	1.63	1.72	0.0295
Work discretion	3.87	4.58	<.0001***
Rewards/reinforcement	0.94	0.99	0.4775
Time availability	2.08	2.21	0.0023***
Organisational boundaries	2.66	3.00	<.0001***
p*** statistical significance at the 5 % level			

In terms of the biographical data of this sample and the various factors there is a significant statistical difference in terms of work discretion, time availability and organisational boundaries. No statistical difference is found in terms of management support and rewards/reinforcement.

TABLE 6.23 Mean scores of the corporate entrepreneurial factors

Factor	Frequency (n)	Mean	Standard Deviation
Management support	375	3.15	0.53
Work discretion	375	3.30	0.41
Rewards	375	3.32	0.71
Time availability	375	3.00	0.47
Organisational boundaries	375	2.73	0.65

From the mean scores presented in table 6.23 it is clear that the overall perception of the corporate entrepreneurial climate is moderate. Respondents had to indicate their perceptions on a 5-point likert scale ranging from strongly disagree to strongly agree. From this analysis it is clear that respondents agrees mostly in terms of the rewards that are in place. This is supported by the statistics as provided in table 6.22 where it was indicated that there is no statistical significant difference in all the biographical areas. The areas that need most attention are time availability and organisational boundaries.

TABLE 6.24 Relationship between management supports in terms of respective independent variables

Independent variables	Mean Square	F Value	P Value (ANOVA)
Gender	0.01	0.01	0.9088
Age	1.16	1.23	0.2998
Ethnicity	0.67	0.71	0.5446
Highest qualification	0.37	0.39	0.6754
Years in business	0.18	0.20	0.8198
Business unit	0.97	1.02	0.3835
Management level	4.30	4.53	0.0039***
Years in current job	0.68	0.72	0.4860
p*** statistical significance at the 5 % level			

Considering all the independent variables in relation to management support there is only a significant difference in terms of the different management levels. This means that the employees on the different management levels (top, middle, lower, call centre and non-call centre employees) have different perceptions on top-level management's willingness to facilitate and promote entrepreneurial behaviour within the business and making resources available that people require taking entrepreneurial actions.

TABLE 6.25 Mean scores of the management levels in terms of management support

Management level				
Level			Frequency (n)	Means
a	Top management	a<d	40	3.4
b	Middle management	b<c b<d	35	3.6
c	Lower management		71	3.2
d	Call and non-Call centre employees		204	3.1
Symbols with < indicate that there is a significant difference at the 5% level				

After a rigorous analysis of the management levels in terms of management support there it is found that there is a significant statistical difference between top management and the employees of the call and non-call centre. Middle management also differs from lower management and the employees of the call and non-call centre employees. There is no statistical difference between top management and middle and lower management; and between lower management and the call and non-call centre employees. The mean scores also support this finding.

In terms of hypotheses Ho27 and Ho28 the following can be deduced:

Hypothesis Ho27 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: managerial support for corporate entrepreneurship.

Hypotheses Ho28 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business unit levels in South African short-term insurance businesses regarding the corporate entrepreneurship construct: managerial support for corporate entrepreneurship.

TABLE 6.26 Relationship between work discretion in terms of respective independent variables

Independent variables	Mean Square	F Value	P Value (ANOVA)
Gender	1.81	2.14	0.1442
Age	0.59	0.70	0.5894
Ethnicity	1.59	1.88	0.1328
Highest qualification	0.89	1.06	0.3483
Years in insurance business	3.47	4.10	0.0174***
Business unit	1.67	1.98	0.1170
Management level	3.74	4.43	0.0046***
Years in current job	0.04	0.06	0.9445
p*** statistical significance at the 5 % level			

The p-value indicates that there is a significant statistical difference between the years that the employees have been in the business as well as the different management levels in terms of work discretion. This means that the longer the employees are working in the insurance business the more they perceive top level management to be committed to tolerate failure; to provide decision-making latitude and freedom from excessive oversight and delegation of authority and responsibility to managers. There is also a significant statistical difference between the various management levels on their perception about work discretion.

No statistical difference could be found between gender, age, ethnicity, qualification, business units and years in present jobs.

After a rigorous analysis of the significant statistical differences in terms of work discretion the following findings can be reported.

TABLE 6.27 Mean scores of the years employed by the business in terms of work discretion

Years in business				
Years			Frequency (n)	Means
a	0 – 2 years	a<c	156	3.2
b	3 – 10 years	b<c	139	3.2
c	11 – 20 years		55	3.7
Symbols with < indicate that there is a significant difference at the 5% level				

A significant statistical difference exists between the employees that have been working in their business for less than two years and those employees that have been working for eleven years and more. There is also a significant statistical difference between the employees that have been working for three to ten years and those employees that have been working for more than eleven years.

TABLE 6.28 Mean scores of management level in terms of work discretion

Management level				
Level			Frequency (n)	Means
a	Top management	a<d	40	3.7
b	Middle management	b<c b<d	35	3.8
c	Lower management		71	3.3
d	Call and non-Call centre employees		204	3.2
Symbols with < indicate that there is a significant difference at the 5% level				

Table 6.28 shows that there is a significant statistical difference between top management and the call and non-call centre employees. There is also a difference between middle management and lower management as well as between middle management and the call and non-call centre employees. The findings for the different management levels in terms of work discretion are the same as for management support. When looking at the mean scores it seems as if top and middle management employees are more positive towards their businesses' work discretion.

In terms of the stated hypotheses the following can be deduced:

Hypothesis Ho29 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: work discretion.

Hypothesis Ho30 can be accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business unit levels in South African short-term insurance businesses regarding the corporate entrepreneurship construct: work discretion.

TABLE 6.29 Relationship between rewards/reinforcement in terms of respective independent variables

Independent variables	Mean Square	F Value	P Value (ANOVA)
Gender	0.94	0.99	0.3194
Age	0.62	0.66	0.6237
Ethnicity	1.32	1.39	0.2448
Highest qualification	0.32	0.34	0.7130
Years in insurance business	1.20	1.27	0.2829
Business unit	0.52	0.56	0.6447
Management level	0.20	0.22	0.8833
Years in current job	1.78	1.88	0.1548
p*** statistical significance at the 5 % level			

The high p-value greater than 0.05 indicates that there is no statistical difference between the various independent variables and the dependent variable rewards/reinforcement. No significant statistical difference exists between rewards/reinforcement and the various independent variables gender, age, ethnicity, highest qualification, years in the business, business units, management levels and years in current job.

It can be deduced that:

Hypothesis Ho31 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: rewards/ reinforcement.

Hypothesis Ho32 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business unit levels in South African short-term insurance businesses regarding the corporate entrepreneurship construct: rewards/ reinforcement.

TABLE 6.30 Relationship between time availability in terms of respective independent variables

Independent variables	Mean Square	F Value	P Value (ANOVA)
Gender	0.31	0.34	0.5629
Age	0.63	0.67	0.6120
Ethnicity	3.89	4.14	0.0067***
Highest qualification	4.63	4.92	0.0078***
Years in insurance business	0.18	0.20	0.8227
Business unit	3.57	3.79	0.0107***
Management level	1.23	1.31	0.2706
Years in current job	3.59	3.82	0.0230***
p*** statistical significance at the 5 % level			

According to the p-value there is a significant statistical difference between the various ethnic groups, the different qualification types of the employees, the business units and the years of employees in their current position in the insurance business.

After rigorous analysis of the significant statistical differences indicated in table 6.30 the following findings can be given according to tables 6.31 to 6.34

TABLE 6.31 Mean scores of ethnicity in terms of time availability

Ethnicity				
Level			Frequency (n)	Means
a	Black	a<b a<c a<d	42	2.9
b	Coloured		60	2.7
c	Indian or Asian		39	2.6
d	White or Caucasian		209	2.6
Symbols with < indicate that there is a significant difference at the 5% level				

There is a significant statistical difference between the black ethnic group and the Coloureds, Indians or Asians as well as the Whites or Caucasian's. The black ethnic group indicated that their workloads are evaluated to ensure that they have the time needed to pursue innovations and that their jobs are structured in ways that support efforts to achieve short- and long-term organisational goals. With the labour legislation in South Africa this could be the reason why the black ethnic group experience this as more positive. With Broad Based Black Economic Empowerment, more deliberate efforts are made to equip and empower blacks to do their jobs.

TABLE 6.32 Mean scores of highest qualification in terms of time availability

Highest qualification				
Qualification			Frequency (n)	Means
a	Grade 12 and lower	a<b a<c	175	2.7
b	Post Matric Diploma or Certificate		125	2.6
c	Bachelors Degree(s) and/or Post Graduate Degree (s)		50	2.7
Symbols with < indicate that there is a significant difference at the 5% level				

A significant statistical difference exists between the employees with a grade 12 and lower qualification and the employees with a post matric diploma or certificate and the employees with Bachelors degree(s) and/or Post Graduate Degree(s).

Employees with a Grade 12 and lower qualification indicate that they have more time available for innovations.

TABLE 6.33 Mean scores of business units in terms of time availability

Business unit				
Unit			Frequency (n)	Means
a	Sales		37	2.7
b	Information Technology		25	2.8
c	Claims and Administration		211	2.6
d	Call and non-Call centre employees		77	2.8
Symbols with < indicate that there is a significant difference at the 5% level				

Table 6.33 indicates that there is a significant statistical difference between the employees in the information technology business unit level and claims and administration. There is also a difference between the employees of the claims and administration business unit and the call and non-call centre employees. Previously, as indicated in table 6.19, it was also indicated that the Information Technology employees were responsible for the most new product improvements and revisions. These two aspects correlate well.

TABLE 6.34 Mean scores of number of years in current job in terms of time availability

Years in current job				
Level			Frequency (n)	Means
a	0 – 12 months		132	2.8
b	1 – 2 years		127	2.6
c	3 – more years		91	2.6
Symbols with < indicate that there is a significant difference at the 5% level				

A significant statistical difference exists between the employees that have been working for less than twelve months in their current job and the employees that have worked in their current jobs between one and two years. There is no statistical difference between the employees that have been working for more than three years and the rest of the employees.

The following can be deduced from the stated hypotheses:

Hypothesis Ho33 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: time availability.

Hypothesis Ho34 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business unit levels in South African short-term insurance businesses regarding the corporate entrepreneurship construct: time availability.

TABLE 6.35 Relationship between organisational boundaries in terms of respective independent variables

Independent variables	Mean Square	F Value	Pr Value
Gender	6.67	7.49	0.0065***
Age	0.37	0.42	0.7911
Ethnicity	1.10	1.24	0.2957
Highest qualification	0.01	0.01	0.9878
Years in insurance business	0.31	0.35	0.7016
Business unit	0.94	1.06	0.3656
Management level	7.96	8.95	<.0001***
Years in present job	0.74	0.83	0.4355
p*** statistical significance at the 5 % level			

There is a significant statistical difference in terms of organisational boundaries between males and females as well as between the various management levels.

Organisational boundaries refer to precise explanations of outcomes expected from organisational work and development of mechanisms for evaluating, selecting and using innovations.

After rigorous analysis of these independent variables and organisational boundaries the following findings can be presented.

TABLE 6.36 Mean scores of gender in terms of organisational boundaries

Gender		
Gender	Frequency (n)	Means
Male	128	2.4
Female	222	2.5

Female perceptions towards organisational boundaries are more positive compared to those of the male respondents.

TABLE 6.37 Mean scores of management level in terms of organisational boundaries

Management level				
Level			Frequency (n)	Means
a	Top management	a<b a<c a<d	40	2.9
b	Middle management	b<c b<d	35	2.7
c	Lower management		71	2.4
d	Call and non-Call centre employees		204	2.4
Symbols with < indicate that there is a significant difference at the 5% level				

There is a significant statistical difference between top management and the rest of the employees in the businesses (middle and lower management as well as call and non-call centre employees). There is also a difference between middle and lower management as well as between middle management and the employees from the call and non-call centre.

Organisational boundaries refer to precise explanations of outcomes expected from organisational work and development of mechanisms for evaluating, selecting and using

innovations. Top level management's perception of organisational boundaries is more positive than the rest of their businesses' employees.

In terms of the stated hypotheses the following can be deduced:

Hypothesis Ho35 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: organisational boundaries.

Hypothesis Ho36 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business unit levels in South African short-term insurance businesses regarding the corporate entrepreneurship construct: organisational boundaries.

7. CONCLUSION

This chapter addressed various aspects by means of descriptive and inferential statistics. Relevant data was captured and presented in tables and figures. The various statistical techniques that were discussed in chapter five formed the basis for the results that were presented in chapter 6.

Firstly the demographic data of the respondents were presented. The main purpose of this was to describe the outstanding characteristics resembling the profile of the respondents.

The two measuring instruments (EPI and CEAI) have been proved as reliable and valid in previous studies. To confirm the reliability of the CEAI, the Cronbach alpha values were determined. The high Cronbach alpha values supported the fact that the instrument is reliable.

As indicated throughout the study, the Entrepreneurial Health Audit instrument was used in this study. In this regard the results of the businesses entrepreneurial intensity were reported, as well as the perceptions of employees in terms of the workplace and business.

The chi-square, one-way analysis of variance tests, post hoc test and *t*-tests were executed to present the significant statistical differences between the various dependent and independent variables.

In the next chapter (chapter 7) the major purpose and findings of the research study will be summarised. A conclusion and recommendations of this study are presented. The research objectives and hypotheses will be revisited. Finally, limitations of the study, contributions to the field of entrepreneurship and corporate entrepreneurship, and recommendations for further research will be presented.

CHAPTER 7 : SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

“As Intrapreneurship programs provide opportunities for success, increasing future research may provide an objective basis for determining the extent to which such programs are feasible and have the potential to be incorporated into organisational structures.”

Marcus and Zimmerer (2003:18)

“Employees need to be trained to be business innovators..... Companies need to invest in people’s skills.”

Hamel in Allio (2008:7)

“If you give people the skills and opportunity to exercise their imagination, they will take advantage of it.

Individuals are adaptive and innovative, companies are not.” Hamel in Allio (2008:9)

7.1 INTRODUCTION

As indicated in chapter 1 and confirmed in chapter 3, it is clear that businesses and industries throughout the world are operating in an uncertain and dynamic global economy. Businesses of the future need continual innovation, growth and value creation to survive. Through corporate entrepreneurship the entrepreneurial spirit within the organisational boundaries can be created, allowing an atmosphere of innovation to prosper. Various researchers have highlighted the fact that there is inadequate research in corporate entrepreneurship, specifically with regard to providing empirical evidence in the field of corporate entrepreneurship. Thornberry (2003:333) noted that there is relatively little field research regarding the successes or failures of large businesses who have tried systematically to instil corporate entrepreneurship within their businesses. Zahra (1991:193) also indicated that “a lack of compelling evidence on the contributions of corporate entrepreneurship performance exists. Even though some research has attempted to fill this gap in literature there is still much more to be learned about the substance and process of corporate entrepreneurship”.

Limited South African research exists in the field of corporate entrepreneurship and more specifically in terms of evaluating corporate entrepreneurial mindsets, corporate entrepreneurship training programmes and the effect thereof, as well as fostering corporate entrepreneurship. The purpose of this study was to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

In the previous chapter the research findings of the study were discussed. This chapter provides the revisited research objectives with an overview of the literature study. Thereafter the hypotheses statements are revisited and summarised according to the three areas of the research (assessment of the entrepreneurial intensity; the climate for corporate entrepreneurship and corporate entrepreneurship development programmes). A summary will be given on the hypotheses that are accepted and rejected based on the statistical techniques discussed in Chapter 6. The contribution to the science and limitations of the study are mentioned. Recommendations are provided and the path for further research into this field is given. Lastly, the chapter ends with a summary and conclusion to the study.

7.2 RESEARCH OBJECTIVES

The primary objective of this research was to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

The primary objective was achieved as a result of the assessment of corporate and entrepreneurial levels that was done through hypotheses Ho1 to Ho37.

In order to achieve this primary objective various secondary objectives were formulated. The secondary objectives of the study were:

To determine by means of a literature study:

- how entrepreneurship and corporate entrepreneurship relate to one another;
- the link between corporate entrepreneurship and innovation;
- the importance and value of corporate entrepreneurship;
- how to foster, develop and implement corporate entrepreneurship;

- how to sustain corporate entrepreneurship and innovation;
- the conceptual models that exist for corporate entrepreneurship;
- the methods of measuring entrepreneurial activity; and
- the design, content and structure of a corporate entrepreneurial development programme.

To determine by means of a case study design:

- how to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses, by means of a corporate entrepreneurial health audit instrument.

The secondary objectives were addressed and achieved by means of the literature review.

7.3 OVERVIEW OF THE LITERATURE STUDY

The literature review was covered in chapters 2 to 4. The following is a short overview of the literature:

In chapter 2 a review was given on various aspects in the field of entrepreneurship. The main purpose for addressing these aspects was to give a background on what entrepreneurship entails and what the relationship with corporate entrepreneurship is. From the various definitions provided by many researchers in the field of entrepreneurship the definition of Stevenson and Jarrilo (1986:10) was adopted for this study – “Entrepreneurship is the process of creating value by bringing together a unique combination of resources to exploit an opportunity”. Despite the fact that a universally accepted definition has not yet emerged, the field of entrepreneurship has grown tremendously since 1970. Cornelius, *et al.* (2006:394) gave an overview of the clusters in which entrepreneurship has developed over time, from 1986 to 2004 (refer to figure 2.1). In this cluster the connection between entrepreneurship and corporate entrepreneurship is clearly indicated, which started to develop rigorously from 1993.

Morris, *et al.* (2008:33) state that the definition of entrepreneurship does not indicate anything in particular about starting a small business. The context within which

entrepreneurship occurs is not part of the definition. The researcher also supports the viewpoint of Morris, *et al.*, that entrepreneurship can occur in start-up ventures, small businesses, medium-sized businesses, large conglomerates, non-profit businesses and even in public sector agencies. What essentially distinguishes corporate entrepreneurship from entrepreneurship is the context in which the entrepreneurial act takes place. Entrepreneurs innovate for themselves, while corporate entrepreneurs innovate on behalf of an existing business.

The similarities and major differences between corporate entrepreneurship and entrepreneurship (start-up ventures) were also given in chapter 2. The main aspect from these similarities and differences points out that entrepreneurship does not only refer to starting a small business and it is not limited to selecting a set of people. An entrepreneurial perspective can be developed in any individual – inside or outside a business.

In chapter 3 it was established why it is necessary for businesses to undertake corporate entrepreneurship. Businesses need corporate entrepreneurship to grow; to integrate and to develop an entrepreneurial spirit; create and sustain competitive advantage, and to be adaptable, flexible, fast, aggressive and innovative. The benefits of instilling corporate entrepreneurship in a business are endless. Businesses that instil corporate entrepreneurship can:

- gain and sustain competitive advantage at all levels of the business;
- rejuvenate and revitalise the existing business;
- develop new products, services and processes;
- pursue entrepreneurial opportunities;
- create new businesses within existing businesses;
- foster strategic renewal of existing operations;
- improve growth and profitability;
- sustain corporate competitiveness; and
- increase financial performance and create new value.

Corporate entrepreneurship can affect the economy by increasing productivity, improving best practices, creating new industries and enhancing international competitiveness.

As with entrepreneurship, researchers in the field of corporate entrepreneurship have not yet reached consensus on a common definition. For purposes of this study the definition of Sharma and Chrisman (1999:18) was adopted. "Corporate Entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing business, creates a new business or instigates renewal or innovation within the business.

Corporate entrepreneurship is a relatively new field of study and therefore various conceptual models and frameworks exist. These conceptual models and frameworks are mostly developed to improve the understanding of the various issues related to the process and phenomenon of corporate entrepreneurship. Most researchers use these models to guide research actions.

Table 7.1 summarises the conceptual models discussed in this study:

Three models can be applied to this study. The interactive model of Hornsby, *et al.* (1993); the model of sustained corporate entrepreneurship by Kuratko, *et al.* (2004); and the model of Covin and Slevin as adapted by Morris, *et al.* (2008) - strategic integration of entrepreneurship throughout the business. The interactive model indicates the characteristics to foster corporate entrepreneurship, and the model for sustained corporate entrepreneurship focuses on the factors necessary to develop entrepreneurial behaviour and how to sustain entrepreneurship on an ongoing basis. The strategic integration of entrepreneurship throughout the business model focuses on how to integrate entrepreneurship throughout the business. The specific focus is on the entrepreneurial intensity.

TABLE 7.1 A summary of the conceptual models in the field of corporate entrepreneurship

Conceptual model	Year	Authors and researchers
A domain model for CE	1990	Guth and Ginsberg
A conceptual model for firm behaviour	1991	Covin and Slevin
A model of predictors and financial outcomes of CE	1991	Zahra
A revised conceptual framework of firm-level entrepreneurship	1993	Zahra (as adapted from Covin and Slevin)
An organisational model for internally developed ventures	1993	Brazeal
An interactive model of corporate entrepreneurship	1993	Hornsby, Haffziger and Montagno
A model of sustained corporate entrepreneurship	2004	Kuratko, Hornsby and Goldsby
Model CE and wealth creation	2004	Antoncic and Hisrich
The micro-model of corporate entrepreneurship and innovation	2005	Shaw, O'Loughlin and McFadzean
Strategic integration of entrepreneurship throughout the business	2008	Morris, Kuratko and Covin (as adapted from Covin and Slevin)

The biggest criticism towards the development of these models is that they have not been tested empirically.

A very important aspect that was also highlighted from research was the relationship between corporate entrepreneurship and innovation. It was indicated that continuous innovation and an ability to compete proactively in global markets are the key skills that will determine corporate performance in the twenty-first century. Corporate entrepreneurship can be seen as the vehicle to instil innovation in businesses.

Chapter 3 focused on how to foster, develop and implement corporate entrepreneurship in businesses. From all the various models, techniques and methods indicated, the

corporate entrepreneurship training or development programme has been indicated as most effective.

Literature on corporate entrepreneurship measuring instruments and development programmes was addressed in chapter 4. Six measuring instruments were highlighted: entrepreneurial orientation, the ENTRESALE, Corporate Entrepreneurship and Assessment Instrument (CEAI), factor based instrument to measure corporate entrepreneurship, Intrapreneurial Intensity Index (III), and lastly, the corporate entrepreneurial health audit. The corporate entrepreneurial health audit forms the basis of this study. The three steps of this instrument are followed. Firstly, the businesses entrepreneurial intensity needs to be established. Secondly, the climate for corporate entrepreneurship needs to be measured, and next a corporate entrepreneurial development programme is developed to address the areas of development in a business.

Lastly, in chapter 4, an overview was given on ten corporate entrepreneurship development programmes (CEDP). These development programmes are summarised and compared. Of these ten CEDPs, only two could be found in academic literature.

What is noticeable in terms of the field of corporate entrepreneurship is that a lot of new researchers are entering and researching this field (e.g. Heinoner, J and Toivonen, J; Ma, H and Ta, J; Frank, H; Wolcott, R.C. and Lippitz, M.J.; etc). Since 2007 much more international research is available in accredited journals. For the future of corporate entrepreneurship this is a positive sign, because it shows that there is increased interest in the field.

7.4 HYPOTHESES STATEMENTS REVISITED

The main findings of this study are summarised in this section and address the formulated. As indicated previously the three steps of the entrepreneurial health audit were used to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

Hypotheses 1 to 26 relate to entrepreneurial intensity (step 1 of the entrepreneurial health audit); hypotheses 27 to 36 relate to the second step of the entrepreneurial health audit (determine the corporate entrepreneurial climate) and lastly hypothesis 37 relates to the third step of the entrepreneurial health audit the compilation of a development programme to address the gaps identified from steps 1 and 2). The findings will be presented according to these three steps and the applicable hypotheses.

7.4.1 Assessment of entrepreneurial intensity

Entrepreneurial intensity consists of two aspects, degree and frequency. As indicated in chapter 3 several researchers have confirmed that entrepreneurial intensity can be directly associated with increased organisational performance (Covin and Slevin, 1989; Davis, Morris and Allen, 1991; Miller and Friesen, 1982; Morris and Sexton, 1996; Wiklund and Shephard, 2005; Zahra, 1986).

A rigorous analysis was done to determine the influence of various dependent variables (relating to the degree of entrepreneurship) on certain independent variables (years working in the business; business unit and management level). An ANOVA was done to determine the significant statistical differences between the various dependent and independent variables. In all the cases listed in table 7.2, 7.3 and 7.4 where the major findings are summarised, there was a significant statistical difference between the variables.

TABLE 7.2 Summary of findings of the influence of various dependent variables (relating to the degree of entrepreneurship) on the years employees have been working in an insurance business

Independent variable	Dependent variable	Statistical significant difference
Years working in the business (less than 2 years, 3 to 10 years, 11 years and more)	The business is characterised by a high rate of new product/service introductions compared to competitors	The employees that have been working for less than 2 years indicated that their businesses do not compare favourably with competitors in terms of the high rate of new product/service introductions. The employees that have been working for 11 years and more indicated that their businesses do compare favourably with their competitors. (P value = 0.0009)
	Top level decision-making is characterised by an active search for big opportunities	The employees that have been working for 11 years and more agree that top management searches for big opportunities. The employees that have been working for less than 11 years disagree. (P value = 0.0045)
	Top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes	Employees that have been working for more than 3 years agree that top management makes large, bold decisions despite uncertainties. (P value = 0.0417)
	Top level decision-making is characterised by compromises among conflicting demands of stakeholders	The employees that have been working for longer than 3 years agree that top management compromises between the conflicting demands of stakeholders. The employees that have been working for less than 2 years disagree. (P value = 0.0070)

Collectively when considering the years that employees have been working in their businesses compared to the listed dependent variables it indicates that the employees that have been working for more than 11 years in their businesses are more positively oriented towards their businesses.

With regard to the findings illustrated in table 7.2 the following hypotheses can be rejected:

Ho1 is rejected: There is no statistical significant difference in terms of the years that the employees have been working in South African short-term insurance businesses and the perceptions on the rate of new products/service introductions compared to competitors.

Ho2 is rejected: There is no statistical significant difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by an active search of big opportunities by in South African short-term insurance businesses.

Ho3 is rejected: There is no statistical significant difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by large bold decisions despite uncertainties of the outcomes are made in South African short-term insurance businesses.

Ho4 is rejected: There is no statistical significant difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by compromises among the conflicting demands of owners, government, management, customers, employees and suppliers.

TABLE 7.3 Summary of findings of the influence of various dependent variables (relating to the degree of entrepreneurship) on the business units

Independent variable	Dependent variable	Statistical significant difference
Business units (Sales, Information Technology, Claims and Administration, Shared Services)	The business is characterised by an emphasis on continuous improvement in methods of production and/or service delivery	There is a difference in perceptions between the sales and claims and administration business units and also between the claims and administration and the shared services business units. The sales and claims and administrative business units are more positive towards their businesses continuous improvement in methods of production and/or service delivery. (P value = 0.0063)
	Top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems	The sales and shared services business units disagree that top management takes cautious, pragmatic, step-at-a-time adjustments to problems. The IT business unit agrees. (P value = 0.0245)

With regard to the findings illustrated in table 7.3, the following hypotheses can be rejected:

Ho5 is rejected: There is no statistical significant difference between the various business units regarding the emphasis which South African short-term insurance businesses' places on continuous improvement in methods of production and/or service delivery.

Ho6 is rejected: There is no statistical significant difference between the business units in the South African short-term insurance regarding how the top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

TABLE 7.4 Summary of findings of the influence of various dependent variables (relating to the degree of entrepreneurship) on management levels

Independent variable	Dependent variable	Statistical significant difference
Management levels (top, middle, lower, call and non-call centre)	The business is characterised by risk-taking by executives in exploring new opportunities	Top management indicate that their businesses do not take a lot of risks in exploring new opportunities. The other management levels disagree. (P value = 0.0161)
	The business is characterised by a “live and let live” philosophy in dealing with competitors	Lower and call and non-call centre employees indicate that their businesses do not have a “live and let live” philosophy in dealing with competitors. Top and middle management disagree. (P value = 0.0069)
	Top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems	Top and middle management agree that top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems. Lower and call and non-call centre employees disagree. (P value = 0.0310)
	Top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes	Top and lower management agree, and middle and call and non-call centre employees disagree that top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes. (P value = 0.0452)
	Top level decision-making is characterised by compromises among conflicting demands of stakeholders	Top and call and non-call centre employees agree, and middle and lower management levels disagree that compromises are made between the conflicting demands of stakeholders. (P value = 0.101)

From the findings presented in table 7.4 it is clear that there is a difference in perception between the various management levels, specifically between top and middle management and the rest of their businesses.

With regard to the findings illustrated in table 7.4 the following hypotheses can be rejected:

Ho7 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how the businesses executives take risks in exploring new opportunities.

Ho8 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the “live and let live” philosophy in dealing with competitors.

Ho9 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

Ho10 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes.

Ho11 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by compromises among conflicting demands of owners, government, management, customers, employees and suppliers.

On the basis of the empirical results presented in table 6.13, the degree of entrepreneurship was found to be moderate. Hypothesis **Ho12 is accepted**. The degree of entrepreneurship in South African short-term insurance businesses is not high.

One obstacle in terms of degree of entrepreneurship is that it is difficult to determine whether the degree of entrepreneurship is low, moderate or high. No specific indication could be found in the academic literature as to what is an acceptable score to be categorised as high. Morris, *et al.* (2008:69) stated that it would assist if an industry's degree of entrepreneurship were known. Then businesses in an industry can measure themselves accordingly. The degree of entrepreneurship for businesses in the short-term insurance industry in South Africa has never been determined. This research is a first in this regard and can assist in establishing a benchmark.

With regard to the findings provided on the frequency of entrepreneurship, hypothesis **Ho13 is accepted**. The frequency of entrepreneurship in South African short-term insurance businesses is not high.

To be able to determine the entrepreneurial intensity of a business or industry the degree and frequency of entrepreneurship need to be combined. If this is done, hypothesis **Ho14 is accepted**: The entrepreneurial intensity in South African short-term insurance businesses is not high.

The summary of the frequency of entrepreneurship is presented in table 7.5. This is a summary of the findings as were presented in tables 6.14 to 6.19 and figures 6.9 to 6.13.

From table 7.5 it can be seen that 0 to 5 new products/services were introduced and 0 to 5 processes were implemented in a two year period. As with the degree of entrepreneurship it is difficult to determine whether this is relatively low, moderate or high, because no other figures or benchmarks exist for the short-term insurance industry in South Africa. Considering that the short-term insurance industry is a very competitive industry and that the demands, needs and wants of the consumer market differ considerably from the past, more new product/services offerings are expected. When looking at item 4 in table 7.5, it supports the item listed in the degree of entrepreneurship where the respondents indicated that their businesses are characterised by a high rate of new product/service introductions compared to competitors.

TABLE 7.5 Summary of major findings with regard to the frequency of entrepreneurship

Dependent variable		Result
1.	Number of new products/services that the business introduced during the past two years (2007 – 2009)	0 – 5
2.	Number of new processes that the business implemented during the past two years (2007 – 2009)	0 – 5
3.	Number of new product improvements or revisions that the individual respondents introduced during the past two years (2007 – 2009)	41 % indicated that they introduced more 37 % indicated that they introduced none
4.	Number of new product introductions compared with major competitors in the industry	51 % indicated their businesses introduce more than competitors
5.	Degree to which new product introductions include products that did not previously exist in the market	44 % indicated that theirs included more 34 % indicated that none was introduced

It seems as if the respondents acknowledge that there are new product/service introductions in their businesses but that they themselves are not responsible for this. It seems contradictory or it could be that there were a few individuals or a specific department that is responsible for all the new product/service introductions. This supports the fact that entrepreneurship needs to be developed in all the employees in the businesses, not just in a few. This would then be able to increase the number of unique and new product/service offerings and the implementation of new processes.

A rigorous analysis was also done on various aspects of the frequency of entrepreneurship and the independent variables (number of years working in the insurance business, business unit, management level and years that employees were working in their current jobs). A Chi-square analysis was done to determine the significant statistical differences between the various dependent and independent variables. These findings are

summarised in table 7.6. The in-depth analyses of the influence of the various dependent variables on the independent variables were given in tables 6.19, 6.20 and 6.21

TABLE 7.6 Summary of various independent variables on dependent variables (related to the frequency of entrepreneurship)

Independent variables	Dependent variables		
	Product improvements/revisions introduced by individuals in their business	New product improvements/revisions compared to competitors in the industry	Number of new product introductions that did not previously exist in the market ("new market")
Number of years working in the business	0.0300***	0.0199***	0.0001***
Business unit level	0.0264***	0.4968	0.7383
Management level	0.0850	0.0158***	0.0058***
Years in current job	0.0573	0.2408	0.0044***
P*** statistical significance at the 5% level			

Table 7.6 gives an overview of the areas where there is a significant statistical difference between the various dependent and independent variables. It is interesting to note that, in terms of the number of years that employee's have been working in their businesses, there is a significant statistical difference in all the listed dependent variables. If the detailed analyses (tables 6.19 to 6.21) were to be considered with table 7.6, then it could be noted that the biggest difference exists between the employees that have been working with the business for less than 2 years and the employees that have been working for more than 11 years. In most instances the employees that have been working for less than 2 years in their businesses indicated that there were no new product improvements. This could be that these employees were fairly new in their businesses and that they are not aware of

new products or product improvements, or that the communication lines are not followed through to all the employees.

With regard to the summarised findings in table 7.6, the following hypotheses are accepted and rejected:

Hypothesis Ho15 is rejected: There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions.

Hypothesis Ho16 is accepted: There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions.

Hypothesis Ho17 is rejected: There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions.

Hypothesis Ho18 accepted: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the number of product improvements/revisions.

Hypothesis Ho19 is rejected: There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions compared with competitors.

Hypothesis Ho20 is accepted: There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions compared with competitors.

Hypothesis Ho21 is accepted: There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions compared with competitors.

Hypothesis Ho22 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the number of product improvements/revisions compared with competitors.

Hypothesis Ho23 is rejected. There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho24 is rejected. There is no statistical significant difference between years in current job and the number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho25 is accepted. There is no statistical significant difference between the business units and the number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho26 is rejected. There is no statistical significant difference between the management levels and the number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”).

7.4.2 Climate for corporate entrepreneurship

To assess the climate for corporate entrepreneurship in a business, the Corporate Entrepreneurship Assessment Instrument (CEAI) can be used. This instrument has been proven to be valid and reliable internationally and in terms of a few South African studies (as indicated in chapter 6). To confirm the validity and reliability a factor analysis was done. The factor analysis confirmed the five factors as indicated in the CEAI.

Factor 1: Management support for corporate entrepreneurship

Factor 2: Work discretion

Factor 3: Rewards/reinforcement

Factor 4: Time availability

Factor 5: Organisational boundaries

The overall alpha value of these factors is 0.9252. A hypothesis testing procedure with an ANOVA was conducted to determine significant statistical differences whereby the hypothesis could be rejected or accepted.

The relationship between all the factors and eight independent variables of the sample respondents were examined. The eight independent variables included gender, age, ethnicity, highest qualification, years employed in the insurance business, business unit, management level and how many years the respondent has been working in his/her current job. Most important was the relationship between each factor and the business units and the management levels. Hypotheses were only formulated in terms of the factors and these two independent variables. Table 7.7 summarises the results of the various relationships between the five factors and the eight independent variables.

Table 7.7 indicates that there is a statistical significant difference between:

- management support and management level;
- work discretion and years in the business and management level;
- time availability and ethnicity, highest qualification, business unit and years in current job; and
- organisational boundaries and gender as well as management level .

A more rigorous analysis was done on each of the relationships in table 7.7 where there was a significant statistical difference. These analyses were reported in chapter 6 in tables 6.26, 6.28, 6.29, 6.32, 6.33, 6.34, 6.35, 6.37 and 6.38.

TABLE 7.7 Summary of relationship between the corporate entrepreneurial factors (dependent variables) and various independent variables

Independent variables	Factors				
	Management support	Work discretion	Rewards/ reinforcement	Time availability	Organisational boundaries
Gender	0.9088	0.1442	0.3194	0.5629	0.0065***
Age	0.2998	0.5894	0.6237	0.6120	0.7911
Ethnicity	0.5446	0.1328	0.2448	0.0067***	0.2957
Highest qualification	0.6754	0.3483	0.7130	0.0078***	0.9878
Years in insurance business	0.8198	0.0174***	0.2829	0.8227	0.7016
Business unit	0.3835	0.1170	0.6447	0.0107***	0.3656
Management level	0.0039***	0.0046***	0.8833	0.2706	0.0001***
Years in current job	0.4860	0.9445	0.1548	0.0230***	0.4355
p*** statistical significance at the 5% level					

With regard to the formulated hypotheses the following hypotheses are rejected or accepted:

Hypothesis Ho27 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: managerial support.

Hypotheses Ho28 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: managerial support.

Hypothesis Ho29 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: work discretion.

Hypothesis Ho30 can be accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: work discretion.

Hypothesis Ho31 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in the South African short-term insurance industry regarding the corporate entrepreneurship construct: rewards/reinforcements.

Hypothesis Ho32 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: rewards/reinforcements.

Hypothesis Ho33 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: time availability.

Hypothesis Ho34 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: time availability.

Hypothesis Ho35 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: organisational boundaries.

Hypothesis Ho36 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: organisational boundaries.

7.4.3 Corporate entrepreneurship development programme

The third and final step of the entrepreneurial health audit includes the compilation of a corporate entrepreneurial development programme that focuses on the development of entrepreneurial behaviour that the business is requesting of the relevant parties in the business. According to Ireland, *et al.* (2006b:29) this is the foundation of a successful entrepreneurial strategy.

From the results presented in 7.4.2 on the entrepreneurial intensity and in 7.4.3 on the climate for corporate entrepreneurship, it is clear that gaps exist that need to be addressed in South African short-term insurance businesses in order to improve the overall corporate entrepreneurial and innovation levels for this industry. Ireland, *et al.* (2006b:28) stated that if a business achieves a low corporate entrepreneurial score it will also indicate the areas that need to be addressed in a training programme.

The following gaps were identified from the results presented in this study:

- The degree and frequency of entrepreneurship, and the entrepreneurial intensity of short-term insurance businesses in South Africa is not high. This means that there needs to be training and development with regard to innovativeness, proactiveness and risk taking.
- There is a significant statistical difference between people who have been working in their businesses for 2 years and less versus the employees that have been working for 3 years or more.
- There are differences between the various business units (Sales, IT, Claims and Administration, Shared Services) with regard to innovations.
- There are differences in the perceptions of management levels (top, middle, lower management, and call and non-call centre employees) in terms of innovativeness,

- proactiveness and risk taking. There is a very distinct difference between top and middle level management and the rest of the employees).
- Only a few (41%) of the employees indicated that they had introduced new products or made improvements or revisions. It could be that most employees don't know how to innovate or that only certain employees or units in their businesses are able to innovate.
 - New employees do not have the same exposure to innovation compared to the employees that have been working longer in their businesses.
 - Only 0 to 5 new products were developed and 0 to 5 processes implemented in a two year period. There is a gap in terms of idea identification.
 - The scores on time availability and organisational boundaries were not high and need to be addressed.
 - Although the scores on management support for corporate entrepreneurship and work discretion were higher than for time availability and organisational boundaries, they are still not very high and also need to be addressed.

Because of the gaps identified from the two measuring instruments (EPI and the CEAI) it is clear that a need for a corporate entrepreneurship development programme exists. **Hypothesis Ho37 can be rejected:** There is no need for a corporate entrepreneurship development programme in short-term insurance businesses in South Africa.

From the ten CEDPs that have been identified in chapter 4 of this study a possible CEDP can be recommended for South African short-term insurance businesses. The main focus should be on the development of a positive entrepreneurial intensity and the identification of entrepreneurial opportunities. As identified in chapter 4 a CEDP should include the following:

- Introduction to Entrepreneurial Management
- Thinking creatively
- Idea development process
- Assessing entrepreneurial culture
- Barriers and facilitators to entrepreneurial thinking
- Action planning

With regard to South African short-term insurance businesses it is also suggested that a CEDP be developed for new employees and those that have been working for 2 years or less, which is different from that for the employees who have been working in the business for longer.

7.5 CONTRIBUTION TO THE SCIENCE

This study analysed the corporate entrepreneurship and innovative levels in South African short-term insurance businesses by means of an established corporate entrepreneurial health audit instrument. This study was the first of its kind in South Africa and also in the short-term insurance industry. Many times international researchers develop instruments and they are only tested in the country of origin. This does not imply that the instrument will be successful in other countries. This study proves that an internationally developed instrument can be applied in a South African context. Further contributions to the science are as follows:

- The latest theory on corporate entrepreneurship has been organised, captured and documented. This can assist in the increase of the body of knowledge on corporate entrepreneurship.
- The results of this study can serve as the beginning of establishing benchmarks for the South African short-term insurance industry in terms of entrepreneurial intensity and a culture for corporate entrepreneurship.
- No research has been done on the South African short-term insurance industry and corporate entrepreneurship. The Entrepreneurial health audit tool can be used by decision makers as part of their effort to help their businesses successfully to engage in entrepreneurship as a path to organisational effectiveness.
- As indicated by Thornberry (2003:333) and Zahra (1991:193), not enough empirical research exists in the field of corporate entrepreneurship. This study contributes to the empirical studies in the field of CE to support the literature and those models that have not been tested empirically.
- The findings can assist the managers not only in South African short-term insurance businesses but also in other businesses to understand the corporate entrepreneurial

process, and can provide guidelines for businesses involved in corporate entrepreneurship.

- The guidelines given in this study to foster and implement corporate entrepreneurship can be used by industry leaders, businesses and managers. Insights are helpful to businesses in understanding what can be done to improve the businesses ability to compete in the complex, rapidly changing, competitive environments. These guidelines can also assist managers in undertaking change efforts directed at stimulating a corporate entrepreneurial and innovative mindset.

7.6 LIMITATIONS OF THE STUDY

Cooper and Schindler (2008) emphasise that all research studies have their limitations, and the sincere investigator recognises that researchers need aid in judging the study's validity. In this regard the reader should be aware of the following limitations of this study:

- For future research the sample size should be increased to explain fully the population's characteristics and to limit the chance of a sampling error occurring, and to increase the response rate of the respondents.
- No benchmarks exist in the South African short-term insurance businesses and it is difficult to determine whether the entrepreneurial intensity score is low, high or moderate. As literature indicated (Morris, *et al.*, 2008) industry benchmarks need to be established.
- This was a cross-sectional study and constrained to be completed within a given period of time. If the study could have been conducted over a longer period the response rate could have been increased. An increased response rate could have given a better view of the corporate entrepreneurship environment in South African short-term insurance businesses.
- A more in-depth analysis could have been done on the various business units and management levels to assist in the compilation of a specific corporate entrepreneurship development programme. The study is nevertheless a step towards providing insight into the entrepreneurial behaviour in South African short-term insurance businesses.

- Information on corporate entrepreneurship development programmes is not freely available or easily accessible.
- Results of the entrepreneurial health audit applied in other international countries are not available. This could have been beneficial to compare with this study.

7.7 RECOMMENDATIONS AND FUTURE RESEARCH

Corporate entrepreneurship is a relatively young field in South Africa. South African industries and businesses can take note of the findings of international research on how to structure their businesses to become more entrepreneurial. The two South African corporate entrepreneurial development programmes offered by the University of Pretoria (discussed in chapter 4) could be used to address the gaps identified for South African short-term insurance businesses as they include all the relevant aspects needed to increase corporate entrepreneurial activity.

For future research the following recommendations can be made:

- It is recommended that the conceptual models and frameworks identified in this study be tested empirically.
- Corporate entrepreneurial and innovative benchmarks should be established for the South African short-term insurance industry. This could encourage the individual insurance businesses to assess their corporate entrepreneurial and innovative levels. This could also assist them in improving their entrepreneurial intensity and corporate entrepreneurial climate.
- The empirical knowledge on the processes associated with corporate entrepreneurial activities is mostly based on case studies. Different research approaches to document the processes and problems associated with the implementation of corporate entrepreneurship need to be exploited.
- A longitudinal study should be conducted to determine whether high levels of entrepreneurial intensity are sustainable over time, and what the effect will be after conducting a corporate entrepreneurial development programme.
- Research can also be done on how the corporate entrepreneurial process develops on successfully exploiting opportunities in a South African context.

- Determining the barriers to corporate entrepreneurship for South African short-term insurance businesses. Once these barriers are identified the corporate entrepreneurial strategies can be adjusted accordingly.
- An extensive research project can be launched to determine which South African businesses make use of corporate entrepreneurship development programmes and the content of these programmes, plus how they compare to international programmes. It could also be determined whether these development programmes are evaluated to determine their successfulness.
- After conducting corporate entrepreneurship development in South African short-term insurance businesses, the effect of the development programme needs to be assessed.
- Other industries in South Africa can be encouraged to use the corporate entrepreneurial health audit. Research can then be done to determine the successfulness and compare it with this study.

The study has the following managerial implications:

- Businesses must assess their entrepreneurial intensity and climate for corporate entrepreneurship to identify gaps to address in developing corporate entrepreneurship in their businesses.
- A corporate entrepreneurial programme is one of the best methods to instil corporate entrepreneurship and innovation in a business.
- Not only top- and senior level management, but all the employees in the business need to undergo training and development in corporate entrepreneurship and innovation.
- Entrepreneurial activity is driven by individuals and the more a business can exhibit entrepreneurial qualities and its people believe in behaving entrepreneurially – the greater the businesses ability to achieve maximum innovation or entrepreneurial success.
- Corporate entrepreneurship needs to be integrated throughout the entire business – cannot focus on just one specific area.
- Entrepreneurial intensity has a direct influence on organisational performance.

- A business's entrepreneurial intensity is influenced by the businesses strategic management practices.
- In businesses that want to foster and develop corporate entrepreneurship, the executives must first of all know what they want to achieve. They must begin with establishing the desired corporate entrepreneurial outcomes, develop measurable goals, make decisions on degree and frequency of entrepreneurship, determine whether the business wants to be a follower or leader in terms of innovation; determine how much time employees can devote to new versus existing initiatives and lastly the amount and type of innovation that needs to come from the different levels in the business.
- Businesses can structure themselves according to the framework for corporate entrepreneurship of Ireland, *et al.* (2006).
- Research has shown that businesses that want to be successful in terms of corporate entrepreneurship and innovation need to adhere to the following:
 - Small number of managerial layers
 - Organisational structure without highly structured job roles
 - Controls that are able to balance loose and tight properties promote and nurture entrepreneurial behaviour
 - The human resource management system is a valuable tool to encourage and reinforce entrepreneurial behaviour
 - Training should be continuous, less structured and focused on individualised knowledge requirements.
 - High importance is placed on the empowerment of people to allow them to act creatively and to fulfil their potential
 - Authority and responsibility are decentralised
 - Business is structured with clear communication of employees' roles and responsibilities, and is supportive
- Managers should pay attention to the organisational antecedents: management support, work discretion; time availability; rewards/reinforcement and organisational boundaries.

7.8 SUMMARY AND CONCLUSION

The literature review of this study introduced various important elements within the field of corporate entrepreneurship specifically in terms of the conceptual models, how to foster and develop corporate entrepreneurship and an analysis of various corporate entrepreneurship development programmes. In this chapter the major aspects of corporate entrepreneurship literature was highlighted with regard to the primary and secondary objectives that were formulated for this study. This showed that the objectives of the study were met. The hypotheses were revisited, summarised and indicated whether they were rejected or accepted.

The findings of the empirical part of the study indicated that the internationally developed corporate entrepreneurial health audit instrument can be used to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses. With this instrument, gaps can be identified for which a corporate entrepreneurial development programme can be developed to address the gaps. A corporate entrepreneurial development programme can assist a business to become more innovative and entrepreneurial.

The study also identified several avenues for further research in the area of corporate entrepreneurship.

Hopefully the findings of this study will serve as a motivation and guideline for other industries and businesses in South Africa to assess their entrepreneurial intensity and corporate entrepreneurial climate in an attempt to instil corporate entrepreneurship and innovation in their businesses.

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ANNEXURE A

Research Questionnaire

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Please take note that to obtain the confidentiality of the organisations that participated in this study the insurance businesses are omitted from this questionnaire



Assessment of entrepreneurial intensity, innovation and corporate entrepreneurship

What you need to do:

1. All employees are kindly requested to complete the questionnaire between 19 and 30 January 2009
2. It will not take you longer than 20 minutes to complete
3. There is no right or wrong answers to these questions so please be as honest and thoughtful as possible in your responses
4. Please answer all the questions
5. Rest assure that your response will be treated confidentially. You do not have to enter your name or contact details on the questionnaire – it remains anonymous.
6. This questionnaire serves as part of a PhD in Entrepreneurship research project which aims to determine the entrepreneurial intensity of the short-term insurance industry in South African and to assess how the internal environment supports entrepreneurship and innovation.

Completing the questionnaire:

The questionnaire consists of three sections, namely:

Section A: Demographic data

Section B: Measurement of the organisation's entrepreneurial intensity

Section C: Employees perception of the workplace and the insurance business

At each section you will find instructions indicating how you should answer the questions. Please read this before answering.

Submitting the completed questionnaire:

After completing the questionnaire, save it in word format and e-mail it to the following address: dgroenewald@uj.ac.za

Thank you for your assistance!!!



Section A: Demographic Data

Instructions:

Please read the following questions and indicate the appropriate option.

You can bold your option or make an "X".

1. Gender

Male	1
Female	2

A1

2. Age

Between 18 and 20 years	1
Between 21 and 25 years	2
Between 26 and 30 years	3
Between 31 and 35 years	4
Between 36 and 40 years	5
Between 41 and 50 years	6
Between 51 and 60 years	7
Older than 60 years	8

A2

3. Ethnicity

Black	1
Coloured	2
Indian or Asian	3
White	4

A3

4. Your highest educational qualification?

Grade 11 or lower (Std 9 or lower)	1
Grade 12 (Matric, std 10)	2
Post-Matric Diploma or certificate	3
Bachelor Degree(s)	4
Post-Graduate Degree(s)	5

A4

5. How many years have you been with this organisation?

Less than 6 months	1
Between 6 to 12 months	2
Between 1 to 2 years	3
Between 3 to 5 years	4
Between 6 to 7 years	5
Between 8 to 10 years	6
Between 11 to 15 years	7
Between 16 to 20 years	8
More than 20 years	9

A5

6. In what Insurance business do you work?

This section is omitted to assure confidentiality of the various insurance businesses

A6

7. What is your current job level?

Top Management (Director)	1
Senior Management (General Manager)	2
Middle Management (Business Manager; HR Manager; Project Manager; Development Manager; Senior Brand Manager; Assistant General Manager)	3
Junior Management (Team Manager; Sales Manager; Marketing Manager; Team Leader (ISS); Brand Manager; Office Manager)	4
Supervisory (Supervisor)	5
Call Centre Staff (Sales Consultant, Contact Centre Consultant, Message Centre Consultant, Sales Administrator)	6
Non Call Centre Staff (Loss Adjustor, Claims Consultant, Personal Assistant, Programmer, Media Planner)	7

A7

8. How many years have you been in your present job?

Less than 6 months	1
Between 6 to 12 months	2
Between 1 to 2 years	3
Between 3 to 5 years	4
Between 6 to 7 years	5
Between 8 to 10 years	6
Between 11 to 15 years	7
Between 16 to 20 years	8
More than 20 years	9

A8



Section B:
Measurement of organisation's entrepreneurial intensity

Instructions:

We are interested in measuring how entrepreneurial your organisation is. Please read the following statements.

For each of the following statements in this section, indicate to what degree you agree. Please indicate your answer using the following 5-point scale:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly agree

**You can bold your option or make an "X".
Please answer all the questions**

Organisation orientation

Our organisation is characterised by:

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
1	a high rate of new product/service introductions, compared to our competitors (including new features and improvements)	1	2	3	4	5	B1	
2	an emphasis on continuous improvement in methods of production and/or service delivery	1	2	3	4	5	B2	
3	risk-taking by key executives in seizing and exploring chancy growth opportunities	1	2	3	4	5	B3	
4	a "live and let live" philosophy in dealing with competitors	1	2	3	4	5	B4	
5	seeking of unusual, novel solutions by senior management to problems via the use of "idea people", brainstorming, etc.	1	2	3	4	5	B5	
6	a top management philosophy that emphasises proven products and services, and the avoidance of heavy new product development costs.	1	2	3	4	5	B6	
7	cautious, pragmatic, step-at-a-time adjustments to problems	1	2	3	4	5	B7	
8	active search for big opportunities	1	2	3	4	5	B8	
9	rapid growth as the dominant goal	1	2	3	4	5	B9	
10	large, bold decisions despite uncertainties of the outcomes	1	2	3	4	5	B10	
11	compromises among the conflicting demands of owners, government, management, customers, employees and suppliers	1	2	3	4	5	B11	
12	steady growth and stability as primary concerns	1	2	3	4	5	B12	



New product introduction

If you don't know what the situation regarding product development is in your organisation please indicate this at the following questions – please do not leave the options blank

1. What is the number of new products your organisation introduced during the past two years?

Number of new products:	0		
	1		B13
	2		B14
	3		B15
	4		B16
	5		B17
	6		B18
	7		B19
	8		B20
	9		B21
	10		B22
If more than 10 new products Indicate the exact quantity			B23
I don't know			B24
			B25

2. How does the number of new product improvements or revisions that **YOU** introduced during the past two years compare to previous years?

Significant ly less	Les s	Sam e	More	Significant ly more	I had no new improvement s or revisions	
1	2	3	4	5	6	B26 <input style="width: 50px;" type="text"/>

3. How does the number of new product introductions at your organisation compare with those of your major competitors?

Significant ly less	Les s	Sam e	More	Significant ly more	I have no knowledge about this	
1	2	3	4	5	6	B27 <input style="width: 50px;" type="text"/>

4. To what degree did these new product introductions include products that did not previously exist in your market ("new to the market")?

Significant ly less	Les s	Sam e	More	Significant ly more	I have no knowledge about this	
1	2	3	4	5	6	B28 <input style="width: 50px;" type="text"/>



New process introduction

5. Please estimate the number of significant **new methods or operational processes** your organisation implemented during the past two years?

(Examples of process innovations include: new systems for managing customer service or inventories, and improved process for collecting receivables, a major new sales or distribution approach, etc.)

Number of new methods or processes:	0		B29	
	1		B30	
	2		B31	
	3		B32	
	4		B33	
	5		B34	
	6		B35	
	7		B36	
	8		B37	
	9		B38	
	10		B39	
If more than 10 new methods or processes please indicate the exact amount			B40	
I don't know			B41	

6. Which of the following methods has your organisation used to **recognize YOU** for innovative behaviour (new ideas and improvements)?

(Indicate all the ones that apply to you).

Salary raise	1		B42	
Promotion	2		B43	
Release/assigned time	3		B44	
Recognitions awards such as certificates or prizes	4		B45	
One time bonus	5		B46	
Did not have any innovative behaviour	6		B47	

7. On a 1-5 please rate **YOUR satisfaction** with the rewards/recognitions **you have received** for developing new ideas or implementing job improvements.

Only rate the options that you identified in question 6.

	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	
Salary raise	1	2	3	4	5	B48 <input type="text"/>
Promotion	1	2	3	4	5	B49 <input type="text"/>
Release/assigned time	1	2	3	4	5	B50 <input type="text"/>
Recognitions awards such as certificates or prizes	1	2	3	4	5	B51 <input type="text"/>
One time bonus	1	2	3	4	5	B52 <input type="text"/>
Did not have any innovative behaviour					6	<input type="text"/>

**Section C:
Perception of workplace and organisation**

Instructions:

We are interested in learning about how **YOU** perceive your workplace and organisation. Please read the following items.

For each of the following statements in this section, indicate to what degree you agree. Please indicate your answer using the following 5-point scale:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly agree

You can bold your option or make an "X".

**Section 1:
Management support for corporate entrepreneurship**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	My organisation is quick to use improved work methods that are developed by workers.	1	2	3	4	5	C1 <input type="text"/>
2	In my organisation, developing new ideas for the improvement of the organisation is encouraged.	1	2	3	4	5	C2 <input type="text"/>
3	Top management is aware and very receptive to my ideas and suggestions.	1	2	3	4	5	C3 <input type="text"/>
4	Those employees who come up with innovative ideas on their own often receive management encouragement for their activities.	1	2	3	4	5	C4 <input type="text"/>



**Section 1:
Management support for corporate
entrepreneurship (continues)**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
5	Those actively working in projects are allowed to make decisions without going through elaborate justification and approval procedures.	1	2	3	4	5	C5	
6	Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	1	2	3	4	5	C6	
7	The top managers have been known for their experience with the innovation process.	1	2	3	4	5	C7	
8	There are several options within the organisation for individuals to get financial support for their innovative projects and ideas.	1	2	3	4	5	C8	
9	People are often encouraged to take calculated risks with ideas around here.	1	2	3	4	5	C9	
10	Individual risk takers are often recognised for their willingness to champion new projects, whether eventually successful or not.	1	2	3	4	5	C10	
11	The term "risk taker" is considered a positive attribute for people in my work area.	1	2	3	4	5	C11	
12	The organisation supports many small and experimental projects realising that some will undoubtedly fail.	1	2	3	4	5	C12	
13	There is considerable desire among people in the organisation for generating new ideas without regard for crossing departmental or functional boundaries.	1	2	3	4	5	C13	
14	People are encouraged to talk to employees in other departments of this organisation about ideas for new projects.	1	2	3	4	5	C14	

**Section 2:
Work discretion**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
15	I feel that I am my own boss and do not have to double check all of my decisions with someone else	1	2	3	4	5	C15	
16	Harsh criticism and punishment result from mistakes made on the job.	1	2	3	4	5	C16	
17	This organisation provides the chance to be creative and to try my own methods of doing the job.	1	2	3	4	5	C17	



**Section 2:
Work discretion (continues)**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
18	This organisation provides the freedom to use my own judgement.	1	2	3	4	5	C18
19	This organisation provides the chance to do something that makes use of my abilities.	1	2	3	4	5	C19
20	I have the freedom to decide what I do on my job.	1	2	3	4	5	C20
21	It is basically my own responsibility to decide how my job gets done.	1	2	3	4	5	C21
22	I almost always get to decide what I do on my job.	1	2	3	4	5	C22
23	I have much autonomy on my job and am left on my own to do my own work.	1	2	3	4	5	C23
24	There is a lot of challenge in my job.	1	2	3	4	5	C24

**Section 3:
Rewards/Reinforcements**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
25	My manager helps me get my work done by removing obstacles and roadblocks.	1	2	3	4	5	C25
26	The rewards I receive are dependent upon my work on the job.	1	2	3	4	5	C26
27	My supervisor will increase my job responsibilities if I am performing well on my job.	1	2	3	4	5	C27
28	My supervisor will give me special recognition if my work performance is especially good.	1	2	3	4	5	C28
29	My manager would tell his/her boss if my work was outstanding.	1	2	3	4	5	C29
30	A promotion usually follows from the development of new and innovative ideas	1	2	3	4	5	C30
31	There are several options within the organisation for individuals to get financial support for their innovative projects and ideas.	1	2	3	4	5	C31
32	Individuals with successful innovative projects receive additional rewards and compensations beyond the standard reward system for their ideas and efforts.	1	2	3	4	5	C32
33	During the past year, my immediate supervisor discussed my work performance with me frequently.	1	2	3	4	5	C33
34	I clearly know what level of work performance is expected from me in terms of amount, quality and timeliness of output.	1	2	3	4	5	C34



**Section 4:
Time availability**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
35	During the past three months, my work load kept me from spending time on developing new ideas.	1	2	3	4	5	C35
36	I always seem to have plenty of time to get everything done.	1	2	3	4	5	C36
37	I have just the right amount of time and work load to do everything well.	1	2	3	4	5	C37
38	My job is structured so that I have very little time to think about wider organisational problems.	1	2	3	4	5	C38
39	I feel that I am always working with time constraints on my job.	1	2	3	4	5	C39
40	My co-workers and I always find time for long term problem solving.	1	2	3	4	5	C40
41	An employee with a good idea is often given free time to develop that idea.	1	2	3	4	5	C41

**Section 5:
Organisational boundaries**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
42	In the past three months, I have always followed standard operating procedures or practices to do my major tasks.	1	2	3	4	5	C42
43	There are many written rules and procedures that exist for doing my major tasks.	1	2	3	4	5	C43
44	On my job I have no doubt of what is expected of me.	1	2	3	4	5	C44
45	There is little uncertainty in my job.	1	2	3	4	5	C45
46	My job description clearly specifies the standards of performance on which my job is evaluated.	1	2	3	4	5	C46
47	I seldom have to follow the same work methods or steps for doing my major tasks from day to day.	1	2	3	4	5	C47



**Section 6:
Specific climate variables**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
48	This organisation definitely rewards employees who take calculated risks and innovate.	1	2	3	4	5	C48
49	Jobs in this organisation tend to be broadly defined with considerable discretion in how tasks are performed.	1	2	3	4	5	C49
50	In this organisation, employees can pursue multiple career paths.	1	2	3	4	5	C50
51	This organisation tries hard to develop the creative potential of employees.	1	2	3	4	5	C51
52	Annual performance appraisals in this organisation include an evaluation of employee innovativeness.	1	2	3	4	5	C52
53	Around here, it seems like there is more concern with process than with performance.	1	2	3	4	5	C53
54	This organisation does a good job of balancing incentives for individual initiative with incentives for team collaboration.	1	2	3	4	5	C54
55	If you are not innovating on the job, you cannot get ahead in this organisation.	1	2	3	4	5	C55
56	An overly bureaucratic structure takes away from our ability to be entrepreneurial in the organisation.	1	2	3	4	5	C56
57	Our organisation is organised in a way that encourages managers to “micromanage” employees and projects.	1	2	3	4	5	C57
58	We have too many levels of management in this organisation.	1	2	3	4	5	C58
59	I would characterise the organisational structure as being highly flexible.	1	2	3	4	5	C59
60	A rigid chain of command limits our ability to experiment with new ideas.	1	2	3	4	5	C60
61	Red tape and slow approval cycles are problems in this organisation.	1	2	3	4	5	C61
62	Managers in this organisation strongly believe in delegating decision-making responsibility.	1	2	3	4	5	C62
63	Controls are very tight in this organisation. We tend to count every rand, every hour.	1	2	3	4	5	C63
64	Senior management focuses on eliminating any slack within budgets.	1	2	3	4	5	C64
65	Once budgets are finalised and accepted, they are difficult to revise.	1	2	3	4	5	C65
66	The lines of command clearly allocate authority and responsibility to each business unit/department.	1	2	3	4	5	C66



**Section 6:
 Specific climate variables (continues)**

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
67	The organisational structure is very clearly defined and delineated.	1	2	3	4	5	C67	
68	In this organisation, employees have a lot of say in how things are done.	1	2	3	4	5	C68	
69	The culture in the organisation is one that rewards the tried and the true.	1	2	3	4	5	C69	
70	This is a business that celebrates innovative achievements.	1	2	3	4	5	C70	
71	We have a culture that strongly discourages failure.	1	2	3	4	5	C71	
72	There is a sense of urgency in this organisation regarding the importance of change and innovation.	1	2	3	4	5	C72	
73	This organisation subscribes to the motto "if it is not broken, don't fix it".	1	2	3	4	5	C73	
74	Innovation and risk taking are core values in this organisation.	1	2	3	4	5	C74	
75	New ideas tend to receive quick go/no decisions from management in this organisation.	1	2	3	4	5	C75	
76	The organisation's environment encourages people to talk openly with others about ways to improve the firm's operations.	1	2	3	4	5	C76	