

**An assessment of entrepreneurial
orientation in an automotive component
manufacturing company in Gauteng
Province, South Africa.**

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ABSTRACT

In South Africa developments in the automotive industry have been in the spotlight in the last few decades. This was as a result of rapid export expansion first in the component segment and later followed by vehicles. Most of the world's major automobile manufacturers have set up assembly plants in the country. In the last couple of decades the automotive sector has received considerable amount of money in foreign investment including substantial fixed investment in assembly plants and component production. The export objectives of all these companies has resulted tremendous improvement in productivity and quality in the last decade or so.

Approximately 20 years ago the South African government introduced an incentive benefit scheme known as Motor Industry Development Plan (MIDP) to encourage automotive and component manufacturing companies to setup operations in the country. The Motor Industry Development Plan worked well for South Africa, achieved the purpose of attracting automotive manufacturing companies to the country. European, American, Japanese and Korean automotive manufacturing companies setup profitable assembly plant. As a result automotive component manufacturing companies such as manufacturers of tyres, catalytic converters etc. also step lucrative operations in South Africa. The 1990s and early 2000s were particularly boom periods in this industry however everything changed when after the 2008 economic meltdown.

Corporate entrepreneurship in the form of entrepreneurial orientation of the South African automotive industry specifically component manufacturing sector can make positive impact in the survival and prosperity of the industry. Entrepreneurial orientation of company and employees in an automotive component manufacturing company in Gauteng Province of South Africa is explored. A literature study on the field of entrepreneurship is conducted. The term entrepreneurial orientation consisting of five constructs or dimensions, namely pro-activeness, innovativeness, autonomy, competitive aggressive and risk-taking is defined. Perceived success of the company is defined in terms of business growth, and business development and improvement. An entrepreneurial orientation questionnaire was distributed among employees including middle managers of the company. Both ratings of the constructs of the constructs and their influence on the perceived success of the company has been measured, analysed and reported. The results obtained from the questionnaire in conjunction with literature review are used to draw conclusions and make recommendations.

KEYWORDS: Automotive; entrepreneurship; entrepreneurial orientation, constructs, perceived business success

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CHAPTER 1

THE NATURE AND SCOPE OF STUDY

1.1 INTRODUCTION

In South Africa developments in the automotive industry have been in the spotlight in the last few decades. This was as a result of rapid export expansion first in the component segment and later followed by vehicles. Most of the world's major automobile manufacturers such as Toyota, VW, Mercedes Benz, BMW and Nissan have set assembly plants in the country. In the last couple of decades the automotive sector has received considerable amount of money in foreign investment including substantial fixed investment in assembly plants and component production. The export objectives of all these companies has resulted tremendous improvement in productivity and quality in the last decade or so.

Approximately 20 years ago the South African government introduced an incentive benefit scheme to encourage automotive and component manufacturing companies to setup operations in the country. This was meant to be win-win situation for the country and the companies but it couldn't last. The benefit scheme was known as Motor Industry Development Plan (MIDP). MIDP was frequently used as an example of trade and industrial policy and even as an example for other sectors to follow.

The Motor Industry Development Plan worked well for South Africa, achieved the purpose of attracting automotive manufacturing companies to the country. European, American, Japanese and Korean automotive manufacturing companies setup profitable assembly plant. As a result automotive component manufacturing companies such as manufacturers of tyres, catalytic converters etc. also step lucrative operations in South Africa. Some of the products from these plants were sold in South Africa however most of them were exported to other countries. The 1990s and early 2000s were particularly boom periods in this industry however everything changed when after the 2008 economic meltdown.

The American and European economic recession meant that most people couldn't afford to buy new cars which resulted in a snow ball effect throughout the industry supply chain. Simply put every company involved in the chain was felt the pinch. In South Africa the situation was perpetuated by the MIDP coming to an end in 2012. Suddenly the South African operations had to be competitive without MIDP. There are different ways in which all these companies can remain competitive against their international counterpart without

MIDP such as improving productivity, quality, reducing cost of operations or increase operating speed. Whatever strategy any organisation focus on that organisation's managers and employees will have to be innovative if there are going to be successful. The possible impact of corporate entrepreneurship on the South African automotive industry more especially component manufacturing sector is the focus of this study.

1.2 PROBLEM STATEMENT

Any loss of competitiveness and productivity on the part of South African operations might result in most of the companies relocating their operations to other parts of the world. The result of that would be catastrophic to the South African economy, lots of people would lose their jobs. MIDP used to give South African operations a competitive advantage in a very competitive global industry. The current global economic meltdown is just makes the situation worse for these companies.

In order to remain competitive these organisations' management and employees will have to turn to new methodologies such as corporate entrepreneurship through entrepreneurial orientation to achieve success. The focus of this study is on an assessment of entrepreneurial orientation in an automotive component manufacturing companies' management and employees and the perceived success of the company.

1.3 OBJECTIVES OF THE STUDY

The objectives of this study are divided into primary and secondary objectives.

1.3.1 PRIMARY OBJECTIVES

The primary objective of the study is to investigate the entrepreneurial orientation of the employees working in an automotive component manufacturing company in South Africa and secondly to determine if the perceived success of the industry in which they operate, namely the automotive component manufacturing industry is depended on the company and employee's entrepreneurial orientation. Test for a relationship between entrepreneurial orientation and demographic profile as well as to determine if there is a relationship between a company employees perceived business success and employee demographic profile.

1.3.2 SECONDARY OBJECTIVES

Secondary objectives include the following:

- To gain insight into entrepreneurship through conducting a literature study.
- To study the concept of entrepreneurial orientation.
- To study what perceived success of a business entails.
- To study the auto catalytic converter industry.
- To determine challenges experienced by entrepreneurial employees and managers working for large multinational companies.
- To examine the entrepreneurial orientation of managers and employees working for large multinational companies.
- To examine the current perceived challenges faced by companies operating in automobile manufacturing industry.
- To draw conclusions from the empirical study and offer practical recommendations to managers and employees working in large multinational organisations.

1.4 SCOPE OF THE STUDY

This section describes the field of the study, industry demarcation and the geographical demarcation.

1.4.1 FIELD OF THE STUDY

The study field falls within the discipline on entrepreneurship with specific focus on entrepreneurship orientation on managers and employees working for large multinational automobile component manufacturing companies. The influence of the entrepreneurial orientation constructs (independent variables) on the perceived success (dependent variable) of the business will be determined.

1.4.2 GEOGRAPHICAL DEMARCATION

This study will be conducted on an automotive component manufacturing company based in Gauteng Province, South Africa. Figure 1.1 indicates the area situated in Gauteng province covered in this study.

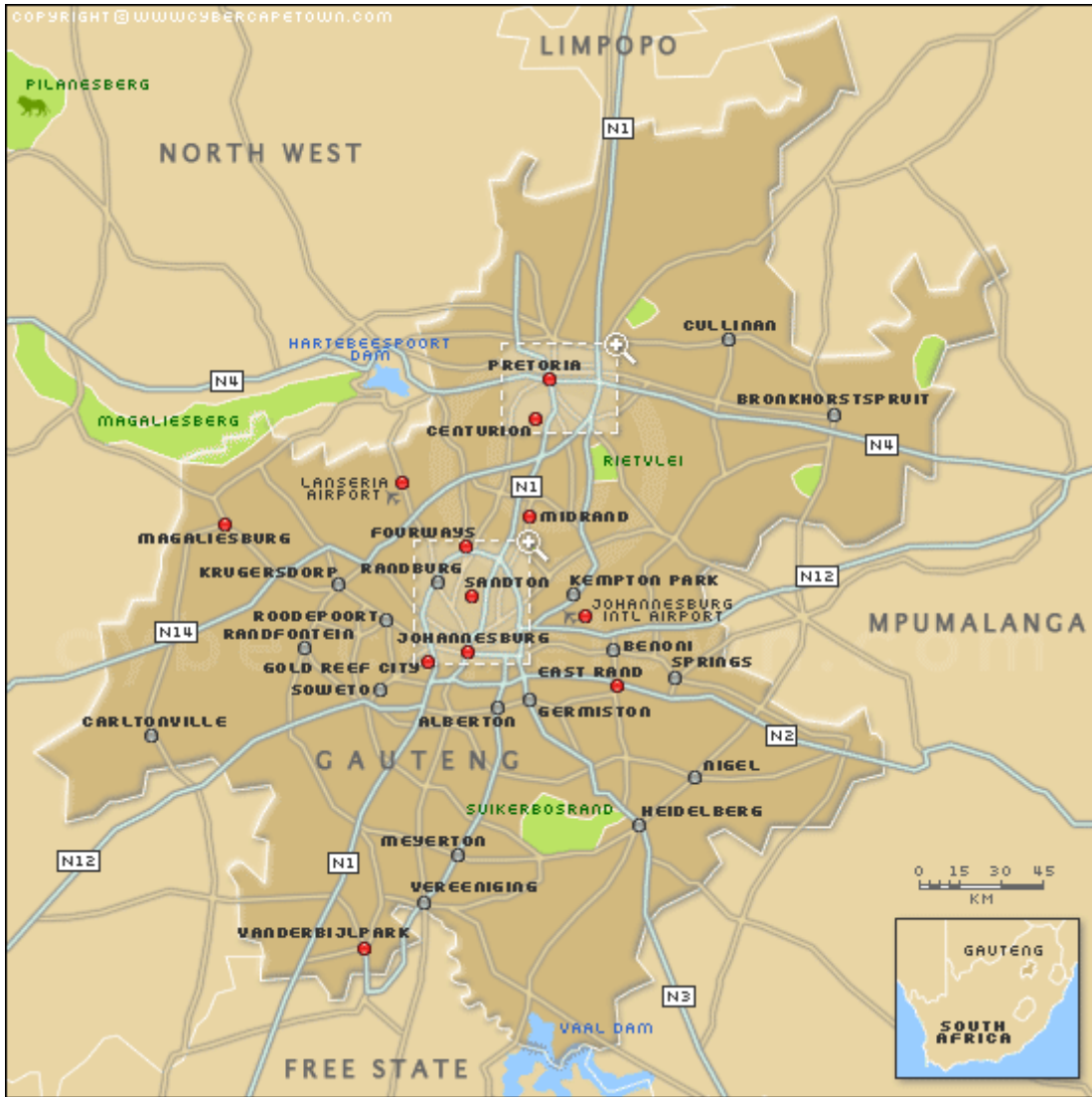


Figure 1.1: Area of automobile component manufacturing companies in the study

1.5 RESEARCH METHODOLOGY

The study consists of two phases, namely a literature study and an empirical study.

1.5.1 LITERATURE STUDY

The literature study focuses on the field of entrepreneurship as phenomenon and entrepreneurial orientation with its five constructs, i.e innovativeness, pro-activeness, competitive aggressiveness, autonomy and risk taking will be defined. Furthermore what is perceived as business success will be explored.

The automobile component manufacturing industry in South African will be explored. The continued competitiveness of South African companies without the Motor Industry Development Plan (MIDP) will also be investigated.

The following sourcing methods have been applied:

- Scientific journals
- Website articles
- South African laws or legislations
- Scientific journals
- Reports on previous research conducted.

1.5.2 EMPIRICAL STUDY

This section includes a description of the specific techniques to be utilized, the specific measurement instruments to be used and activities initiated in conducting the research.

A research design can be described as a plan or strategy which moves from the underlying philosophical assumptions to specifying the selection of respondents, the data gathering techniques to be used and the data analysis to be done (Nieuwenhuis, 2007:70)

1.5.3 RESEARCH DESIGN

A quantitative research design techniques will be used. Quantitative research approach will be used to investigate the relationship between variables whilst qualitative approach can be used to gain in-depth understanding of the individual's experiences as was laid out by (Ivankova, Creswell & Clark, 2009:259). However qualitative study was not considered for this research.

According to Creswell and Ebersohn (2009:261) there are four main reasons for combining qualitative and quantitative methods within one study, namely:

- Explain or elaborate on quantitative results with subsequent qualitative data.
- Use qualitative data to develop a new measuring instrument or theory that is subsequently tested.
- Compare quantitative and qualitative data sets to produce and validated conclusions.
- Enhance a study with supplement data set which can be either quantitative or qualitative.

Each participant in the research will have their own background. Therefore in depth understanding of where the participant comes from would contribute greatly to the results of the questionnaire, this will be established demographic profile of the questionnaire. The focus of the questionnaire is to investigate what is the strength of entrepreneurial orientation of the managers or employees and perceived success of the industry in which automobile component companies operates.

An automobile component manufacturing company has been selected to participate in the study. Questionnaires were printed and handed out to employees and middle managers. An email was also used to distribute questionnaires.

1.5.4 SELECTION OF A QUESTIONNAIRE

When an existing questionnaire is used, the validity and reliability of the instrument should be investigated (Strydom, Fouche & Delpont, 2002:120). The researcher should discuss which combination of designs available has been selected.

An entrepreneurial orientation questionnaire compiled by Lotz (2009:324) was identified as a compatible tool for the purpose of this study. The questionnaire was customised to specifically meet the industry under study. The questionnaire is divided into four sections, namely:

- Section A: Evaluation of entrepreneurial orientation of employees and managers.
- Section B: Evaluation of perceived success of the industry.
- Section C: Demographical and educational background.

1.5.5 STUDY POPULATION AND SAMPLING METHOD

Sampling refers to the process used to select a portion of the population for study. Qualitative research is generally based on non-probability and purposive sampling rather than probability or random sampling approaches. Purposive sampling means that participants are selected because of some defining characteristics that make them holders of the data needed for the study (Nieuwenhuizen, 2007:79).

For the purpose of this study purpose sampling will be applied and the sample will be derived from managers and employees from the selected company. The selected groups of sampling will provide the richest possible source of information answer the research questions.

Niewenhuizen (2007:79) elaborates further as follows: “purposive sampling decisions are not only restricted to the selection of participants but also involve the settings, incidents, events and activities to be included for data selection. The three most commonly used are stratified purposeful.

The three most purposive sampling methods are described below:

- Stratified purposive sampling: selecting participants according to pre-selected criteria relevant to a particular research question.
- Criterion sampling: decision made in the design stage of the study the typical characteristics of the participants to be included. Criteria refer to age, gender, profession, a particular strategy etc.
- Snowball sampling: already participating individuals are used to enter their social networks to refer the researcher to other participants who might contribute to the study.

The target population of this study is the selected automobile component manufacturing companies in the Ekurhuleni municipality of Gauteng, South Africa. For the scope of this study purposive sampling will be applied and the sample will be derived from selected departments of those companies. Both middle managers and employees of different departments were approached and asked to participate in the study.

The above mentioned groups for sampling will provide the best possible source of information to answer the research questions for the company.

1.5.6 DATA COLLECTION

Numerous data collection techniques, instruments or sources may be used, including structured interviews, observations, surveys, in-depth interviews. A recommendation is that research questions should be kept in mind when deciding on research designs as more than one strategy or method could be appropriate for the research design as more than one strategy or method could be appropriate for the collection of data for a specific research question. In addition to the description of the research design motivation will be provided for methods selected, by quoting from relevant literature, pointing out strengths and limitations of the designs chosen and ways to minimise these limitations will be discussed as suggested by Maree (2007:35). For the purpose of this study the data will be collected by means of a formal, structured questionnaire.

The techniques used to distribute and complete the questionnaires consisted mainly of personal delivery and on a smaller scale via email to participants. Questionnaire distribution were followed up by personal visits to most of the participants, more especially managers. Questionnaires were distributed with cover letters ensuring confidentiality.

1.5.7 DATA ANALYSIS

Data collected was be statistically analysed using Statistica (Statsoft, 2011), Statistical Package for Social Sciences (SPSS, 2011), PHStat and Minitab.

Data from the questionnaires was coded, investigated and transformed to useful outputs such as frequency and frequency accumulation tables. The frequency tables will be used to draw conclusions and make recommendations regarding the development of entrepreneurial orientation in the company.

In the world of research there are numerous potential limitations so much so that even the most carefully planned research will suffer from these. Generally when identifying limitations, the researcher must consider the validity and reliability of all data collection instruments, the extent to which generalisation can occur of the sample to the population from which it was drawn, access to data, ethical problems and also the ability to control extra factors in the environment and the respondents (Strydom et al., 2002:121).

- Only manager and employees working for the selected company will participate in the questionnaires.
- The study will be limited to the selected Gauteng based company..
- The entrepreneurial orientation of managers and employees in the company under study cannot be generalised to managers and employees of other companies in or outside South Africa or other sites belonging to the same organisation around the world.
- The measurement of perceived success in one location might be totally different from the next due to area, site or even country specific challenges.
- Managers and employees have a lot of careers to choose from, this study will only focus on managers from automobile component manufacturer under study.

1.6 LAYOUT OF THE STUDY

A brief description of the main elements and focus of the study is out below. A schematic representation of the chapter outlay is shown figure 1.2.

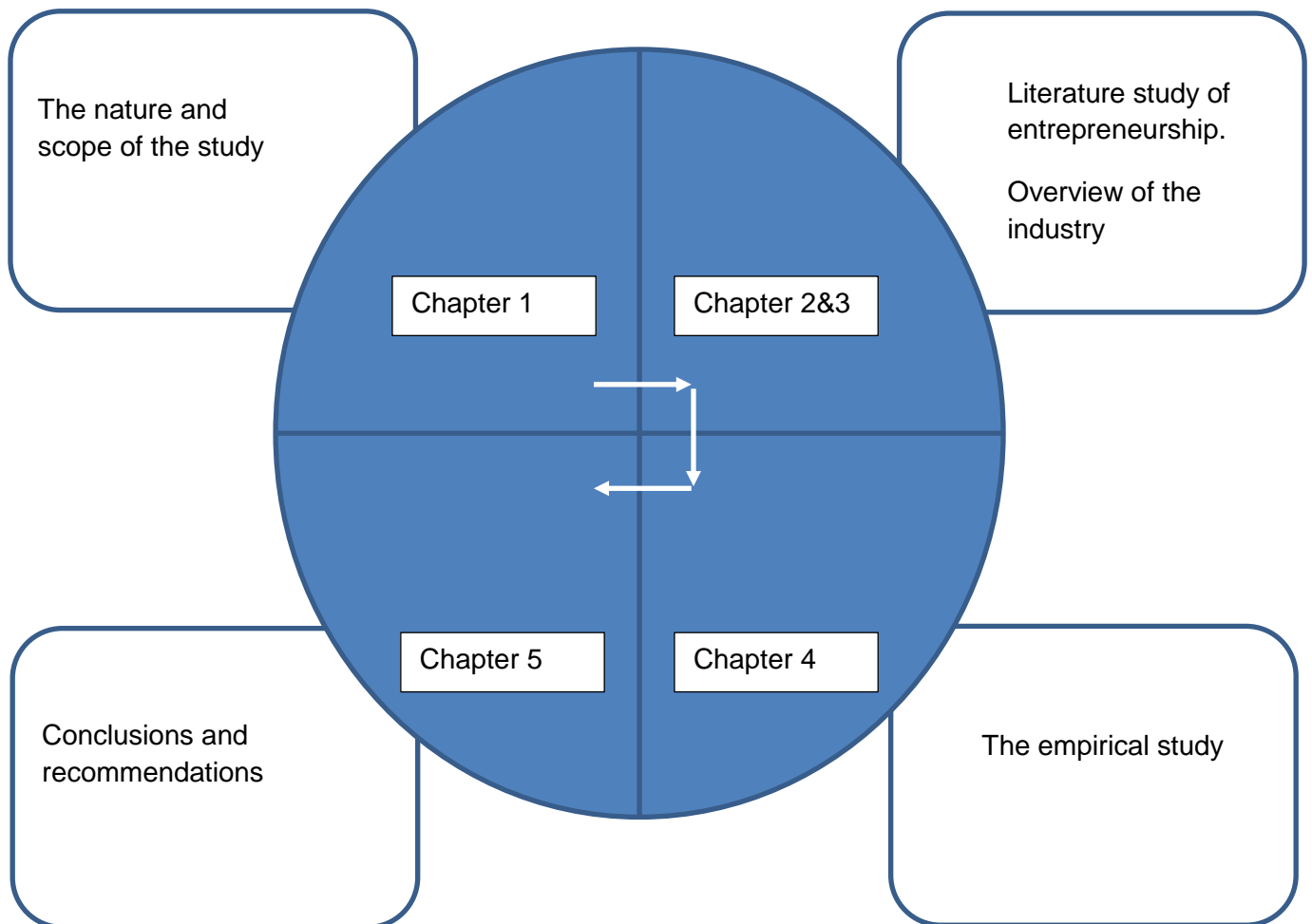


Figure 1.2: Research process flow chart

According to Niewenhuizen (2007:81), most qualitative studies do not treat data collection and analysis as two separate processes but rather as an ongoing cyclical and non-linear process. The chapter layout will be used even this study only focuses on quantitative research methods.

Chapter one consists of three steps, namely selecting a study focus area, determining the purpose of the study and developing of problem statements. Furthermore the primary and secondary objectives are described. The focus is on automotive component manufacturing companies in Gauteng, South Africa. The primary objective of the study is to investigate the

entrepreneurial orientation of the employees working in an auto catalytic converter manufacturing company in South Africa and secondly to determine the perceived success of the industry in which they operate, namely the automobile component manufacturing industry more specially catalytic converter. Secondary objectives include the following: to gain insight into entrepreneurship through conducting a literature study and to study the concept of entrepreneurial orientation.

CHAPTER 2

LITERATURE REVIEW ON ENTREPRENEURSHIP

2.1 INTRODUCTION

The automotive industry is an interesting manufacturing sector to study because of the current volatile world economic climate and new technological developments. The recent economic meltdown in North America and Europe has forced organisations in the automotive industry supply chain to revisit their strategies in order to survive. For over a century the western world countries were the biggest consumers of automobiles in the world. Countries such as the United States of America used to manufacture big passenger cars powered by some of the biggest and most engines in the world. These automobiles are extremely expensive, they consume lots of fuel and causes environmental pollution as a result.

It is widely acknowledged that entrepreneurship is an important force in shaping the changes that take place in the economic environment (Herrington and Kew, 2009:15). Herrington and Kew (2009:14) state that during 2008 and 2009 South Africa, like most other countries around the world, experienced a recession. During this period business closure accelerated and resulted in job losses and the inability of large and small companies to create employment. Large companies have also found it difficult to remain competitive and struggled to remain in business during this period, forcing most of them to cut costs through retrenchments and other means. Few of them also went bust.

The competitive pressures on large companies to become lean and agile have helped many of them survive. Many of these companies are leaner and more agile with fewer management layers, increased dependence on lateral relations and team structures, and increasingly enabled by technology. Leanness can and often does, have a dramatic effect on the bottom line, but it does not automatically translate into growth or the development of a long-term competitive advantage (Covin and Miles, 1999:123), since almost everyone with a benchmarking kit can now learn how to become more efficient. The emergence of internet based companies has also brought tremendous pressure to companies still operating in old economy models. Amazon.com, for example, has forced Barnes & Noble to seriously re-evaluate and change the major elements of its business model. A further example of this phenomenon is Autobyte.com who has forced General Motors (GM) and others to put up their own Web sites in direct competition with their own dealerships. Even though a number

of these internet companies have struggled of late, their new business models are clearly sound and will be here for many years to come.

Corporate entrepreneurship also known as intrapreneurship is quickly becoming a weapon of choice for many of these large companies. Corporate entrepreneurship is an attempt to take both the mindset and skill set demonstrated by successful start-up entrepreneurs and inculcate these characteristics into the cultures and activities of a large company. Corporate entrepreneurship can be a powerful antidote to large company staleness, lack of innovation, stagnated top-line growth, and the inertia that often overtakes the large, mature companies of the world. At the same time, teaching managers to behave like start-up entrepreneurs is a tall order, but a number of large companies have already embarked on this path. While the idea of corporate entrepreneurship has been around for a number of years, large companies are looking anew at this concept, in their increasing search for real growth mechanisms. Four broad typologies or categories of corporate entrepreneurship have been identified in the literature, namely:

- Corporate venturing,
- Intrapreneuring or corporate entrepreneurship
- Organizational transformation
- and Industry rule-breaking.

Corporate venturing has to do with starting businesses within a business, usually emanating from a core competency or process. One example is of a bank which has a core competency in transaction-processing, turns this into a separate business and offers transaction-processing to other companies who need mass processing of information. A second example is of Thermo-Electron from Boston which took its core competency in industrial and medical laser technology and started a new venture involving hair removal salons utilizing their laser technology.

Intrapreneuring or corporate entrepreneurship, as first pencilled by Pinchot (1985:23), is an attempt to take the mindset and behaviours that external or start-up entrepreneurs use to create and build businesses, and bring these characteristics to bear inside an existing and usually large corporate setting. Start-up entrepreneurs are often credited with being able to recognize and capture opportunities that others have either not seen or not thought worth pursuing. Large companies wishing to encourage innovation and find new market opportunities are most often interested in trying to inculcate some of these entrepreneurial values into their culture by creating intrapreneurs.

The third type involves “corporate renewal” or transformation. This type of entrepreneurship only fits the original Schumpeterian definition if the transformation involves innovation, a new arrangement or combination of resources, and results in the creation of sustainable economic value. A middle manager at Sun Financial Group reorganized the internal value chain of his department in order to create a new and unique service proposition to their agents. As a result, the company’s service delivery was given both a speed and cost advantage over their competitors. In fact, this manager wound up using fewer resources in developing his new business model.

The fourth type of corporate entrepreneurship is a subset of transformation, but involves not only transformation of the enterprise but “also the competitive environment of the industry into something significantly different than it was”. Stopford & Baden-Fuller, (1993: 522) label this behaviour as “frame-breaking change”. Toyota, for example, in the automobile industry, changed the rules of the game by producing low cost automobiles with exceptionally high quality. US and European auto manufacturers were forced by Toyota and other Japanese automakers to follow suit. Thus, Toyota not only transformed itself, but also helped to start a wholesale transformation of the industry. Many of the aforementioned internet companies have brought about even more dramatic changes in the rules of industry competition. Amazon.com is probably the best-known new economy company that successfully changed the rules of engagement for booksellers.

2.1.1 COMMONALITIES

Despite the differences in types and some lack of clarity around the concept of corporate entrepreneurship (Stopford & Baden-Fuller, 1993:522), the various types described earlier share common elements with each other and with external or start-up entrepreneurship. These common elements are:

2.1.1.1 Corporate entrepreneurship

The creation of something new, that is something that did not exist before. This “something new” could be a new business-within-a-business, a product, a service, a delivery system, or a new value proposition to the customer. These “new things” require additional resources and or changes in the pattern of resource deployment within the organization. Learning takes place in both the creation of the “new thing” and its implementation which results in the development of new organizational competencies and capabilities.

These three commonalities are cited most often in the research. Less cited, however, are the following common threads, which seem equally important in remaining true to the original concept of entrepreneurship (Schumpeter, 1934):

- The new business product or service is intended to result in long-term economic value and the creation of wealth, be it for the shareholders, owners, or society.
- The financial returns resulting from the “new thing” are predicted to be better than the returns resulting from the current deployment of resources. (This last item comes from the author’s view, and is evident in those companies that formally support corporate entrepreneurship.). Otherwise companies would turn their assets into cash and put the money into savings accounts or secure investment instruments.
- There is increased risk for the organization because the “new thing” is unproven. Even if the organization is creating something new for itself, but not new to the marketplace, the ability to actually implement is unproven, and therefore there is increased risk that the “new thing” either won’t work correctly, be too late to the market, or cost too much to produce, etc.

2.1.1.2 Developing corporate entrepreneurship

There is something quite seductive about the notion of building entrepreneurial thinking and acting inside a large organization. We generally view external or start-up entrepreneurs, who become famous and wealthy as a result of their own grit and determination, as people to be envied and perhaps emulated. Having a few of these people inside the organization might bring a breath of fresh air and challenge to the bureaucracy. Start-up entrepreneurs are usually passionate to a fault with their idea and are single minded in removing barriers to its realization (Timmons, 1989). Most of us wouldn’t mind a few employees like this in a large company.

Start-up entrepreneurs are generally more concerned about the results than following the proper processes in getting these results. What companies wouldn’t prefer action to analysis paralysis?

Entrepreneurs are innovative. They find opportunities that others either miss or perceive as unattainable. What CEO wouldn’t want an employee to exploit an opportunity that his competitors have missed? Thus the idea of corporate entrepreneurship has a certain cache that is hard to resist. But what is the reality? Can corporate entrepreneurship really be instilled into a bureaucratic culture? How different are corporate entrepreneurs from external entrepreneurs, and how well does the entrepreneurial mindset fit within a hierarchical corporate structure? There are few empirical answers to these questions. The literature abounds with examples, but unfortunately the examples often revolve around a few high profile examples like 3M, and Disney. These companies have had long histories of innovation and opportunity focus as cultural values, and have had numerous processes that institutionalized these values (Greco, 1999; Roepke et al., 2000; Schrage, 1999). There is

relatively little field research regarding the successes or failures of large companies who have tried to systematically instil corporate entrepreneurship within their walls.

The purpose of this paper, then, is to discuss the results and lessons learned from field research involving the attempt to create internal or corporate entrepreneurship within automotive component manufacturing companies in Gauteng Province of South Africa. Two of these organizations favoured a corporate venturing approach, while the other two followed more of an intrapreneuring approach.

These companies follow corporate renewal or transformational whereby transformation involves innovation, a new arrangement or combination of resources, and results in the creation of sustainable economic value.

Timmons and Spinelli (2009:101) state that entrepreneurship is in the creation of value, not just for owners, but for all participants and stakeholders. The core of this process is the creation of recognition of opportunities, followed by will and determination to seize these opportunities. Furthermore, the authors conclude that entrepreneurial leaders inject imagination, motivation, commitment, passion, tenacity, integrity, teamwork and vision into their companies. They face dilemmas and must make decisions despite contradictions and ambiguity. The true entrepreneur is never satisfied with the nature of the opportunity. The result of the value creation process is that total economic pie grows larger and society benefits (Timmons & Spinelli, 2011:101) the literature study's focus is on entrepreneurship; corporate entrepreneurship; entrepreneurial & corporate entrepreneurial characteristics; entrepreneurial orientation and the perceived success of a business will be defined.

2.1.2 DEFINITION OF TERMS

Throughout the study a number of terms will be used to explain concepts. They are as follows:

- The **entrepreneur** is a person who starts and operates a business. According to Longenecker, Moore and Petty (2000: 3), entrepreneurs are the decision makers who will shape the free-enterprise economic environment of the new millennium by discovering new market needs and launching new organisations to meet those needs.
- Johnson (2001: 138) defines **entrepreneurship** as the process of capturing ideas, converting them into products or services and the building of a venture to take the product to the market.

- **Risk** is the term used to describe the risk entrepreneurs take in exploiting opportunities. This may include financial and career risk (Longenecker *et al.*, 2000: 9).
- **Innovation** is the complete process starting from where products and services are conceived to the point where those ideas are integrated and implemented in the organisation Macadam and McClelland (2002: 88) define innovation as "a process with distinct stages stretching from idea generation to implementation."
- **Creativity** is the right brain activity that sparks the ideas. It is often referred to as "out of the box" thinking Macadam and McClelland (2002: 88) emphasise the role of creativity in the idea generation stage of the innovation process.
- **New venture formation** is the creation or starting of a new business. According to Timmons and Spinelli (2004: 6), classical entrepreneurship implies new venture creation.
- **Competitive advantage** exists when a firm has a product, service or idea that is perceived by its target market as better than those of competitors. Competitive advantage can be achieved through a number of ways. Longenecker *et al.* (2000: 98) identified some of these methods as: Price/value, unique service features, notable product attributes, customer experience and accessibility.
- **Sustainable competitive advantage**, very simply put, is to ensure that the value that is created is likely to endure over time (Morris *et al.*, 2008: 7).
- **The Market** is a group of customers or potential customers who has purchasing power and unsatisfied needs. Longenecker *et al.* (2000: 155) explain that a business can only be successful if an adequate market exists for its products or service.
- **Opportunity** is the market climate or situations which allow entrepreneurs to launch or operate a business successfully in specific conditions. This requires individuals to identify needs and to generate ideas on how to meet those needs in a profitable manner or method (Longenecker *et al.*, 200: 99).
- **Intrapreneurs** are the individuals who are personally responsible for innovation in an organization. Pinchot (1985) first came up with the term in order to describe employees of organisations who have the ability to identify opportunities and to exploit the organisations resources to satisfy new needs and to better satisfy existing needs. Kroon (1999: 15) describes intrapreneurs as dreamers or individuals with vision who moves into action. They are individuals who are creative and who turns good ideas into profitable reality.

- **Organizational Culture** can be defined as the formal and informal internal value system of the organization that is shared by the employees of the organization (Timmons & Spinelli, 2004: 279)
- **Corporate entrepreneurship** is a process in an existing organization that leads to identification of new opportunities and therefore new business ventures, by developing new products, processes or services in order to exploit the newly identified business opportunities. Morris *et al.* (2008: 11) describe corporate entrepreneurship as entrepreneurial behaviour within established mid-sized and large organisations. Corporate entrepreneurship can be formal or in-formal. It can thus be a formal initiative with strategic approach managed and implemented by senior management or it can be a process of gradual product or service enhancement. The corporate entrepreneurship process also implies a constant adaptation or renewal of organizational processes (Timmons & Spinelli, 2004: 246).

2.2 ENTREPRENEURSHIP

2.2.1 ENTREPRENEURSHIP DEFINED

Entrepreneur is a French word with its origin dating back to 1700's which has since evolved to mean someone who undertakes a venture (Herrington & Kew, 2009:11). There are many definitions which evolved the latter half of the 20th century and were summarized by Hitt, Ireland, Camp and Sexton (2002:1) in the table below:

Table 2.1: Definitions of entrepreneurship

Author	Definition
Schumpeter(1934)	Entrepreneurship is seen as new combinations, including the doing of new things that are already being done in a new way. New combinations include: <ul style="list-style-type: none"> - introduction of new goods - New method of production - Opening of new markets - New source of supply - New organisations
Krizner (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 to equilibrium.

Drucker (1985)	Entrepreneurship is the act of innovation that involves endowing existing resources with new wealth capacity.
Stevenson, Roberts and Grousbeck (1985)	Entrepreneurship is the pursuit of an opportunity without concern of current resources or capabilities.
Rumelt(1987)	Entrepreneurship is the creation of new business: new business meaning that they do not exactly duplicate existing business but have the same element of novelty.
Low & MacMillan (1988)	Entrepreneurship is the creation of new enterprise.
Gartner (1988)	Entrepreneurship is the creation of organisations: the process by which new organisations come into existence.
Timmons (1997)	Entrepreneurship is a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach and leadership balanced.
Venkataraman (1997)	Entrepreneurship research seeks to understand opportunities to bring into existence future goods and services 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 resources inputs to exploit opportunities in the environment. It can occur in any organisational context and can result 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.

Furthermore according to Bridge *et al.* (2003:34), there are a range of possible meanings for the term 'entrepreneurship' and this is derived from the different ways of looking at an entrepreneur. An entrepreneur is an individual who is able to identify an opportunity and utilise it for both internal and external environmental benefits (Melamed, 2002:23). While Inegbenebor (2007:748) defines entrepreneurship as a someone who creates and grows a new enterprise and demonstrates characteristics of risk taking and innovation.

According to Kuratko and Hodgetts {2004: 30), entrepreneurship is more than just creation of business, although important, it also includes a dynamic process of vision, change, and

creation. It requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. Essentially it includes the willingness to take calculated risk in terms of time, equity or career, the tenacity to push an idea through to reality and combining it into a special perspective that permeates entrepreneurs. Entrepreneurs have the ability to formulate an effective venture team, the creative skill to marshal needed resources as well as the fundamental skill of building solid business plans. Furthermore entrepreneurship is the vision to recognise opportunity where others see chaos, contradiction and confusion.

Other scholar describe entrepreneurship as growth and according to the current research on growth models poses a growth paradox, because as growth occurs, firms increase planning, control and formalise structures as a consequence of growth and by doing so move away from an entrepreneurial type of organisation to a non-entrepreneurial type of organisation. They also refer to research that indicates that entrepreneurial management styles in association with growth (Lechner & Leyroynas, 2009:667).

Cunningham and Lischeron (1991) offer a summarised table of the various approaches to describing entrepreneurship.

Table 2.2: Summary of approaches to describing entrepreneurship

Entrepreneurial model	Central focus or purpose	Assumption	Behaviour and skills	Situation
'Great Person' school	Entrepreneur has an intuitive ability- a sixth sense, traits and instincts with which he or she is born	Without this inborn intuition this individual would be like the rest of us mortals who lack what it takes	Intuition, vigour, energy, persistence and self-esteem	Start-up
Psychological characteristics school	Entrepreneurs have unique values, attitudes and need that drive them.	People behave in accordance with their values, behaviour results in attempt to	Personal values, risk taking, need for achievement and others.	Start-up

		satisfy needs.		
Classical school	The central characteristic of entrepreneurial behaviour is innovation.	The critical aspect in the process of doing rather than owning	Innovation, creativity and discovery.	Start-up and early growth stage.
Management school	Entrepreneurs are organisers of economic ventures: they are people who organise, own, manage and assume the risk	Entrepreneurs can be developed and trained in the technical function of management.	Production planning, people organising, capitalisation and budgeting.	Early growth and maturity.
Leadership school	Entrepreneurs are leaders of people; they have the ability to adapt their style to the needs of people.	An entrepreneur cannot accomplish his or her goals alone, but depends on others.	Motivating, directing and leading.	Early growth and maturity.
Intrapreneurship school	Entrepreneurial skills can be useful in complex organisations; intrapreneurship is the development of independent units to create a market and expand services.	Organisations need to adapt to survive; entrepreneurial activity leads to organisational building and entrepreneurs becoming managers.	Alertness to opportunities, maximising decisions.	Maturity and change.

Malamed (2000:48) researched entrepreneurship and quoted Miller's (1996:4) four type of entrepreneurs, namely: the personal achiever, the super sales person, the real manager and the expert idea generator. The personal achiever is someone who is filled with energy, enjoys planning and setting goals for future achievement. This type of entrepreneur takes initiative, he is committed to the organisation and has a strong internal locus of control. The super sales person has empathy and attempts to be at service of others at all times. They utilise a soft-sell approach and are rewarded by sales to their customers. The real manager is effective in corporate leadership positions, they enjoy taking control and their power guides ventures into growth. The expert idea generator invents new products or finds a new niche for existing products, develops new process and thereby creates a competitive edge over rivals (Malamed, 2000:49).

The seven aspects that explain the nature of entrepreneurship identified by Morris (1998) are as follows:

- Creation of wealth: the process of entrepreneurship implies assuming the risks involved with the facilitation of production in exchange for profit.
- Creation of enterprise: Traditionally entrepreneurship entails the founding of a new business venture where none existed before.
- Creation of innovation: A primary objective for entrepreneurs is the concentration on improvement and unique combination of resources that makes current methods or products obsolete.
- Creation of change: The process of entrepreneurship involves change by adjusting, adapting or modifying one's personal skills and approaches in order to fully utilize opportunities in the environment.
- Creation of employment: As entrepreneurs develop and respond to opportunities in the market, products or services are created and this requires a developed labour force.
- Creation of value: Entrepreneurship is the process of creating value by exploiting untapped opportunities.
- Creation of growth: Entrepreneurship is a strong orientation towards growth in sales, income, assets and employment.

2.3 CORPORATE ENTREPRENEURSHIP

2.3.1 CORPORATE ENTREPRENEURSHIP DEFINED

Corporate entrepreneurship can be defined as the innovative process whereby an organization re-invents itself through constant organisational renewal of processes, systems, products and services. Morris *et al.* (2008: 11) highlighted the fact that corporate innovation is a broad concept that includes the generation, development and implementation of new ideas or behaviours. An innovation can be a new product or service, and administrative system, or a new plan or program pertaining to organizational members. The core function of corporate innovation is enhancing the organisations ability to acquire innovative skills and capabilities. Corporate entrepreneurship is also referred to as intrapreneurship, corporate venturing or organizational entrepreneurship.

According to Pinchot (1985: vii), corporate entrepreneurship is within an established business organisation, he perceived corporate entrepreneurship as an extension of individual entrepreneurship within the context of existing organisations. Sharma and Chrisman (1999: 11), as well as Geisler (1993: 53), define corporate entrepreneurship as the process where an individual or group of individuals in association with an established organisation, creates a new organisation, or instigates renewal or innovation within the current organisation. Corporate entrepreneurship revitalises, reinvigorates and reinvents. It is the catalyst that places firms on the path to competitive superiority or keep them in a competitively advantageous position (Nayager & Van Vuuren, 2005: 30). According to Antoncic and Hisrich (2003: 9), corporate entrepreneurship not only refers to the creation of new business ventures, but to innovative activities such as the development of new products, services, technologies, administrative techniques, strategies and competitive postures.

The definitions have one aspect in common that is either an individual or a group of people within an established organisation created through innovation new ways of doing things. The organisation can become competitive in the industry through these entrepreneurial actions

According to Dess, Lumpkin and McKee (1999: 85) hardware, people and software are interrelated concepts which capture the salient attributes inherent in corporate entrepreneurship. Dess *et al.* (1999: 85) add that these three concepts mentioned above, must fit together in the organisation as a whole for strategic renewal and innovation to take place. Hardware is the structure of the organisation, its business and planning systems, the control mechanisms as well as the reporting relationships within the organisation. On the

other hand people refer to the skills of employees, their personalities and their characters whilst software refers to the informal networks, practices, values and culture of the organisation.

The definition of corporate entrepreneurship is taken a step further by (Morris and Kuratko, 2002: 23) as they state that entrepreneurship is about creating wealth, enterprise, employment, change, innovation, value and growth. Morris and Kuratko (2002: 33) add that corporate entrepreneurship should be integrated throughout the organisation and not just as a discrete activity or an event which occurs once and never again. They are of the opinion that the entrepreneurial intensity must have a direct and a positive influence on the performance of the organisation. This can only be done by the integration of the organisation's vision, mission, strategies, objectives, structures as well as the overall organisational culture (Morris & Kuratko, 2002: 34). Ireland, Kuratko and Morris (2006: 24) observed that the entrepreneurial intensity tends to be associated with higher levels of performance and entrepreneurial intensity differs across industries. Ireland et al. (2006: 24) proposed that an organisation's entrepreneurial intensity is a consequence of the organisation's corporate entrepreneurial climate. This is an assessment if the organisation's internal work environment supports entrepreneurial behaviour and the use of a corporate entrepreneurial strategy.

2.3.2 DIMENSIONS OF CORPORATE ENTREPRENEURSHIP

A number of authors who had views on the dimensions of corporate entrepreneurship were cited by (Wang and Li-Hua, 2006: 2). Lumpkin and Dess (1996) said "as with the definition of corporate entrepreneurship, no agreements have been reached about the key dimensions of corporate entrepreneurship and some studies view corporate entrepreneurship in terms of entrepreneurial orientation and emphasised by characteristics such as innovativeness, pro-activeness, risk taking autonomy and competitive aggressiveness". Others consider it as a three dimension construct such, namely venturing, innovation and self-renewal Zahra (1993) or innovativeness, pro-activeness and risk taking. While four dimensions of construct, namely new business venturing, innovativeness, self-renewal and pro-activeness were identified by Luo, Zhou and Liu (2005: 277 -284). Antoncic and Hirsch (2003: 9) altered their four dimension construct of entrepreneurial orientation to that of innovativeness, pro-activeness, competitive aggressiveness and autonomy a couple of years later.

According to Foba and De Villiers, (2007: 4) there are four key or primary dimensions of corporate entrepreneurship, namely corporate or new venturing, pro-activeness, self-renewal or transition and competitive aggressiveness. Foba and De Villiers (2007: 4) went on to add

that in addition to these four dimensions, the following characteristics of the entrepreneur should also be included namely, strategy, innovativeness, autonomy, risk-taking and team building. The expansion of the dimensions to nine is supported by Antoncic (2002) who concluded that the construct of corporate entrepreneurship comprises of dimensions which exceed the commonly accepted four "key" or primary dimensions.

According to Foba and De Villiers (2007: 5) these dimensions are expressed properly within organisations, they will translate into a different form playing roles of facilitation or enabling the dimensions to be effective, isolating and identifying these translated dimensions, and referring to them as them as the enablers of the "true" dimensions of entrepreneurship.

These findings are significant because during analysis of the construct of corporate entrepreneurship, the following key variables which facilitate or enable the practice of corporate entrepreneurship, can be identified and defined:

- To identify the enablers as being the vision, mission, objectives, strategy, culture, structure, risk-taking, team work, autonomy, employee involvement, processes, resources, reward systems, competitiveness, innovativeness, pro-activeness and learning.
- Synthesise the dimensions and enablers into a conceptual model to measure behaviour of entrepreneurial employees in a corporate environment aiming to achieve competitiveness
- Identify and define the key variables which characterise entrepreneurial employees, i.e. innovativeness, pro-activeness, autonomy, commitment, risk-taking, competence and the ability to learn or to be trained.

For the purpose of the study, five key dimensions of corporate entrepreneurship were identified and discussed as elements of entrepreneurial orientation, namely innovativeness, risk taking, autonomy, pro-activeness and competitive aggressiveness.

According to Dess and Lumpkin (2005: 147), entrepreneurial orientation is a business strategy which companies invoke to assist in searching and pursuing opportunities. Entrepreneurial orientation also represents a frame of mind and a perspective about entrepreneurship which is reflected in the never ending processes and in the corporate culture. Rauch, Wiklund, Lumpkin and Frese (2004: 164) went on to add that entrepreneurial orientation can be viewed as the strategy process where organisations enact their purpose, sustaining their vision and create a competitive advantage. According to these scholars entrepreneurial orientation consists of innovativeness, autonomy, risk taking, pro-activeness and competitive aggressiveness.

Innovativeness is a reflection on the tendency of an organisation to engage and support new ideas, novelty, experimentation, as well as to be involved in the creative processes which could result in new products, services and processes (Lumpkin & Dess, 1996: 142). According to Rauch et al. (2004: 165), innovativeness can also be described as a predisposition to engage in creativity and experimentation by introducing new products or services and technological leadership.

Risk taking refers to the willingness of an organisation to capture a venture opportunity although it does not know if the venture will be successful or not, and to act with boldness without knowing what the outcomes will be (Dess & Lumpkin, 2005: 152). Risk taking includes financial risks, personal risks and business risks.

Dess and Lumpkin (1996: 146) describe pro-activeness as taking initiative by anticipating emerging markets and pursuing new opportunities. Dess and Lumpkin (2005: 150) also add changes in demand to having a forward-looking perspective, monitoring trends and identifying future needs of existing customers.

Lumpkin and Dess (1996: 148) went to refer competitive aggressiveness as how organisations relate to competitors, i.e. how firms respond to trends and demands which already exist in the market place, and how organisations respond towards achieving a competitive advantage, where autonomy means having the ability and motivation to self-direct the pursuit of opportunity.

Foba and De Villiers, (2007: 6) concluded by saying contribution of the discussion above is that two conceptual models of corporate entrepreneurship have been developed which include the dimensions of corporate entrepreneurship as well as the characteristics of an entrepreneurial organisation and an entrepreneurial employees.

2.4 ENTREPRENEURIAL CHARACTERISTICS

According to Herrington and Kew (2009:14) institutional characteristic, culture, education, the regulatory environment, national demographics and social culture of the nation all play a part in shaping the country's entrepreneurial landscape.

The table below illustrates how academics have continued to characterise the special qualities of entrepreneurs.

Table 2.3: Characteristics of entrepreneurs

Date	Authors	Characteristics
1848	Mill	Risk bearing
1917	Weber	Source of formal authority
1934	Schumpeter	Innovation and initiative
1954	Sutton	Desire for responsibility
1959	Hartman	Source of formal authority
1961	McClelland	Risk taking, need for achievement
1963	Dauids	Ambition, desire for independence, responsibility and self confidence
1964	Pickle	Drive/ mental, human relations, communication ability and technical knowledge
1971	Palmer	Risk management
1971	Hornaday and Aboud	Need for achievement, autonomy, aggression, power, recognition, innovative and independent
1973	Winter	Need for power
1974	Borland	Internal locus of power
1982	Casson	Risk, innovation, power and authourity
1985	Gartner	Change and ambiguity
1987	Begley and Boyd	Risk taking and tolerance of ambiguity
1988	Caird	Drive
1998	Roper	Power and authourity
2000	Thomas and Mueller	Risk, power, internal locus of control and innovation
2001	Lee and Tsang	Internal locus of control

According to Bridge, O'Neil & Crommie, (2003:37) typical entrepreneurial characteristics or attributes identified by a variety of authors on the subject of entrepreneurship includes autonomy, belief in control of own destiny, creativity, determination, flexibility, goal orientation, hard work, imagination, initiative, leadership, moderate risk taking, need for achievement, optimism, perseverance, persuasive powers and and problem solving ability.

Studies on entrepreneurship in organisations show that entrepreneurship in existing organisations differs in approaches and in definitions. Gartner (1993: 232) notes that the choice of words used to define entrepreneurship sets the boundaries of how we think about and study it. In this section a behavioural approach is followed that emphasises entrepreneurial activities which are centered on the individual characteristics of the entrepreneur. Pirich et al. (2001: 14-15) believe that entrepreneurship is a process and not a static phenomenon and involves change as well as choice related issues.

According to Frijs, Paulsson and Karlsson (2002: 1-2), existing definitions of entrepreneurship often relate to the functional role of entrepreneurs. Carree and Thurik (2002: 8) mention three of the most frequently mentioned functional roles of entrepreneurship which are associated with the schools of thought on entrepreneurship: risk seeking, innovativeness and opportunity seeking. One operational definition of entrepreneurship that successfully synthesises the functional roles of entrepreneurs is the manifested ability of individuals, on their own, within and outside existing organisations, to perceive and create new economic opportunities (new products, new production methods, new organisational schemes and new product- market combinations) and to introduce their ideas in the market, in the face of uncertainty and other obstacles, by making decisions on location, form and the use of resources and institutions (Wennekers & Thurik, 1999: 46 -47).

One of the most important theoretical foundations for the entrepreneurial traits approach is the studies done by David McClelland, a psychologist from Harvard (1961). The traits approach concentrates on who the entrepreneur is and what are the personality traits of an entrepreneur. McClelland emphasised the importance of the motivational aspect of the entrepreneur, and his studies show that entrepreneurial behaviour is driven by the need for personal achievement. McClelland also identified 10 personal entrepreneurial competencies for detecting and strengthening entrepreneurial potential which are opportunity seeking and initiative, risk taking, demand for efficiency and quality, persistence, commitment to the work, information seeking, goal setting, systematic planning and monitoring, persuasion and networking and independence and self-confidence (McClelland, 1961: 205-301). Philipsen (1998: 8) summarised the different personality trait theories as an internal locus of control,

low aversion to risk, aggressiveness, ambition, being over optimistic, a desire for autonomy and personal values.

The entrepreneurial orientation, one of the personality traits, depends on McClelland's theory of the need to achieve, a theory which states that the need for achievement is strongly related to entrepreneurial behaviour (Duygulu, 2008: 5). According to this theory, individuals who have a strong need to achieve are those who want to solve problems themselves, set targets and achieve these targets through their own efforts. The theory suggests that individuals with a strong need to achieve often find their way to entrepreneurship and succeed better than others as entrepreneurs (Duygulu, 2008: 5). On the other hand, with respect to Littunen (2000: 296) and Hansemark (1998: 35- 36), the locus of control of an individual is seen as either internal or external. An external control refers to the attitude which focuses on the actions of other people, or on fate, luck or chance (Littunen, 2000: 296). Based on the view of McClellan, internal locus of control and pro-activity can be seen as entrepreneurial traits.

In a most recent research, Barendsen and Gardner (2004: 45) noted that entrepreneurs are energetic, persistent, and usually confident, with the ability to inspire others. These entrepreneurs are also deeply committed to their cause, they are very independent, and they are able to explain the link between their specific goals and a broader picture. Barendsen and Gardner (2004: 47) add that most entrepreneurs are also spiritual or religious and believe in human potential and the possibility of change.

According to Epelle (2003: 2), corporate entrepreneurs are achievement orientated and results focused as well as determined, they take decisive decisions and see projects through. This is a result of the entrepreneur's commitment and dedication. Epelle (2003: 2) argues that entrepreneurs are leaders with the ability to influence the behaviour of a group of people in a changing environment. They take calculated risks and have the ability of coping with change and uncertainty. These entrepreneurs can identify opportunities, and because entrepreneurs are creative, they can match the business goals with that of the organisation.

Sun (2007:4) concludes that knowledge is very crucial to the success of an entrepreneur and defines knowledge as follows: "It is the result of the accumulation of information of information by an individual who chooses to create meaning and take action. Lack of learning is the ultimate point of failing for any entrepreneur." According to Katz and Shepherd (2003:240), experience provides a framework for processing information and allows informed and experienced entrepreneurs with diverse skills and competencies, like networks and knowledge, to foresee and take advantage of opportunities they can identify.

“Based on earlier learning experience, entrepreneurs can use their acquired skills and knowledge to identify a business opportunity or to leverage resources. The value of resources and skills acquired through prior business ownership experience is in part dependent on the ability of experienced entrepreneurs to learn from their previous experience”(Katz & Shepherd, 2003:241)

The top 10 factors for entrepreneurial success are summarized in the pie chart below.

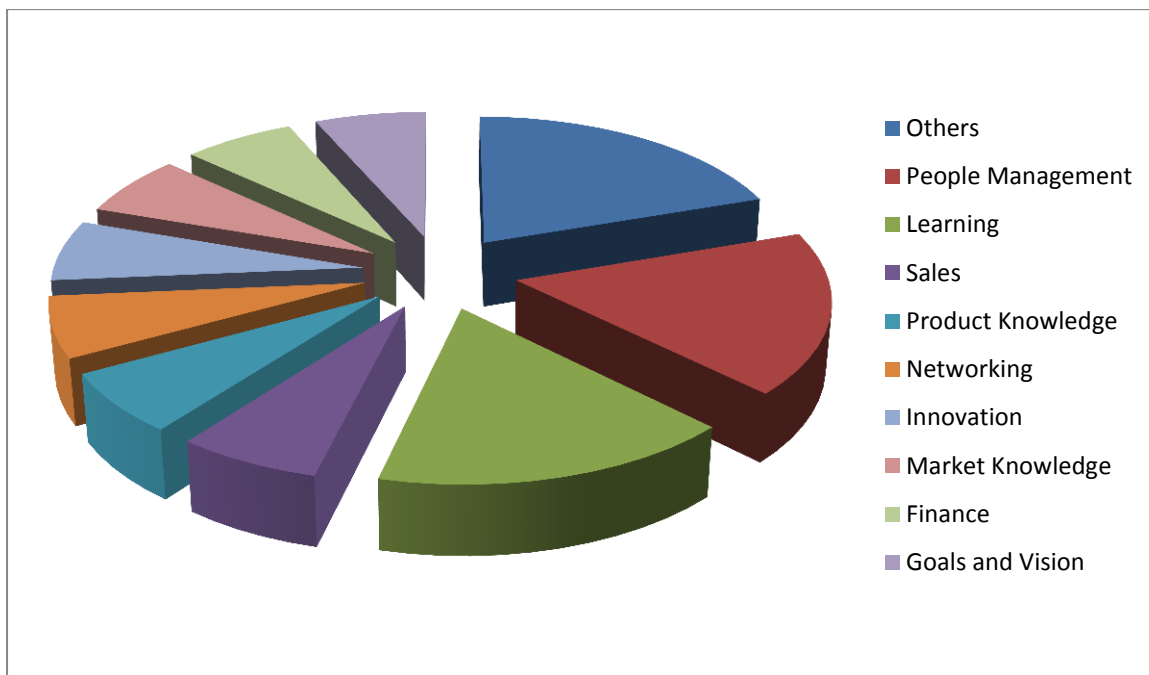


Figure 2.1: Top 10 factors effecting entrepreneurial success

The pie chart depicts the various factors of knowledge areas that are most important to business success. According to Sun (2007:61), the journey of an entrepreneur starts as technical proficiency in a specific field. That type of expertise needs to shift if you intend to keep a healthy balance between business, personal well-being and family. To grow a business, a technical proficiency translates into mastery of organisational learning and people development. This form of leadership takes time to build; it is not a quick fix like many leaders would want to believe.

Katz and Shepherd (2003:241) conclude that the ability of entrepreneurs to objectively reflect on and evaluate their experiences, which includes success or failures, may be crucial in determining future performance and make the following statement: “While cognitive process may be a source of sustained competitive advantage they may limit the ability of some entrepreneurs to adapt in response to changing and different market technological conditions.”

Locus of control is a personality construct that is defined as perceived control over the events in one's life. It is an individual's general expectancy of the outcome of an event being either within or beyond his or her personal control of understanding. Individuals who believe that the outcomes of events are within their personal control have an internal locus of control. They believe that they can affect the outcomes of their lives. Those who believe that the outcomes of event are beyond their control have external locus of control. Inegbenebor (2007:747) conducted a research study in which he investigated whether the locus of control distinguished between pharmacists who become entrepreneurs and those whom took up employee roles in pharmaceutical establishment.

There are ample research evidence that generally support differences between employees and entrepreneurs in terms of achievement, motivation, risk taking propensity and locus of control. Individuals who seek entrepreneurial careers are high in achievement motivation, take moderate risks, have more inclination and ability to innovate and have internal, rather than external locus of control (Inegbenebor, 2007:748).

According to Inegbenebor (2007:748), entrepreneurs are managers who perform their roles in an entrepreneurial way, their primary focus being change, rather than maintaining the status quo. A non-entrepreneurial style is characterised by being risk-averse, passive, reactive and non-innovative.

"Internal locus of control is associated with a desire to become an entrepreneur, a tendency to exert greater efforts to control the environment, to make better use of information in complex decision making situations, high tolerance for uncertainty and have greater propensity to behave proactively. Internal locus of control has also been found to be associated with innovative strategies" (Inegbenebor, 2007:749).

Inegbenebor (2007:753) conclude that the result of the study has implications for curriculum development in entrepreneurship. The implications may at first be obscured by the fact that locus of control is a stable personality construct which is difficult to change, especially in the short run. However, a clear conclusion drawn includes that the improvement of students attitudes towards entrepreneurship could enhance the number of graduates who want to start their own business.

A consulting study by McKinsey & Co of medium-size growth companies confirms that the chief executive officers of winning companies were notable for three common traits, namely perseverance, a builder's mentality and a strong propensity for taking calculated risk (Timmons & Spinelli, 2009:45).

2.5 ENTREPRENEURIAL ORIENTATION

Lumpkin & Dess, (1996:136) stated that the term entrepreneurial orientation refers to strategy making process and styles of firm that engage in entrepreneurial activities. Five dimensions, namely: autonomy, risk taking, innovativeness, pro-activeness and competitive aggressiveness have been identified and used for characterising and distinguishing key entrepreneurial process, which is a firms' entrepreneurial orientation.

Rauch, Willund, Lumpkin and Frese (2009:6) defined entrepreneurial orientation as the entrepreneurial strategy making process that key decision makers use to enact the firms organisational purpose, sustain its vision and create competitive advantage." Based on Miller's conceptualisation (Rauch *et al.*, 2009:6), three dimensions of entrepreneurial orientation have been identified and used consistently in the literature, namely innovativeness, risk-taking and pro-activeness (Rauch *et al.*, 2009:6). Lumpkin and Dess (1996) suggest that there are two additional salient dimensions to entrepreneurial orientation. Concluding from Miller's definition (1983) and prior research (Burgelman, 1984; Hart, 1992) Lumpkin and Dess (1996:139) identified competitive aggressiveness and autonomy as additional components of the entrepreneurial construct.

Lumpkin and Dess (1996:136) noted a distinction between entrepreneurial orientation and entrepreneurship by suggesting that entrepreneurial orientation represents key entrepreneurial process that answer the question of how new ventures are undertaken, whereas the term entrepreneurship refers to the content of entrepreneurial decisions, by addressing what is undertaken.

An entrepreneurial orientation refers to the process, practices and decision making activities that lead to the new entry. It involves the intentions and actions of key players functioning in a dynamic generative process aimed at new-venture creation. The key dimensions that characterise entrepreneurial orientation include a propensity to act autonomously, willingness to innovate and take risks and the tendency to be aggressive towards competitors and pro-active relative to the marketplace opportunities (Lumpkin & Dess, 1996:136).

For the purpose of this study, these five dimensions will be considered as independent variables influencing the dependent variables, perceived success.

2.5.1 AUTONOMY

Autonomy refers to independent action undertaken by entrepreneurial leaders or teams direct at bringing about a new venture and seeing it succeed (Rauch *et al.*, 2009:7). Entrepreneurship has flourished because independently minded elected to leave secure positions in order to promote novel ideas or ventures into marketers rather than allow organisational superiors and processes to inhibit them. Within organisations it is the freedom granted to individuals and teams who can exercise their creativity and ideas which is needed for entrepreneurship to occur. Autonomy is the independent action of an individual or team in bringing forth an idea or vision and carrying it through to completion. In general, it refers to the ability and will to be self-direct in the pursuit or opportunities. In an organisation context it is action free from organisational constraints (Lumpkin & Dess, 1996:140).

Lumpkin and Dess (1996:141) conclude the following: "Evidence of autonomy in firms may vary as a function of size, management style or ownership. For example a firm in which the primary decision maker is the owner or manager – autonomy is implied by the rights of ownership. However, the extent to which autonomy is exercised in the case may depend on the level of centralisation or the extent of delegation and this may relate to an organisation size."

The items included in the questionnaire for measuring autonomy are being able to do work as an employee, without continual supervision; allowed decision making without an elaborated justification process; encouragement to manage own work and seldom have to follow the same work methods or steps while performing major duties daily.

Although Lumpkin and Dess proposed the inclusion of entrepreneurial orientation in 1996, very few studies have investigated autonomy as an element of entrepreneurial orientation (Lumpkin, Cogliser & Schneider, 2009:48). Prior research underlines the view that autonomy encourages innovation, promotes the launching of new ventures and increases the competitiveness and effectiveness of organisations. For the purpose of this study autonomy will be considered an independent variable and its impact on dependable variable will be determined.

2.5.2 INNOVATIVENESS

Schumpeter (1934) was among the first to emphasise the role of innovative in the entrepreneurial process (Lumpkin & Dess, 1996:142). According to McFadzean, O'Loughlin and Shaw (2005:353), innovativeness reflects a business's tendency to engage in and

support new ideas, novelty, experimentation and creative process that may result in new products, services and technological processes. Hamel (1997:70) elaborates on the term innovation and refers to strategic-innovation as the ability to reinvent the basis of competition within existing industries and to invent totally new industries. Strategic innovation is considered to be a major success factor for businesses operating in turbulent environments (Recklies, 2001:3). O'Regan and Ghobadian (2001:1) argue that failure to innovate will likely result in reduced competitiveness.

There is a distinction between product market innovation and technological innovation. Technological innovativeness consists primarily of product and process development, engineering, research and an emphasis on technical expertise and industry knowledge. Product-market innovativeness suggests an emphasis on product design, market research and advertising and promotion (Lumpkin & Dess, 1996:143). Innovativeness represents the willingness to depart from existing technologies or practices and venture beyond the current state of the art (Lumpkin and Dess, 1996:142).

According to Wiklund and Sherpherd (2003:1309), innovative business can generate extraordinary performance and have been described as the engines of economic growth. Innovativeness as independent variables will be measured by the following items in the questionnaire, the company regularly introduces new products, process, or services; the company has increased the number of services; the company pursues new opportunities; in the relationship between the numbers of new ideas generated and the number of ideas implemented. The relationship with the dependent variables of perceived success will be evaluated.

2.5.3 RISK-TAKING

Risk-taking is an attitude and involves taking bold actions by venturing into the unknown and committing significant resources to ventures in uncertain environments (Frese *et al.*, 2002:264). As a term in financial analysis, risk is used in the context of the familiar risk-return trade-off, where it refers especially to the probability of a loss or negative outcome. This is essentially the definition adopted by Miller and Friesen when they defined risk-taking as the degree to which managers are willing to make and risky resource commitments – those which have a reasonable chance of failures (Lumpkin & Dess, 1996:144).

The range of risk taking behaviour extends from a nominal level – safe risks, such as depositing money into a bank or restocking the shelves, to high risky actions, such as borrowing heavily, investing in unexplored technologies or bringing new products into new

markets. There is a well-accepted and widely used scale based on Miller's (1993) approach to entrepreneurial orientation, which measures risk taking at the firm level by asking managers about the firms' proclivity to engage in risky projects and managers' preferences for bold versus cautious acts to achieve firm objectives (Lumpkin & Dess, 1996:146).

The term risk taker is defined by Dewett (2004:258) as the extent to which there is an uncertainty about whether a potentially significant or disappointing outcomes of a decision will be realised. This definition is congruent to the items used in the questionnaire. To measure risk-taking a number of items were included in the questionnaire namely, the term risk-taker is considered as a positive attribute for the company, employees are encourage to take calculated risk, they have to take bold, wide ranging acts to achieve objectives and when employees confronted with uncertain decision, employees typically adopts a bold gesture in order to maximise the probability of exploiting opportunities.

In conclusion, risk-taking is viewed as essential to capture profits from creating new combination of productive resources, because profits comes from an entrepreneurs' perceiving of an opportunity followed by investment to capitalise on the opportunity (Nieuwenhuizen, 2003:9). Risk-taking will be used as an independent variable to measure the impact on dependent variables of perceived success.

2.5.4 PRO-ACTIVENESS

Pro-active suggests a forward-looking perspective characteristic of the marketplace leader that has the foresight to act on anticipation of future demand and shape the environment (Lumpkin and Dess, 2001:433). Pro-activeness refers to how a firm relates to market opportunities in the process of new entry. It does so by seizing initiative and acting opportunistically in order to shape the environment (Lumpkin & Dess, 1996:147).

This definition is consistent with Miller and Friesen's (1978) view of pro-activeness as changing the environment by introducing new products and technologies. Lieberman and Montgomery (1988) emphasised the importance of first mover advantage as the best strategy for capitalising on a market opportunity. Pro-activeness may be crucial to an entrepreneurial orientation, because it suggests a forward-looking perspective that is accompanied by innovative or new-venturing activity. A proactive firm is a leader rather than a follower, because it has the will and foresight to seize new opportunities (Lumpkin & Dess, 1996:146).

Some activities associated with pro-activeness include new opportunity identification and evaluation, identification and monitoring of market trends and new venture team formation

(Kropp, Lindsay & Shohaman, 2008:104). This relates to items in questionnaire, namely the company is very often first to introduce new products, services and processes; the company typically initiates actions to which competitors respond to; the company seeks out new products or services and the company continuously monitors market and identifies future needs of customers.

2.5.5 COMPETITIVE AGGRESSIVENESS

Competitive aggressiveness refers to the intensity of a firm's efforts to outperform industry rivals. It is characterised by a strong offensive posture directed at overcoming competitors and may also be quite reactive as when a firm defends its market position or aggressively enters a market that a rival has identified (Lumpkin and Dess, 2001:434). The definition of Lumpkin and Dess (2001) correlates with Rauch *et al.* (2009:7) whom define competitive aggressiveness as the firm's efforts to outperform its rivals and is characterised by strong aggressive response to competitive threats. Once a firm has developed resources which achieved a competitive advantage, the firm are more likely to defend these resources (Lumpkin & Dess, 2001:434).

Stinchcombe (1965) suggested that young firms take steps to establish legitimacy and power relative to suppliers, customers and other competitors. Because the new ventures are much likely to fail than established businesses, an aggressive stance and intense competition are critical to the survival and success of new entrants (Lumpkin & Dess, 1996:148). Competitive aggressiveness therefore refers to a firms' propensity to directly and intensely challenge its competitors to achieve entry or improve position and by doing so outperform rivals in the marketplace (Lumpkin & Dess, 1996:148).

The items measuring competitive aggressiveness in the questionnaire include a number of statements, namely the company typically adopts a very competitive posture; the automotive industry is very aggressive and intensely competitive, the company effectively assumes an aggressive posture to combat threats to survival and the company knows that acting overly aggressive is dangerous, because it can lead erosion of its reputation or retaliation of competitors.

2.6 DETERMINANTS OF AN ENTREPRENEURIAL CLIMATE

Organisational climate can be defined as the relatively enduring quality of the internal environment of an organisation that is experienced by its members; it influences their

behaviour and can be described in terms of the values of a particular set of characteristics or attitudes of the organisation. The organisational climate is either within which the organisation exist (Taguiri & Litwin, 1968: 27). Burton, Lauridsen and Obel (1999: 2) elaborated on (Taguiri & Litwin 1968: 29)'s definition further by adding that the organisational climate can be measured in terms of trust, morale, conflict, equity in rewards, credibility, resistance to change and scapegoating.

According to Denison, (1996: 644), climate refers to a situation and its link to thoughts, feelings and behaviours of the organisational employees or members, it is temporal, subjective and often subject to direct manipulation by people in power and who have influence. While according to Schneider, Brief and Guzzo (1996:9), the dominant paradigm within organisational climate, is regarded as an organisational parameter whose direct or indirect influence on organisational performance is studied.

Schneider et al, (1996:11) identify four key organisational climate dimensions, the first three are related to function and the last one is related to goals:

- the nature of interpersonal relationships: mutual sharing, trust, relationship between functional units, importance of personal welfare amongst colleagues and with management
- the nature of the hierarchy: participative decision making and team work, cohesion between management and employees
- the nature of the work: challenging, employees autonomy, necessary tools to do the job and information sharing.
- the focus of support and rewards: shared goals and standards, customer focus, rewards for quality and quantity, provision of training and which facets of performance are appraised and rewarded.

Where organisational climate is the experience of employees of the internal environment of the organisation, is culture a system of shared meaning held by members that distinguish the organisation from other organisations. According to Robbins (2001:510), cultures serves as a control mechanism that guides and shapes the attitudes and behaviours of employees. Culture allows organisation to develop a core set of assumptions, understandings and implicit rules that govern day-to-day behaviour in the workplace. Navager and Van Vuuren (2005: 31) add that entrepreneurial culture should encourage employees to be creative and innovative, to experiment with new products, to make suggestions for the improvement of

products and internal processes, to take risks, responsibility and ownership of their creations.

According to Hornsby et al. (1993: 29), Kuratko, Montagno and Hornsby (1990: 49) and Hisrich and Peters (1998: 47), as cited by Nayager and Van Vuuren (2005: 32), organisational characteristics that foster corporate entrepreneurship are: rewards for innovation, management support of entrepreneurial projects, resource availability, risk-taking and tolerance for failure. Management has control over each mentioned element (Nayager & Van Vuuren, 2005: 32). Stevenson and Jarrillo-Mossi (1986: 15) argue that beliefs must be instilled in employees stating that it is in their best interest to pursue and act upon discovering opportunities, which can be done through rewards and by reducing the risk of failure.

2.7 DEVELOPING AN ENTREPRENEURIAL CORPORATE ENVIRONMENT

According to Kuratko and Hornsby (1996: 3), the first step in planning a strategy of corporate entrepreneurship for the organisation is sharing the vision of innovative executives wish to achieve. Due to the suggestion that corporate entrepreneuring results from the creative talents of people in the organisation, the employees need to know and understand the vision.

According to Elenkoy, Judge and Wright (2005: 680), internal organisational factors influence the types of corporate entrepreneurship pursued by the organisation. Elenkoy et al. (2005: 680) further add that internal factors that could influence the pursuit of corporate entrepreneurship are organisational leadership, culture and value system, structures and processes, systems and availability of resources. Entrepreneurial intensity has a direct and positive influence on company performance which can be done by integrating the vision and mission of the organisation, strategies, objectives and structures of the organisation as well as the overall culture of the organisation (Morris & Kuratko, 2002:34).

Russel and Russel (1992: 640) state that entrepreneurial strategy is the component of corporate strategy that promotes the persistent search for competitive advantage through innovation. Kuratko and Morris (2002: 154) argue that the presence of corporate entrepreneurship creates opportunities to be innovative and more dynamic. Although it could place the organisation at risk, employees should have a strong understanding that innovation is part of the organisational strategy, thereby supporting daily innovative actions.

Covin and Selvin (1991: 44), as cited by Nayager and Van Vuuren (2005:31), state that organisations can be characterised by the degree to which they have an organic or mechanic where the organic organisation has more open communication and a more loosely controlled or a flat structure. A mechanic organisation tends to be more traditional and hierarchical in its approach.

Christensen (2004:302) supports this view and states that many large companies find it very difficult to integrate the entrepreneurial spirit in a well-structured or bureaucratic organisation, and must think non-traditionally to cope with these increasing paradoxes. Some companies tend to stick to the 'old ways' of doing business, i.e. preserving the well known techniques, business concepts and ways of cooperation while others reorganise, recreate themselves, merge, split up, become virtual, enter new markets and create unforeseen alliances.

From the above it can be argued that an organisational structure which can respond to change quickly, communicate these changes quickly, has a positive impact on the effective and efficient communication between employees of all business units. It is also imperative that the organisational structure supports the delegation of responsibilities enabling employees to be creative in solving issues.

If organisational entrepreneurship is seen as a behaviour that consists of different components, managers can manage and control entrepreneurship (Nayager & Van Vuuren, 2005:31)

2.8 ROLE OF MIDDLE MANAGEMENT

Kanter (2004:152) states that because middle managers have their finger on the pulse of operations, they can conceive, suggest and get new ideas into motion. To support the integral role played by middle managers in corporate entrepreneurship, the larger organisation must provide support to facilitate and exploit the potential contributions of the middle managers. According to Hornsby et al.(1999), as cited by Kuratko, Ireland, Covin and Hornsby (2005: 703- 704), there are five antecedences an organisation should provide in an effort to facilitate the entrepreneurial behaviour of the middle manager.

- Management support: top level management to promote entrepreneurial behaviour, championing of innovative ideas, resources for entrepreneurial actions.

- Work autonomy: tolerance for failure, own decision making, delegation of authority from top management to middle management, freedom from executive oversight.
- Rewards/ reinforcement: development and the use of systems that reward performance, highlighting significant achievement and encouragement of pursuing challenging work.
- Time availability: ensuring individual and groups have the time required to pursue innovations, structuring jobs to support efforts to achieve all the goals of the organisation.
- Organisational boundaries: in depth explanation of the outcomes expected from the organisational work as well as the development of mechanism for evaluating, selecting and using innovations.

Kuratko et al. (2005: 699) state that the entrepreneurial behaviour of the middle manager is linked to successful corporate entrepreneurship. Typical characteristics of effective middle managers are that they are comfortable with change, they see unmet needs as opportunities, they have a participative management style and they are persuasive and collaborative management style with a strong association with being innovative. Their management style is more persuasive than ordering they have team building by using frequent staff meetings and sharing information while welcoming the input and ideas from others (Kanter, 2004:158).

According to Kuratko et al. (2005: 705), a middle manager can be described as existing in a three-factor model of entrepreneurship which includes an entrepreneur, an entrepreneurial opportunity as well as resources facilitating the entrepreneur to pursue the entrepreneurial opportunity. Kuratko et al (2005:705) are of the opinion that middle management is in direct contact with the lower and upper levels within the organisation. When potential entrepreneurial opportunities are identified by lower levels, the middle manager can evaluate and endorse these opportunities to the upper levels of management. Therefore middle managers can refine the idea, and give their perspective on how the opportunity or idea could fit better into the organisation. The idea could be interpreted by the middle manager and structured in a way that it is understood and accepted on higher level.

A further role of the middle manager is to pass an initiative from a lower level on to higher levels by using their support network to ensure that these initiatives gain momentum and receive necessary attention (Floyd & Woolridge, 1992; King Fowler & Zeithaml, 2001), as cited by Goldsby, Kuratko, Hornsby and Neck (2006:20), state that middle management acts

a hub through which most the knowledge flows. Middle management must have the technical competence to understand the initial development, subsequent shaping, and continuous application of the firm's core competencies through the interactions of middle management with senior and first-level management they can influence and shape the corporate entrepreneurship strategies of the organisation.

2.9 FOSTERING AN ENTREPRENEURIAL CLIMATE

Nonaka and Takeuchi as cited by Hornsby, Kuratko and Zahra (2002:257) highlight the central role played by middle managers in an organisation. Middle managers interact with supplier, observe the market and analyse the competition, they are well positioned to identify areas where innovation is needed. Hornsby *et al.* (2002: 269) measure the key internal organisational factors which have an influence on middle managers which initiate corporate entrepreneurship activities. These factors are: the appropriate use of rewards, the support from top management, availability of time, organisational boundaries and work autonomy. Due to the major role played by middle management in creating an environment which encourages and stimulates innovation and entrepreneurship, they can influence the commitment of employees on these entrepreneurial activities resulting in organisational benefitting.

In support of the views above, Hornsby, Naffziger, Kuratko and Mantango (1993:30) emphasise that if an organisation strives to foster corporate entrepreneurship, a reward system based on results needs to be implemented. In addition to the reward system, employees must have resources available, e.g. time to spend on innovative activities. Lastly, employees and management must be willing to take risks and be tolerance in the case of failures.

According to Hornsby *et al.* (2002:261), the strategy of an organisation influences the internal factors which in turn have an influence on corporate entrepreneurship. An organisation needs to be market orientated as well as focused on business opportunities to facilitate corporate entrepreneurship (Lampikoski & Emben, 1996: 161). The strategy of the organisation has to be based on a vision, and the organisational structure should be flat and flexible. The organisational culture should be one where risk taking, respect for people, tolerance for mistakes, senses of pride and a drive for improvement and development exists. Lampikoski and Emben (1996: 161) add that work should be organised to allow shared responsibility, controlled freedom as well as job rotation. Hisrich and Peters as cited by Van

Aardt (1997:23), identify factors which are critical for the implementation of corporate entrepreneurship in large organisations:

- Organisation to be at the forefront of technological development.
- Encouraging new ideas
- Encouraging experimenting
- Permitting failures
- No boundaries for opportunities
- Multi-disciplinary team approach
- Voluntary participation
- availability of sponsors and champions

The above can only be possible if top management has a commitment towards corporate entrepreneurship.

According to Pinchot and Pellman (1999: 93), there are additional factors that top management has to consider to promote innovative and entrepreneurial behaviour in an organisation:

- Dissatisfaction with status quo.
- Creation of a vision to empower employees as well as guide the individual innovative employee.
- Allow employees to put their innovative ideas forward.
- Remove obstacles which might hinder innovation
- Search for sponsors as well as rewards for sponsors.
- Open system for innovation on value improvement, products and services, new working ways.
- Flexible organisation by catering for choice on projects and time spent.
- Measuring innovation and climate for innovation.

2.10 PERCIEVED SUCCESS OF A BUSINESS

After everything has been said and done, how does an organisation know whether it's entrepreneurial strategy has been successful or not. Dess *et al.* (1997:678) asked the following question: "What are performance indicators for firms operating in an

entrepreneurial strategy making mode?” they continued providing the following answer: “on the one hand there seems to be a strong normative bias toward the inherent value in entrepreneurial behaviour and an assumption or explicit depiction of a positive relationship between behaviour and desired organisational outcomes such as sales growth and profit.”

Frese *et al.* (2002) conclude they consider entrepreneurial orientation as a psychological concept in the sense of an attitude. Owners have to be high in entrepreneurial orientation in a difficult environment, because threatening and dynamic condition commands more innovation and aggressiveness (Frese *et al.*, 2002). (Frese *et al.*, 2002:276) findings indicate that entrepreneurial orientation, referring to the dimensions of innovativeness, autonomy, competitiveness and risk-taking was positively related to success.” Business owners who develop new ideas on products, services and technologies, who are more self-directed, who risk more and who challenge their competitors more are more successful than people with a low degree of entrepreneurial orientation” (Frese *et al.*, 2002:276).

According to Rauch *et al.*(2009), the conceptual arguments suggest that entrepreneurial orientation results in stronger performance. Performance is a multi-dimension concept and the relationship between entrepreneurship between entrepreneurial orientation and performance may depend on the indicators used to measure performance (Lumpkin & Dess, 1996). A common distinction, namely financial and non-financial indicators are usually made (Rauch *et al.*, 2009:10) where non-financial measures includes goals, satisfaction and business ratings made by owners and managers; financial measures includes sales growth and return on investment . Entrepreneurial managers take a certain strategic stance.

For the purpose of this study, perceived business success was measured through two dependent variables, namely business growth and business development and improvement.

2.10.1 BUSINESS GROWTH

The construct of business growth was validated by Lotz (2009:19) in his study with the referral to growth profits, turnover, market share and competitive position of the business over the past few years.

Business growth includes growth in turnover and profit, growth in market share, a better competitive position and job satisfaction of employees, morale of the business and the image of the business. The importance of entrepreneurship to the strategic management of firms has been widely accepted. According to Lumpkin and Dess (1996:151), “prior theory and research have suggested that an entrepreneurial orientation is a key ingredient for organisational success”.

“Revenue is of primary consideration for any business. If there is no revenue there is no business. Providing a valuable product or service to customers is the primary means by which business generate revenue”(Deuning & Sherril, 2007:79). Therefore a business revenue strategy concerns understanding and serving customer needs and wants. According to Deuning and Sherril (2007:80), an entrepreneur has three rules of success namely:

- Focus on the customer.
- Keep turnaround time short.
- Always give the customer value (which should include the combination price and quality).

How many customers will remain if the competition offers better value? According to Chaudhuri (2006:133), there are two types of value to the retail customer, namely merchandise value and differentiation value. Merchandise value is the rationale to shop whilst differentiation value leads to positive effect, commitment and willingness to pay. “Willingness to pay is the propensity of a customer to pay a higher price at a particular store, even if another store offers the same or similar item at a lower price” (Chaudhuri, 2006:143).

Chadhuri (2006:137) takes this notion further and concludes the following:

- Consumers derive a sense of pleasure in knowing that they have found a unique store.
- Consumers react positively being in a store that is different in a good way.
- People feel good when they find something of worth that is not abundantly available.

Financial measures according to Van der Post (1997:75), provide a solid foundation from which to draw inferences regarding the success and effectiveness of financial returns. The most popular financial measures include sales growth and return on assets (Covin & Slevin, 1991) and growth in market share.

2.10.2 BUSINESS DEVELOPMENT AND IMPROVEMENT

In business development highly committed employees are viewed as the most valuable asset of the business and the improvement of job satisfaction, image of the business, efficacy and effectiveness over the past few years with continued investment in research and development or investment into innovative projects (Lotz, 2009:19).

A measure of business success is often related to effectiveness and efficiency that a business’s employees are able to employ in producing the business outputs (Dess, Ireland,

Floyed, Janney & Lane, 2003; 370). The performance of an organisation's members is determined by the inner organisational environment. Members will perform better when they display a positive emotion, passion for work and favourable perceptions of their team member's organisations (Wu et al., 2008:265). Organisations operating in an atmosphere of higher entrepreneurial orientation and social capital may also enhance their intellectual capital. Furthermore, organisations that operate will enable in highly interactive and coordinative environments will enable employees to create a climate of innovation and information sharing (Wu et al., 2008:272).

(Kreitner & Kinicki, 2007:4) said successful businesses create people centred businesses in which human capital is viewed as the most important asset”.

2.11 SUMMARY

For the best part of a century entrepreneurship has been a buzz word, it has sparked depth research and has touched many schools of thought. In last couple of decades intrapreneurship or corporate entrepreneurship within established organisations has been researched and the impact of entrepreneurial behaviour for the future existence of an organisation is dependent on people within an organisation. More and more large companies and their Chief Executive Officers or Managing Director have come value and appreciate people who can see an opportunity where others see chaos, people who take calculated risk to make an idea work, people who act as catalysts to make things work during times when other wait for things to happen. Over the years different definitions of entrepreneurship and corporate entrepreneurship have been used, but the main thread that brings all these definitions together is doing things differently to achieve a different and a more successful result.

Corporate entrepreneurship is meant to exist and thrive within established thriving or struggling organisation's structures, its business and planning systems as well as control and reporting mechanisms within the organisation. People skills, personalities, characters and organisational values make up an organisation's corporate entrepreneurship orientation or climate. The smooth inter linking of these factors will result in wealth creation, not only for the organisation and its employees, but also for its shareholders.

Corporate entrepreneurship is not a one dimensional concept, it is a complex concept with dimensions referring to individual as well as organisational characteristics. These characteristics include innovativeness, autonomy, pro-activeness, competitive

aggressiveness, risk taking, self- renewal, team building, entrepreneurial strategy and entrepreneurial leadership.

An organisation's entrepreneurial climate is the enduring quality of the internal environment of an organisation, is an important internal organisational factor which is the make or break factor for entrepreneurial behaviour. Organisational climate is the nervous system which exists within organisation, the morale of employees, the measure of trust amongst employees, conflict handling as well as the appropriate use of recognition and rewards.

CHAPTER 3

OVERVIEW OF THE AUTOMOTIVE COMPONENT MANUFACTURING INDUSTRY

3.1 INDUSTRY BACKGROUND INFORMATION.

The automotive industry in general has been hit hard since the global economic slowdown of 2008. The economic meltdown of the industry's biggest market in Europe and North America Africa has meant that industry players has to look at other means to remain in business. The emerging market such as China, India, Brazil and Africa presents the only opportunity for economic growth in this period.

As an emerging market Africa presents a realistic opportunity for manufacturing and market growth in the automotive industry. Over the years the majority of Africans have relied on bicycles, motorcycles and unreliable public transport systems such as mini bus taxis and buses for transport. The rapid of emergence of middle-class in the continent means that more and more consumers will be able to afford cars. The continent is also blessed with raw materials which are used in the industry. Industry players should position themselves to take advantage of this opportunity. The biggest challenge for the automotive industry in Africa is lack of transport infrastructure such as roads, bridges and skills with the exception of few countries such South Africa.

South Africa presents a unique African opportunity for industry players because unlike other countries in the continent the country has world class infrastructure and some industry experience. Some of the world top industry players such as BMW, Mercedes Benz, Toyota, Ford, VW etc setup and have been operating successful assembly plants in the country for decades. The presence of all these different automotive manufacturing companies has resulted in automotive component manufacturers of components such tyres, car seats, fuel tanks, brake pads, catalytic convertors setting etc. setting up operations in the country.

The South African autocatalytic convertor industry is dominated by two multinational companies with two other smaller companies battling to establish themselves in this highly competitive market.

3.2 INTRODUCTION

The South African automotive industry is well established, some industry players have been operating in South Africa for many years. In the 1960s and 70s some companies pulled out and left the country in protestation against the country's Apartheid laws at the time. Up until the late 1980's the country was also faced with sanction which meant that there was no foreign investment in that period. However following the unbanning of liberation political parties in early 1990's sanctions were lifted. In 1992 the then South African government introduced an incentive scheme known as Motor Industry Development Plan (MIDP) to encourage industry players to setup manufacturing operations in the country. The scheme afforded companies with a competitive advantage over competitors operating in other parts of the world.

The introduction of MIDP resulted in a period known as the industry boom period. For over a decade international automotive companies setup assembly plant and with that followed the automotive component manufacturing plants. This period lasted for over a decade. However the MIDP came to an end in 2012 resulting in a need for these companies to remain competitive without MIDP. In the autocatalytic convertor industry since most of the companies are multinationals the competition often comes from internal competitors as well as external competitors. Geographically South Africa's location on the world map presents an Achilles' hill for most companies in this industry because majority of the raw materials are sourced from Europe, transported to South Africa where manufacturing takes place and then the final product is transported back to Europe and all over the world for final assembly. The result is a longer than normal lead time for most of the companies.

With all these odds stacked against these companies it is through entrepreneurial orientation, manufacturing/service excellence and entrepreneurial behavioural behaviour that these South African companies can remain competitive against their international counterparts.

3.3 HISTORICAL OVERVIEW OF THE AUTOMOTIVE COMPONENT COMPANY

The company is a multinational company that has been in existence since for almost 200 years. This is a multifaceted fine chemicals company which operates in a variety of industries such as environmental technologies, precious metals products and fine chemicals. After the discovery of platinum deposits in the Rustenburg and Lydenburg districts of the then Transvaal province of South Africa the company's metallurgists were able to

develop a method for the extraction of the platinum group metals from these ores. In 1974 after successful research on autocatalysis to control air pollution from automobile exhausts the company built the first autocatalytic convertor manufacturing plant in the world. The company setup operations in South Africa in the early 1950s focusing on different mineral processing activities such as mining, refining as well as final metallic product manufacturing.

The company's South African operation has evolved several times in the last 60 years to the current main operation in autocatalytic convertor industry. In 1992 the company built the first autocatalytic convertor manufacturing line. By late 1990s the company's autocatalytic convertor business has grown so much that all other businesses sold to make room for more convertor production lines. For the next 10 years or so the company's South African autocatalytic convertor business enjoys vast growth as the world enjoys a boom economic period which led to spending in automobiles. Environmental regulations in North America, Europe and other countries around the world also fuelled this huge demand in autocatalytic convertors. However everything changed after 2008 economic meltdown. The company is listed on the London Stock Exchange is a world leader in the industry.

3.4 COMPANY VALUES AND CULTURE

The company believes that it's organisational values are lived and can be witnessed by the way employees interact with each other and the way they interact with suppliers and customers. An annual employee survey gives employees an opportunity to voice their opinions about the company's current organisational state and the future. The survey is fully supported even though participation is not compulsory. The survey results are shared with all employees while trying to address their concerns.

The company's goal is to meet the needs and expectations of it's customers, shareholders and employees. The company's success is based on sustainable operations, manufacturing excellence and high performance culture. Some of the company's most important values are:

- Promoting a clean, safe and healthy environment.
- Making people their greatest asset by harnessing their skills and dedication.
- Focusing the efforts of teams towards profitable growth.
- Continuously improving skills development and open communication to achieve zero defects.

- Succeeding in world markets to secure the company's future.
- Ensuring that work is enjoyable and rewarding.

The company maintains a competitive advantage over rivals through recruiting, retaining and developing the best available people. People with disabilities are given an opportunity to fulfil their dreams by making a contribution to the success of the company. The company believes that its most valuable resource is their employees. The continued success of the company depends upon having highly motivated people with the right skills in the right job at the right time now as well as for the future. The company's extensive development programmes play an important part in ensuring a good flow of talent to the business all over the world. The company is the sum of its people, they represent its values, skills, achievements and aspirations. The people will deliver the future benefits to customers, shareholders, suppliers, communities and to themselves as employees. Internal and external training is provided when required.

3.5 OVERVIEW OF THE COMPANY AND AUTOCATALYTIC CONVERTOR MARKET

The company can be distinguished by its well decorated history, cutting edge technology, the number of operations around the world and the leadership role it plays in the field of emission control and environmental technology. The company is a world leader in the autocatalytic convertor industry therefore enjoys a major market share. The close working relationship the company enjoys with the original equipment manufacturers (OEM) affords them a big competitive advantage over their competitors. The company employs a decentralised management structure throughout its operation all over the world, however sales, marketing as well as research and development components of the organisation are centralised in the headquarters in Europe.

Since the company has autocatalytic convertor manufacturing facilities in all continents around the world that means the company's customers (OEMs) have several options when a time comes to decide which manufacturing site they would like to do business with. The South African manufacturing facility's close proximity to PGM resources gives the company a huge competitive advantage over rivals however most of the customers are in Europe and North America and this is an Achilles' heel when it comes to lead-time. From customer order to product delivery the company probably has one of the longest lead times out there. European customers would place an order for catalyst, after which raw material such

chemicals and ceramic parts would be ordered from Europe and shipped to South Africa, eventually catalysts would be manufactured and transported to Port Elizabeth or Cape Town for canning and finally shipped to the OEMs in Europe or North America. The result is that other manufacturing facilities within the group end up taking business away from the South Africa manufacturing plant. Therefore the company's biggest competitors is not external company but internal sister companies.

The only way for the company to survive is to focus on the South African market where the long lead time would no longer be any issue and also improve productivity in order to reduce lead time and reduce cost per catalyst produced. In order to capture the bulk of the relatively small South African market the company has to be at the forefront of entrepreneurial orientation dimensions such as innovation, pro-activeness and cutting edge technology through utilization of world class manufacturing process improvement or continuous improvement methodologies such lean manufacturing, autonomous maintenance, kaizens etc.

3.6 CAUSAL FACTORS OF THE STUDY

The literature review discussion in chapter 2 was aimed at giving of corporate entrepreneurship, its multiple dimensions, the characteristics of an entrepreneur, the internal environment of established or entrepreneurial organisations, the important roles played by middle management in creating and fostering an entrepreneurial friendly environment which in turn can promote entrepreneurial behaviour.

Today's constant changing economic climate organisations have to change or adopt faster than ever before to keep ahead of their competitors. Lately changes sometimes occurs so fast that organisation's most valuable assets, its people are not well prepared to handle or adopt. This can result in loss of business or loss of market of market share.

In automotive manufacturing industry changes is a constant phenomenon, new cars are designed, developed and manufacturing at break neck speed therefore automotive component manufacturing have to be always on their toes in order to meet and exceed customer demand and expectation. Companies have to work closely with OEM at all times to get a better understanding of customer expectations.

In order to remain competitive companies to constantly improve their manufacturing processes and employees are best positioned to identify improvement opportunities.

However employees must have an entrepreneurial mindset in order to identify and take advantage of such opportunities. The company and its employees will have to be entrepreneurial in order to gain and maintain a competitive advantage over internal and external customers. The company's middle managers can play a catalytic role in ensuring that entrepreneurial behaviour exists throughout the supply chain.

3.7 SUMMARY

The 2008 economic meltdown brought the automotive manufacturing industry down to its knees. During financial hardship consumers will immediately refrain from purchasing new cars. The company's extremely long lead-time and relatively small South African market means that the company will have to be extremely entrepreneurial in order to remain competitive, survive and then finally regain a competitive advantage.

CHAPTER 4

DISCUSSION AND RESULTS OF EMPERICAL RESEARCH

4.1 INTRODUCTION

This chapter describes the research methodology followed in the study as well as present and discuss the results of empirical research. The chapter is separated into data gathering, presentation and concluded with a discussion. The findings include population's demographic profile, the entrepreneurial characteristic, the assessment of entrepreneurial climate based on the five identified constructs, the relationship between demographic profile and the five constructs and finally the reliability of the questionnaire.

4.2 RESEARCH METHODOLOGY

During literature review in chapter 2, corporate entrepreneurship and entrepreneurship in general were defined and discussed in detail. Furthermore an organisation's entrepreneurial characteristics, entrepreneurial orientation, determinants of an entrepreneurial climate, developing an entrepreneurial corporate environment and role played by middle management in fostering a corporate entrepreneurial climate was also discussed. The chapter was closed with a discussion on what different organisations perceive to be a business success. An empirical study was taken in order to determine an entrepreneurial climate in the automotive component manufacturing company.

4.2.1 DEVELOPMENT OF THE MEASURING INSTRUMENT

As discussed in chapter 1 an entrepreneurial orientation questionnaire compiled by Lotz (2009:324) was identified as a compatible tool for the purpose of this study. The questionnaire was customised to specifically meet the industry and organisation under study. The questionnaire is divided into three sections, namely:

- Section A: Evaluation of entrepreneurial orientation of employees and managers using 31 carefully selected questions or statements.
- Section B: Evaluation of perceived success of the industry using 10 questions.

- Section C: Demographical and educational background.

In order to establish the organisation's corporate entrepreneurial climate five constructs were identified. The constructs used are autonomy, innovativeness, risk taking, pro-activeness and competitive aggressiveness. Five to six carefully selected statements were allocated to each construct. A Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5) was used to assess each respondent's opinion of each statement. Each respondent had to indicate the degree to which they agree or disagree with each statement.

The organisation's employees and managers were also asked to answer 10 questions in order to assess their perceived success of the business using the same Likert scale used in section A. Furthermore the following demographic information was collected, age, race, highest level of education, job title and department. The relationship between different constructs and demographic profile was presented and analysed.

4.2.1.1 Study population and sampling method

A study population can be defined as a set of all cases of interested (Shaughnessy, Zechmeister & Zechmeister, 2003:128). The population for this study is professional employees, junior and middle managers. The company employs approximately 400 people of which +/- 150 are professionals, junior and middle managers.

The targeted employees and managers were contacted and handed over a hard copy of the questionnaire or sent to them via email. Approximately 115 questionnaires were distributed and 65 was filled in and returned back. However 2 of these were spoiled leaving only 63 appropriate questionnaires for the study.

4.2.1.2 Data collection

The questionnaire was emailed or printed and handed out to targeted population in various departments after a permission to conduct the survey was obtained from company management. The questionnaire was printed and handed out to employees and managers from close proximity departments such as production and laboratory while the rest of employees and middle managers received the questionnaire through email.

The anonymity of each respondent's identity was assured declaration on the questionnaire's cover page. Printed questionnaire were collected by hand while those sent through email were returned by via email. Incomplete questionnaires were sent back to the respondent for completion. A total of 63 fully completed questionnaires were received out of 115 sent out, that is equivalent to 54.78% response rate.

4.2.1.3 Statistical analysis

The collected data was simplified, arranged, charted and analysed using statistical computer programs such as SPSS (SPSS, 2005) and Minitab. The Cronbrach's alpha coefficients were calculated and interpreted to assess questionnaire reliability and validity. The relationship between five selected corporate entrepreneurship orientation constructs and demographic variables will be analysed. The relationship between entrepreneurial orientation and perceived business success were also assessed, analysed and interpreted using effect sizes, correlation coefficient and t-tests. The raw data's statistical analysis results are interpreted and discussed in the following sections.

4.3 DEMOGRAPHIC INFORMATION RESULTS

Section C of the questionnaire provides respondents' demographical information and educational background. The demographical information will be used as a framework of reference for the interpretation of the results. An example of the questionnaire can be found in Appendix A.

4.3.1 GENDER DISTRIBUTION

Table 4.1: Gender distribution

Gender	Frequency	%Frequency	Cum % Frequency
Male	39	63.93%	63.9%
Female	22	36.07%	100.0%
Total	61	100%	

From table 4.1 above the majority of the respondents are men at 63.93% while women make up 36.07% of them.

4.3.2 AGE GROUP CLASSIFICATION

Table 4.2: Age group classification

Age group	Frequency	% Frequency	Cum %Frequency
≤29	13	20.63%	20.6%
30-39	37	58.73%	79.4%
40-49	7	11.11%	90.5%
50-59	6	9.52%	100.0%
60+	0	0.00%	100.0%
Total	63	100%	

From table 4.2 respondents within 30-39 year age group make up the majority, followed by those that are young than 29 years old while the 40-49 year age group make up 11.11%. The 50-59 year old age group makes up 9.52% while no one is over 60 year old.

4.3.3 RACE DISTRIBUTION

Table 4.3: Race distribution

Race group	Frequency	% Frequency	Cum %Frequency
Black	47	74.60%	74.6%
White	13	20.63%	95.2%
Coloured	1	1.59%	96.8%
Indian	2	3.17%	100.0%
Total	63	100%	

The overwhelming majority of the respondents are blacks at 74.60% of the respondents followed by white respondents who makes up 20.63%, Indians makes up 3.17% while coloured constitutes 1.59%.

4.3.4 HIGHEST EDUCATION CLASSIFICATION

Table 4.4: Highest education classification

Highest Qualification	Frequency	% Frequency	Cum %Frequency
Lower than matric	1	1.59%	1.6%
Matric	1	1.59%	3.2%
Certificate	5	7.94%	11.1%
Diploma (Technical College or Technikon)	25	39.68%	50.8%
Degree	21	33.33%	84.1%
Post graduate degree	10	15.87%	100.0%
Total	63	100%	

From table 4.4 respondents with diplomas constitutes 39.68%, those with degree constitutes 33.33% while those with post graduate degree make up 15.87%. Respondents with a certificate make up 7.94% while those with matric and lower than matric make up 1.59% each.

4.3.5 DEPARTMENTAL DISTRIBUTION

Table 4.5: Departmental distribution

Department	Frequency	% Frequency	Cum %Frequency
Executive Management	0	0.00%	0%
Production	36	57.14%	57.1%
Quality	1	1.59%	58.7%
Laboratory	9	14.29%	73.0%
Engineering	7	11.11%	84.1%
Human Resource	2	3.17%	87.3%
Finance Department	3	4.76%	92.1%
Logistics	2	3.17%	95.2%
Information Technology	0	0.00%	95.2%
Marketing & Sales	1	1.59%	96.8
Other (EHS, Security, etc)	2	3.17%	100%
Total	63	100%	58.7

From table 4.5 production staff makes up 57.14% of the respondents, the lab makes up 14.29%, engineering makes up 11.11%, the finance department makes up 4.76% while human resource and logistics departments makes up 3.17% each.

4.3.6 OCCUPIED JOB POSITION

Table 4.6: Occupied job positions

Job position	Frequency	% Frequency	Cum %Frequency
Top management	0	0.00%	0%
Middle management	5	7.94%	7.9%
Junior management or superintendent	12	19.05%	27.0%
Supervisor or team leader	16	25.40%	52.4%
Skilled employee	24	38.10%	90.5%
Semi-skilled employee	6	9.52%	100.0%
Total	63	100%	

From table 4.6 above skilled employee makes up 38.10%, supervisor or team leaders makes up 25.40% of the respondents, junior managers or superintendents makes up 19.05%, semi-skilled employees makes up 9.52% while middle management makes up 7.94% of the respondents.

4.4 ASSESSMENT OF CONSTRUCTS MEASURING ENTREPRENEURIAL ORIENTATION

Section A, question 1- 31 of the questionnaire (refer to appendix A) is designed to assess the respondents' entrepreneurial orientation. The questions were divided into five factors according to the constructs which they measure. The five constructs are **innovativeness, pro-activeness, autonomy, risk-taking and competitive aggressiveness**. The results will be used to determine the influence of these factors on the perceived success of the business. The mean and standard deviation of each of the 31 statements measuring the entrepreneurial orientation of company employees are displayed in Tables 4.8 to 4.12 below.

The mean and standard deviation of each factor or construct is displayed in Table 4.7 followed by a summarisation and discussion of each factor. All statements constituting each construct will be discussed separately. All constructs have been arranged from highest to the lowest rank mean order.

Table 4.7: Entrepreneurial orientation factor results

Factor	No of respondents(n)	Average or mean	Standard deviation (s)
Proactive	63	3.79	0.59618
Innovative	63	3.77	0.56948
Competitive Aggressiveness	63	3.47	0.50449
Autonomy	63	3.21	0.70167
Risk	63	2.96	0.65615

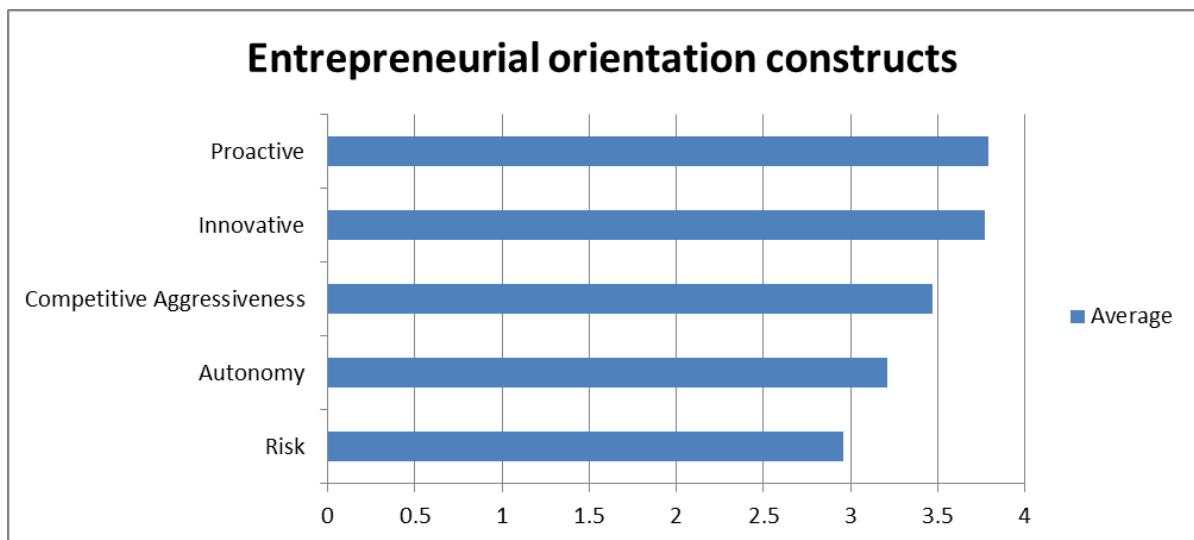


Figure 4.1 Entrepreneurial orientation constructs

From the Table 4.7 and Figure 4.1 above it is apparent that four out of the five, namely autonomy, competitive aggressiveness, innovativeness and pro-activeness's averages or means fall within the same category, that is **uncertain to agree** (between 3 and 4 rating) while risk's mean is below 3 which means that the company's employees disagree even it is by a small margin. The highest agreement was found in pro-activeness followed by innovativeness, competitive aggressiveness and finally autonomy.

The standard deviation ranged between 0.5 and 0.7 indicate that there is a general agreement regarding the entrepreneurial orientation variables.

The five constructs with the statements contained within each factor and it's results will now be discussed.

4.4.1 PRO-ACTIVENESS

The pro-activeness of the company's employees will be determined by statements A5; A31; A13; A16; A12 and A30 from section A of the questionnaire (refer to Appendix A). The purpose of the statements is to determine the level of pro-activeness of company employees.

Table 4.8 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.8: Pro-activeness of respondents

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
Our business develops products/services with customers in mind.	63	2	5	4.2222	0.75015
Our business develops products/services with customers in mind.	62	1	5	4.0323	0.90477
Our business continuously monitors market trends and identifies future needs of customers.	63	2	5	3.9365	0.64441
Our business continuously seeks out new products/processes/services.	62	2	5	3.9194	0.73101
Employees in our business understand the need of our customers.	63	1	5	3.8254	0.73044
Our business typically initiates actions which competitors respond to.	61	1	5	3.3443	0.68032
Our business is very often the first to introduce new products/services/processes.	63	1	5	3.2381	0.91077

For the constructs of pro-activeness, majority of the items are above the mean namely: our business develops products/services with customers in mind ($\bar{x} = 4.2222$), our business develops products/services with customers in mind ($\bar{x} = 4.0323$), our business continuously monitors market trends and identifies future needs of customers ($\bar{x} = 3.9365$), our business continuously seeks out new products/processes/services ($\bar{x} = 3.9194$) and employees in our business understand the need of our customers ($\bar{x} = 3.8254$).

Only two items namely, our business typically initiates actions which competitors respond to ($\bar{x} = 3.3443$) and our business is very often the first to introduce new products/services/processes ($\bar{x} = 3.2381$) ranked the below average mean. The standard deviation ranged between 0.64441 and 0.91077.

4.4.2 INNOVATIVENESS

The innovativeness of the company's employees will be determined by statements A1, A10, A11, A24, and A25 from section A of the questionnaire (refer to Appendix A). The purpose of the statements is to determine the level of innovativeness of company employees.

Table 4.9 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.9: The innovativeness of respondents

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
Our business has widely held belief that innovation is an absolute necessity for the business's future.	62	2	5	4.0806	0.7531
Our business is continually pursuing new opportunities.	63	3	5	4.0635	0.61887
Our business places a strong emphasis on new and innovative products/services/processes.	63	2	5	3.7619	0.75593
Our business has increased the number of services/products offered during the past two years.	62	1	5	3.6774	1.02067
There is eagerness among employees in our business for generating new ideas.	63	1	5	3.2540	1.09203

For the constructs of innovativeness, two items namely: Our business has widely held belief that innovation is an absolute necessity for the business's future ($\bar{x} = 4.0806$) and our business is continually pursuing new opportunities ($\bar{x} = 4.0635$) are above the average mean of 3.77. While three items namely, our business places a strong emphasis on new and innovative products/services/processes ($\bar{x} = 3.7619$), our business has increased the number of services/products offered during the past two years ($\bar{x} = 3.6774$) and there is eagerness among employees in our business for generating new ideas ($\bar{x} = 3.2540$) are below the average mean.

The standard deviation ranged between 0.61887 and 1.09203.

4.4.3 COMPETITIVE AGGRESSIVENESS

The employee's perceived company competitive aggressiveness will be determined by statements A6, A21, A22, A28, and A29 from section A of the questionnaire (refer to

Appendix A). The purpose of the statements is to determine the level of company competitive aggressiveness from an employee's perspective.

Table 4.10 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.10: Competitive aggressiveness of respondents

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
Our business is very aggressive and intensely competitive.	62	1	5	3.7097	0.83739
Our business 'competitive position has improved over the past few years.	62	2	5	3.7097	0.77644
Our business effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competitive position.	62	1	5	3.5484	0.80322
Our business knows when it is in danger of acting overly aggressively (this could lead to erosion of our business's reputation or to retaliation by competitors).	63	1	5	3.2063	0.74398
In dealing with competitors our business typically adopts a very competitive "undo-the-competitors" posture.	63	1	5	3.1905	0.80035

For the constructs of competitive aggressiveness, three items were rated above the average mean of 3.47, namely: our business is very aggressive and intensely competitive ($\bar{x} = 3.7097$), our business 'competitive position has improved over the past few years ($\bar{x} = 3.7097$) and our business effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competitive position ($\bar{x} = 3.5484$). While two items namely, Our business knows when it is in danger of acting overly aggressively (this could lead to erosion of our business's reputation or to retaliation by competitors) ($\bar{x} = 3.2063$) and In dealing with competitors our business typically adopts a very competitive "undo-the-competitors" posture. ($\bar{x} = 3.1905$) are below the average mean.

The standard deviation ranged between 0.74398 and 0.83739.

4.4.4 AUTONOMY

The level of autonomy given to the company's employees will be determined by statements A2, A4, A7, A8, A14, A15, A17 and A20 from section A of the questionnaire (refer to

Appendix A). The purpose of the statements is to determine the level of autonomy experienced by company employees.

Table 4.11 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.11: Autonomy experienced by respondents

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
I have enough autonomy in my job without continual supervision to do my work.	62	2	5	3.9355	0.80716
Employees are encouraged continually to look at things in new ways.	62	1	5	3.9032	1.03559
Employees in our business are encouraged to manage their own work and have flexibility to resolve the problems.	63	1	5	3.5714	0.99538
Our business allows me to be creative and try different methods to do my job.	63	1	5	3.4603	1.04458
Our business has flexible job descriptions rather than formal job descriptions.	63	1	5	3.127	1.12869
An employee with a good idea is often given free time to develop that idea.	63	1	5	2.7619	1.01146
Our business is characterised by low levels of red tape/bureaucracy.	61	1	5	2.7541	0.92477
Employees in our business are allowed to make decisions without going through elaborate justification and approval procedures.	63	1	5	2.1746	0.9595

For the constructs of autonomy, four items are above the average mean of 3.211 namely: I have enough autonomy in my job without continual supervision to do my work ($\bar{x} = 3.9355$), employees are encouraged continually to look at things in new ways ($\bar{x} = 3.9032$), employees in our business are encouraged to manage their own work and have flexibility to resolve the problems ($\bar{x} = 3.5714$) and our business allows me to be creative and try different methods to do my job ($\bar{x} = 3.4603$). While four items namely, Our business has flexible job descriptions rather than formal job descriptions. ($\bar{x} = 3.1270$), an employee with a good idea is often given free time to develop that idea. ($\bar{x} = 2.7619$), our business is characterised by low levels of red tape/bureaucracy ($\bar{x} = 2.7541$) and Employees in our business are allowed to make decisions without going through elaborate justification and approval procedures ($\bar{x} = 2.1746$) are below the average mean.

The standard deviation ranged between 0.80716 and 1.12869.

4.4.5 RISK-TAKING

The company and employees' level of risk-taking willingness will be determined by statements A3, A18, A19, A23, A26 and A27 from section A of the questionnaire (refer to Appendix A). The purpose of the statements is to determine the level of risk-taking the company is prepared to expose themselves to.

Table 4.11 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.12: Risk-taking willingness of the company

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
Owing the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business objectives.	62	2	5	3.5645	0.89847
When confronted with uncertain decisions, our business typically adopts a bold posture in order to maximize the probability of exploiting opportunities.	62	1	5	3.2097	0.85194
Our business supports many small and experimental projects, knowing that some will ultimately fail.	63	1	5	3.0317	1.04678
Our business supports many small and experimental projects, knowing that some will ultimately fail.	61	1	5	2.9344	1.03068
The term "risk-takers" is considered a positive attribute for employees in our business.	62	1	4	2.6452	0.95979
Managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	62	1	5	2.371	1.05944

For the constructs of risk-taking, three items are above the average mean of 2.9594 namely: Owing the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business objectives. ($\bar{x} = 3.5645$), When confronted with uncertain decisions, our business typically adopts a bold posture in order to maximize the probability of exploiting opportunities. ($\bar{x} = 3.2097$) and our business supports many small and experimental projects, knowing that some will ultimately fail ($\bar{x} = 3.0317$). While three items namely, our business supports many small and experimental projects, knowing that some will ultimately fail ($\bar{x} = 2.9344$), the term "risk-takers" is considered a positive attribute for employees in our business ($\bar{x} = 2.6452$) and managers encourage innovators to bend rules and rigid

procedures in order to keep promising ideas on track ($\bar{x} = 2.3710$) are below the average mean.

The standard deviation ranged between 0.85194 and 1.05944

4.4.6 THE OVERALL RANKING OF ITEMS

Figure 4.2 illustrates the ranking the means of all 31 statements (A1-A31) in section A of the questionnaire (refer to appendix A) from highest to lowest mean. The overall average mean is 3.4247. The majority of the statements fall within the 3 to 4 range indicating that these statements are varying between uncertain to agree. Half of the items (16) are ranked above 3.5 averages, which indicates higher tendency towards agreeing with the statements. A total of 4 statements leaned more towards strongly agree with the statements having been rated above 4. A total of 4 of the statements were more towards the uncertain or 3 rating. Only 2 items are ranked at 2 (disagree) – this was the statement relating to managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track ($\bar{x} = 2.3710$) and employees in our business are allowed to make decisions without going through elaborate justification and approval procedures ($\bar{x} = 2.1746$)

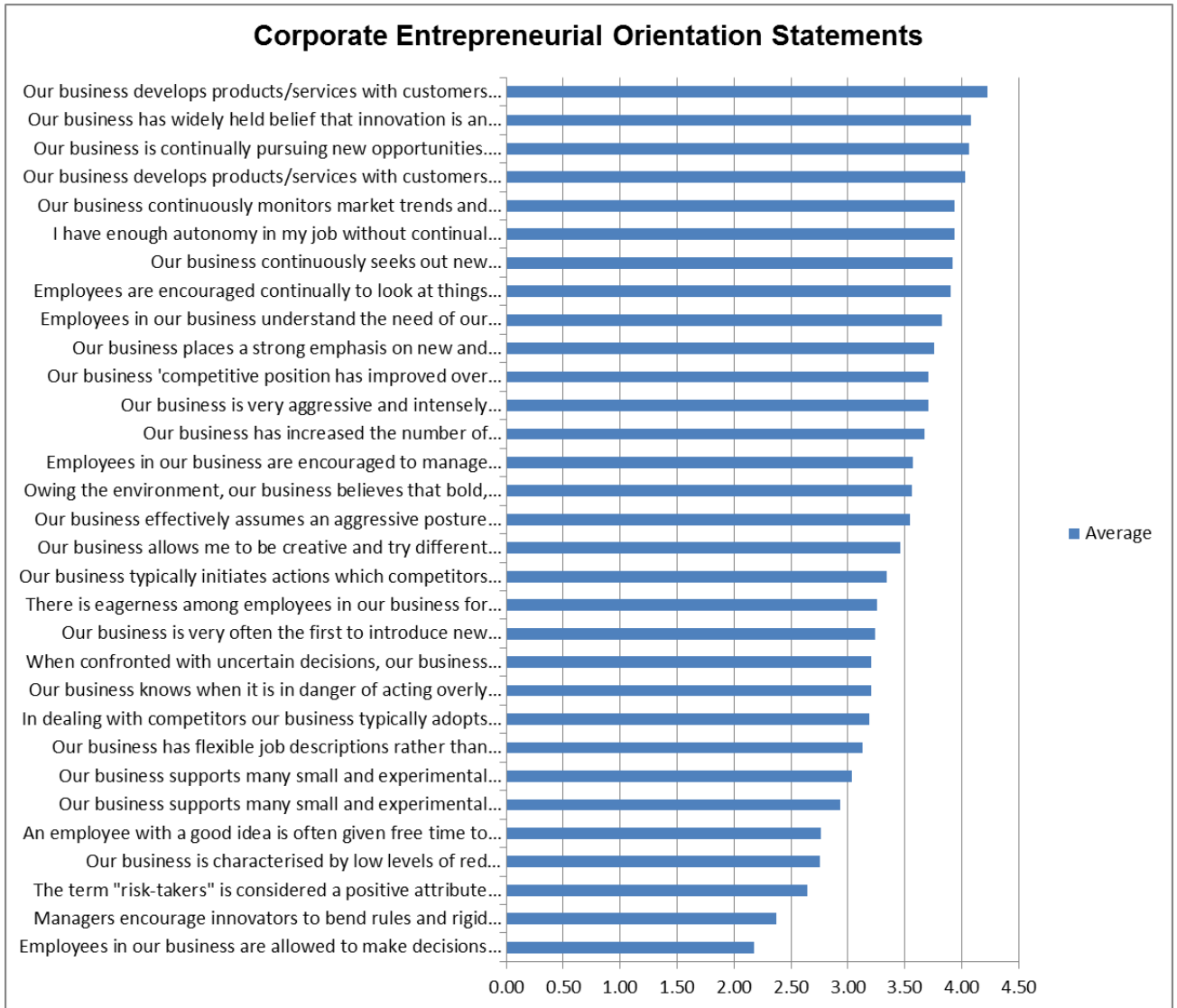


Figure 4.2: Corporate entrepreneurial orientation statements

4.5 ASSESSMENT OF RESPONDENTS' PERCEIVED BUSINESS SUCCESS

The results of section B of the questionnaire (refer to appendix A) evaluated the perception of company employees with regard to two variables measuring perceived success of the business. Employees were asked to answer the 10 items related to perceived success of the company or business.

Table 4.13 indicates the results showing the range, mean and standard deviation.

Table 4.13: Respondent's perceived business success

Perceived business growth construct	N	Min	Max	Mean	Std. Deviation
Business growth	62	1	5	3.3157	0.57482
Business development and improvement	62	1	5	3.2635	0.58531

The respondents are in agreement with both business growth and business development improvement. However the highest agreement was found with business growth ($\bar{x} = 3.3157$) followed by business development and improvement ($\bar{x} = 3.2635$). Both constructs have a mean above three out of five. The standard deviation for growth and development and improvement are 0.57482 and 0.58531 respectively, indicating that there was a general agreement amongst the respondents regarding the two variables.

4.5.1 BUSINESS GROWTH

The employees' perceived business growth in the company will be determined by statements B4, B6, B8, B9 and B10 from section B of the questionnaire (refer to Appendix A). The purpose of the statements is to determine the level of perceived business growth from an employee perspective.

Table 4.14 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.14: Respondent's perceived business growth

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
Our business has experienced growth in profit over the last few years.	62	1.00	5.00	3.5806	0.85982
Our business has experienced growth in turnover over the past few years.	62	1.00	5.00	3.4516	0.91754
The image (structure) of our business, relative to our competitors, has grown over the past few years.	61	1.00	5.00	3.4098	0.71594
Our business has experienced growth in market share over the past few years.	60	1.00	5.00	3.3167	0.81286
The morale (job description) has improved over the past few years.	61	1.00	5.00	2.8197	1.08794

For the constructs of business growth, four items are above the average mean of 3.3157 namely: our business has experienced growth in profit over the last few years ($\bar{x} = 3.5806$), our business has experienced growth in turnover over the past few years ($\bar{x} = 3.4516$), the image (structure) of our business, relative to our competitors, has grown over the past few years ($\bar{x} = 3.4098$) and our business has experienced growth in market share over the past few years ($\bar{x} = 3.3167$). While only one item namely, the morale (job description) has improved over the past few years ($\bar{x} = 2.8197$) are below the average mean.

The standard deviation ranged between 0.71594 and 1.08794.

4.5.2 BUSINESS DEVELOPMENT AND IMPROVEMENT

The employees' perceived business development and improvement in the company will be determined by statements B1, B2, B3, B5 and B7 from section B of the questionnaire (refer to Appendix A). The purpose of the statements is to determine the level of perceived business development and improvement from an employee perspective.

Table 4.15 displays the results of the range, mean and standard deviation for each variable, ranking the mean from highest to lowest.

Table 4.15: Respondent's perceived business development and improvement

Questionnaire statement	N	Min	Max	Mean	Std. Deviation
Our business' efficiency (doing things right) has improved over the past few years.	62	2.00	5.00	3.9032	0.71768
Over the past few years, changes in our process, services and product lines have been quite dramatic.	62	2.00	5.00	3.8387	0.70580
Our employees are likely committed to our business.	62	1.00	5.00	3.0968	1.00343
During difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made.	62	1.00	5.00	2.7903	0.88960
In our business employees are viewed as the most valuable asset of the business.	61	1.00	5.00	2.6885	1.14806

For the constructs of business development and improvement, two items are above the average mean of 3.2635 namely: our business' efficiency (doing things right) has improved over the past few years ($\bar{x} = 3.9032$) and over the past few years, changes in our process, services and product lines have been quite dramatic ($\bar{x} = 3.8387$). While three items namely, our employees are likely committed to our business ($\bar{x} = 3.0968$), during difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made ($\bar{x} = 2.7903$) and in our business employees are viewed as the most valuable asset of the business ($\bar{x} = 2.6885$) are below the average mean.

The standard deviation ranged between 0.70580 and 1.14806.

4.5.3 OVERALL RANKING OF ITEMS

Figure 4.3 illustrates the ranking the means of all 10 statements (B1-B10) in section B of the questionnaire (refer to appendix A) from highest to lowest mean. The overall average mean is 3.140. The majority of the statements fall within the 3 to 4 range indicating that these statements are varying between uncertain to agree. More than half of the items (7) are ranked below 3.5 averages, which indicates higher tendency towards disagreeing with the statements. A total of 3 statements leaned more towards strongly agree with the statements having been rated above 3.5. A total of 6 of the statements were more towards the uncertain or 3 rating. While none of the statements leaned towards absolute disagreement.

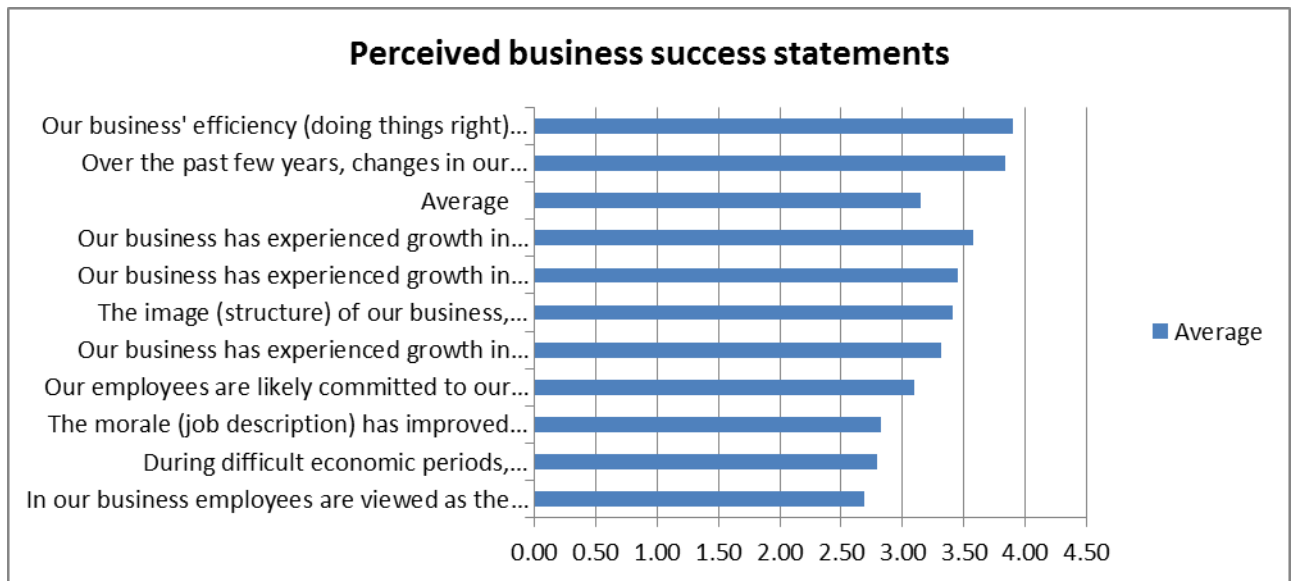


Figure 4.3 Respondent's perceived business success

4.6 FACTOR ANALYSIS

Table 4.16 displays results of factor descriptive statistics. According to these results two entrepreneurial orientation related factors namely, pro-activeness and autonomy reveals the presence of sub-factors. Pro-activeness has 3 sub-factors while autonomy has 2 sub-factors. Pro-activeness' components are related to the following aspects: new opportunity identification and evaluation (F1), identification and monitoring of market trends (F2) and new venture team formation (F3) (Kropp, Lindsay & Shohaman, 2008:104). While autonomy's components are related to the following aspects: independency to make decisions (F1) and encouraged to manage work without following the same procedure (F2) (Lumpkin & Dess, 1996:140). Foba and De Villiers (2007: 5) identified entrepreneurial orientation enablers as being the vision, mission, objectives, strategy, culture, structure, risk-taking, team work, autonomy, employee involvement, processes, resources, reward systems, competitiveness, innovativeness, pro-activeness and learning.

The outcome of full factor analysis can be found in appendix B. The 31 item analysis also revealed a 10 component matrix. The different sub-components will be identified by the letter F

Table 4.16: Factor descriptive statistics

Factor	N	Min	Max	Mean	Std. Deviation
Business development and improvement	62	2.00	4.40	3.2677	0.57482
Business growth	62	1.40	4.80	3.3153	0.58531
Competitive aggressiveness	63	2.20	4.60	3.4746	0.50449
Innovativeness	63	2.25	4.50	3.7857	0.56948
Risk	63	1.50	4.17	2.9632	0.65615
Proactive_F1	63	1.67	4.67	3.4947	0.56715
Proactive_F2	63	2.00	5.00	3.9365	0.64441
Proactive_F3	63	2.00	5.00	4.0291	0.57699
Autonomy_F1	63	1.50	5.00	3.5529	0.72853
Autonomy_F2	63	1.25	4.75	2.8810	0.67480
Valid N (listwise)	62				

The factor analysis results will now be discussed in detail.

4.6.1 ENTREPRENEURIAL ORIENTATION FACTORS

4.6.1.1 Pro-activeness

Table 4.17: Pro-activeness factor analysis results

Component Matrix			
Questionnaire statements	Component		
	1	2	3
Our business is very often the first to introduce new products/services/processes	0.822		
Our business typically initiates actions which competitors respond to	0.692		
Our business continuously seeks out new products/processes/services	0.570		
Our business continuously monitors market trends and identifies future needs of customers		0.768	
Employees in our business understand the need of our customers		0.646	
Our business develops products/services with customers in mind			0.812
Our business develops products/services with customers in mind			0.812
Sub-components of proactiveness	new opportunity identification and evaluation	identification and monitoring of market trends	new venture team formation

The three pro-activeness sub-factors displayed in table 4.17 can be classified as follows:

- **New opportunity identification and evaluation.** This sub-factor comprises of the following items: our business is very often the first to introduce new products/services/processes, our business typically initiates actions which competitors respond to and our business continuously seeks out new products/processes/services
- **Identification and monitoring of market trends.** This sub-factor comprises of the following items: our business continuously monitors market trends and identifies future needs of customers and employees in our business understand the need of our customers.
- **New venture team formation.** This sub-factor comprises of the following items: our business develops products/services with customers in mind and our business develops products/services with customers in mind.

4.6.1.2 Innovativeness

Table 4.18: Innovativeness factor analysis results

Component Matrix		
Questionnaire statement	Component	
	1	2
Our business has widely held belief that innovation is an absolute necessity for the business's future.	.791	-.518
There is eagerness among employees in our business for generating new ideas	.756	
Our business places a strong emphasis on new and innovative products/services/processes	.666	.346
Our business is continually pursuing new opportunities.	.545	
Our business has increased the number of services/products offered during the past two years		.900

From table 4.18 the following items are strongly related to innovativeness: our business has widely held belief that innovation is an absolute necessity for the business's future and There is eagerness among employees in our business for generating new ideas. The following items are only mildly related to innovativeness: our business places a strong emphasis on new and innovative products/services/processes and our business is continually pursuing new opportunities. While the last item, our business has increased the number of services/products offered during the past two years is not related to innovativeness it is related to perceived success factor of business growth.

4.6.1.3 Competitive aggressiveness

Table 4.19: Competitive aggressiveness factor analysis results

Component Matrix	
Questionnaire statement	Component
	1
Our business is very aggressive and intensely competitive.	0.828
In dealing with competitors our business typically adopts a very competitive "undo-the-competitors" posture.	0.792
Our business knows when it is in danger of acting overly aggressively (this could lead to erosion of our business's reputation or to retaliation by competitors)	0.569
Our business effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competitive position	0.550
Our business 'competitive position has improved over the past few years	0.405

From table 4.19 the following items are strongly related to competitive aggressiveness: our business is very aggressive and intensely competitive and in dealing with competitors our business typically adopts a very competitive "undo-the-competitors" posture. The rest of the items are only mildly related to competitive aggressiveness.

4.6.1.4 *Autonomy*

Table 4.20: Autonomy factor analysis results

Component Matrix		
Questionnaire statement	Component	
	1	2
Employees are encouraged continually to look at things in new ways. Autonomy	0.823	
I have enough autonomy in my job without continual supervision to do my work. Autonomy	0.822	
Our business is characterised by low levels of red tape/bureaucracy. Autonomy	0.686	
Employees in our business are encouraged to manage their own work and have flexibility to resolve the problems. Autonomy	0.584	
Our business allows me to be creative and try different methods to do my job. Autonomy		0.441
An employee with a good idea is often given free time to develop that idea. Autonomy		0.890
Employees in our business are allowed to make decisions without going through elaborate justification and approval procedures. Autonomy		0.619
Our business has flexible job descriptions rather than formal job descriptions. Autonomy		0.868
Sub-components of autonomy	Independency to make decisions	Encouraged to manage work without following the same procedure

The two autonomy sub-factors displayed in table 4.20 can be classified as follows:

- **Independency to make decisions.** This sub-factor comprises of the following items: employees are encouraged continually to look at things in new ways, i have enough autonomy in my job without continual supervision to do my work, our business is characterised by low levels of red tape/bureaucracy and employees in our business are encouraged to manage their own work and have flexibility to resolve the problems.
- **Encouraged to manage work without following the same procedure.** This sub-factor comprises of the following items: our business allows me to be creative and try different methods to do my job, an employee with a good idea is often given free time to develop that idea, employees in our business are allowed to make decisions without going through elaborate justification and approval procedures and our business has flexible job descriptions rather than formal job descriptions.

4.6.1.5 Risk-taking

Table 4.21: Risk-taking factor analysis results

Component Matrix	
Questionnaire statement	Component
	1
When confronted with uncertain decisions, our business typically adopts a bold posture in order to maximize the probability of exploiting opportunities	0.770
Our business supports many small and experimental projects, knowing that some will ultimately fail	0.755
Our business supports many small and experimental projects, knowing that some will ultimately fail	0.738
The term "risk-takers" is considered a positive attribute for employees in our business	0.723
Managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	0.573
Owing the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business objectives	0.457

From table 4.21 four items are strongly related risk-taking namely: when confronted with uncertain decisions, our business typically adopts a bold posture in order to maximize the probability of exploiting opportunities, our business supports many small and experimental projects, knowing that some will ultimately fail, our business supports many small and experimental projects, knowing that some will ultimately fail and the term "risk-takers" is considered a positive attribute for employees in our business. The last two items are only mildly related to risk-taking namely: managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track and owing the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business objectives

4.6.2 PERCEIVED BUSINESS SUCCESS FACTORS

4.6.2.1 Business growth

Table 4.22: Business growth factor analysis results

Component Matrix^a	
Questionnaire statement	Component 1
Our business has experienced growth in market share over the past few years.	.870
Our business has experienced growth in profit over the last few years.	.838
Our business has experienced growth in turnover over the past few years.	.770
The image (structure) of our business, relative to our competitors, has grown over the past few years.	.583
The morale (job description) has improved over the past few years.	.240

From table 4.22 three items are strongly related to business growth namely: our business has experienced growth in market share over the past few years, our business has experienced growth in profit over the last few years and our business has experienced growth in turnover over the past few years. The last two items are only mildly related to risk-taking namely: the image (structure) of our business, relative to our competitors, has grown over the past few years, and the morale (job description) has improved over the past few years.

4.6.2.2 Business development and improvement

Table 4.23: Business development and improvement factor analysis results

Component Matrix	
Questionnaire statement	Component 1
Our employees are likely committed to our business.	.789
In our business employees are viewed as the most valuable asset of the business.	.747
Our business' efficiency (doing things right) has improved over the past few years.	.680
During difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made.	.528
Over the past few years, changes in our process, services and product lines have been quite dramatic.	.334

From table 4.23 three items are strongly related to business development and improvement namely: our employees are likely committed to our business, in our business employees are viewed as the most valuable asset of the business, and our business' efficiency (doing things right) has improved over the past few years.. The last two items are only mildly related to risk-taking namely: during difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made, and over the past few years, changes in our process, services and product lines have been quite dramatic.

4.7 RELATIONSHIP BETWEEN DEMOGRAPHICAL PROFILE AND ENTREPRENEURIAL CLIMATE CONSTRUCTS.

The p-value is the probability of getting a test statistic equal to or more than the sample results. The p-value often referred to as the observed level of significance are the smallest level at which null hypothesis can be rejected. The level of significance used is $\alpha=0.05$. The t-test is used to determine if there is a significant difference between the means of two populations (Levine et al.,2008:371). A small p-value ($p<0.05$) is considered sufficient evidence that the result is significant. The p-value only concludes there is a significant difference or there is a significant correlation at some level of confidence. However, it does not indicate whether the finding is of any practical significance. By calculating an effect size, in addition to the p-value this problem can be overcome. The effect size is a standardised scale free measure of the magnitude of the difference or correlation being tested and it is not

affected by for the size of the sample. The effect size serves as a purpose of statistical significance is found, as well as when no statistical significance is detected (Pietersen & Maree, 2009:211)

According to Pietersen and Mare (2009:211), effect sizes can be calculated in a variety of different cases. The most important ones are for the difference between two means and for the relationship between variables.

For the purpose of this study it will be calculated for the differences between two means. When looking at mean differences, the effect size is denoted by d; Cohen's guidelines exist for the interpretation of the magnitude of d:

Table 4.24: Interpretation of magnitude of effect size

D	Meaning
0.2	Small effect
0.5	Medium
0.8	Large effect

Source : Pietersen and Maree (2009:211)

Results with medium effect can be interpreted as visible effect and with $d > 0.8$ it will be regarded as being practically significant (Field, 2005:32; Ellis and Steyn, 2003:51-53; Thompson, 2001:80-93).

Table 4.25 and 4.26 illustrate each of the two groups' mean score, their size and their standard deviation. The differences between the demographical variables gender (male and female) and race group (black and white) of the participating employees with regards to variables measuring entrepreneurial orientation and perceived success were examined by an independent t-test (p-values) and effect sizes (d-values). Demographic variable race group has been reduced a non-pair to a paired variable because number of coloured and Indian were not significant enough to have an influence in results.

Statistical significance tests have the tendency to yield small p-values, which is the indication of statistical significance. Table 4.25 shows the relationship between 7 variables and demographic variables, with the means, standard deviation (s) independent t-test (p-value) and effect sizes (d-value)

4.7.1 GENDER AND RACE (PAIRED DEMOGRPHIC VARIABLES)

Table 4.25: relationship between entrepreneurial orientation factors and demographical variables (gender)

Gender Group Statistics							
Orientation factors	Gender	N	Mean	Std. Deviation	Std. Error Mean	P value	Effect size(d)
Competitive aggressiveness	Male	39	3.3949	0.5241	0.0839	0.125	0.4000
	Female	22	3.6045	0.4685	0.0999	0.115	
Innovativeness	Male	39	3.8205	0.5763	0.0923	0.700	0.1026
	Female	22	3.7614	0.5694	0.1214	0.700	
Risk	Male	39	2.9679	0.7137	0.1143	0.857	0.0449
	Female	22	3.0000	0.5681	0.1211	0.848	
Proactive_F1	Male	39	3.4872	0.5766	0.0923	0.973	0.0091
	Female	22	3.4924	0.5784	0.1233	0.973	
Proactive_F2	Male	39	3.7949	0.6951	0.1113	0.025	0.5567
	Female	22	4.1818	0.5011	0.1068	0.015	
Proactive_F3	Male	39	3.9829	0.6708	0.1074	0.405	0.1949
	Female	22	4.1136	0.3828	0.0816	0.336	
Autonomy_F1	Male	39	3.4829	0.7612	0.1219	0.236	0.3061
	Female	22	3.7159	0.6714	0.1432	0.221	
Autonomy_F2	Male	39	2.9936	0.7662	0.1227	0.169	0.3179
	Female	22	2.7500	0.3858	0.0822	0.104	

From table 4.25 above the results indicated a statistical significant difference ($p < 0.05$) in the mean values between the entrepreneurial orientation pro-activeness sub-factor F2 (identification and monitoring of market trends) with both male and female respondents with p-value of 0.025 and 0.015 respectively. Pro-activeness F2 factor's effect size was determined to be 0.5567 which means gender only has a medium effect on this factor. This result can be interpreted to have only a visible effect. With regard to other variables, innovativeness, risk-taking, pro-activeness F1, pro-activeness F3, autonomy F1, autonomy F2 and competitive aggressiveness the evaluation the effect size (d) range between 0.0091 and 0.4000 while p-value range between 0.104 and 0.973.

Table 4.26: Relationship between entrepreneurial orientation factors and demographical variables (race)

Race Group Statistics							
Orientation factors	Race	N	Mean	Std. Deviation	Std. Error Mean	P value	Effect size(d)
Competitive aggressiveness	Black	47	3.5809	0.4826	0.0704	0.026	0.694
	White	13	3.2462	0.4013	0.1113	0.018	
Innovativeness	Black	47	3.7181	0.5281	0.0770	0.048	0.596
	White	13	4.0577	0.5697	0.1580	0.069	
Risk	Black	47	2.9720	0.6171	0.0900	0.751	0.081
	White	13	3.0385	0.8198	0.2274	0.789	
Proactive_F1	Black	47	3.5142	0.5634	0.0822	0.774	0.081
	White	13	3.4615	0.6460	0.1792	0.793	
Proactive_F2	Black	47	3.9362	0.6726	0.0981	0.948	0.019
	White	13	3.9231	0.4935	0.1369	0.939	
Proactive_F3	Black	47	4.0532	0.5540	0.0808	0.665	0.120
	White	13	3.9744	0.6591	0.1828	0.698	
Autonomy_F1	Male	47	3.5266	0.7476	0.1090	0.618	0.153
	Female	13	3.6410	0.6467	0.1794	0.591	
Autonomy_F2	Male	47	2.9202	0.7015	0.1023	0.284	0.325
	Female	13	2.6923	0.5511	0.1528	0.227	

From table 4.26 above the results indicated a statistical significant difference ($p < 0.05$) in the mean values between the entrepreneurial orientation of competitiveness aggressiveness with both black and white respondents with p-values of 0.026 and 0.018 respectively. Competitiveness aggressiveness factor's effect size was determined to be 0.694 which means that race has a medium to large effect. This can be interpreted to have a visible to significant effect. Innovativeness indicated a borderline statistical significance with a p-value of 0.048 and 0.069 for black and white respondents respectively. At 0.596 the effect size is only medium. With regard to other variables, risk-taking, pro-activeness F1, pro-activeness F2, pro-activeness F3, autonomy F1 and autonomy F2 the evaluation the effect size (d) range between 0.081 and 0.325 while p-value range between 0.227 and 0.793.

4.7.2 AGE, OCCUPIED POSITION AND HIGHEST EDUCATION LEVEL (NONPARAMETRIC DEMOGRAPHIC VARIABLES)

Coefficient of correlation (ρ) will be used to measure the relative strength of a linear relationship between nonparametric demographic variables (dependent) and entrepreneurial

orientation factors (independent). Table 4.27 will be used to determine if there is a strong relationship or not, while p-value will be used to measure the significance of the relation.

Table 4.27: Strength of correlation coefficient

Value of the correlation coefficient(ρ)	Strength of correlation
1	Perfect
0.7 – 0.9	Strong
0.4 – 0.6	Moderate
0.1 – 0.3	Weak
0	Zero

Correlation coefficient can be positive or negative

Table 4.28: Relationship between entrepreneurial orientation factors and demographical variables: age, occupied position and highest qualification.

Age, occupied position and highest qualification group statistics				
Orientation factors	Correlation statistics	Age	Occupied position	Highest qualification
Competitive	Correlation Coefficient	-0.031	0.137	0.008
	Sig. (2-tailed)	0.811	.284	0.951
	N	63	63	63
Innovative	Correlation Coefficient	0.164	-0.044	-.149
	Sig. (2-tailed)	0.199	0.734	0.244
	N	63	63	63
Risk	Correlation Coefficient	.017	-.048	-.102
	Sig. (2-tailed)	0.894	0.712	0.428
	N	63	63	63
Proactive_F1	Correlation Coefficient	0.292*	-0.103	-0.161
	Sig. (2-tailed)	0.020	0.420	0.208
	N	63	63	63
Proactive_F2	Correlation Coefficient	0.162	-0.155	0.106
	Sig. (2-tailed)	0.205	0.225	0.409
	N	63	63	63
Proactive_F3	Correlation Coefficient	0.005	0.211	0.001
	Sig. (2-tailed)	0.971	0.096	0.994
	N	63	63	63
Autonomy_F1	Correlation Coefficient	0.089	0.297*	-0.349**
	Sig. (2-tailed)	0.489	0.018	0.005
	N	63	63	63
Autonomy_F2	Correlation Coefficient	-0.057	0.159	-0.232
	Sig. (2-tailed)	0.655	0.213	0.067
	N	63	63	63

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

From table 4.28 above the results reveals the presence a weak ($\rho < 0.3$) but statistical significant positive relationship ($p < 0.05$) between the entrepreneurial orientation factor proactiveness F1 (new opportunity identification and evaluation) and age with a p-value of 0.02 and correlation coefficient of 0.292. The rest of the factors are not significantly influenced by age.

From table 4.28 above the results reveals the presence a weak ($\rho < 0.3$) but statistical significant positive relationship ($p < 0.05$) between the entrepreneurial orientation factor autonomy F1 (independency to make decisions) and occupied position with a p-value of 0.018 and correlation coefficient of 0.297. The rest of the factors are not significantly influenced by occupied position.

One again from table 4.28 above the results reveals the presence a weak ($\rho < 0.3$) but statistical significant negative relationship ($p < 0.05$) between the entrepreneurial orientation factor autonomy F1 (independency to make decisions) and highest education level with a p-value of 0.005 and correlation coefficient of -0.349. The rest of the factors are not significantly influenced by education level.

4.8 RELATIONSHIP BETWEEN DEMOGRAPHICAL PROFILE AND PERCEIVED SUCCESS FACTORS.

4.8.1 GENDER AND RACE

Table 4.29: relationship between perceived success factors and demographical variables (gender)

Gender Group Statistics							
Perceived success factors	Gender	N	Mean	Std. Deviation	Std. Error Mean	P value	Effect size(d)
Business development and improvement	Male	38	3.3368	0.5847	0.0948	0.376	0.2340
	Female	22	3.2000	0.5521	0.1177	0.370	
Business growth	Male	38	3.3368	0.5847	0.0948	0.941	0.0197
	Female	22	3.3250	0.6023	0.1284	0.941	

From table 4.29 above the results indicated that there is no statistically significant difference ($p < 0.05$) in the mean values between perceived success factors and gender with all p-values higher than 0.05 while business development and improvement indicates a presence of small effect.

Table 4.30: relationship between perceived success factors and demographical variables (race)

Race Group Statistics							
Perceived success factors	Race	N	Mean	Std. Deviation	Std. Error Mean	P value	Effect size(d)
Business development and improvement	Black	47	3.2298	0.5532	0.0807	0.118	0.478
	White	13	3.5077	0.5809	0.1611	0.140	
Business growth	Black	47	3.2543	0.5917	0.0863	0.144	0.454
	White	13	3.5231	0.5262	0.1460	0.128	

From table 4.30 results race shows that race has a medium but insignificant effect on perceived business of the company because all d-values approximately 0.5 while p-values are higher than 0.05.

4.8.2 AGE, OCCUPIED POSITION AND HIGHEST QUALIFICATION

Table 4.31: relationship between perceived success factors and demographical variables: age, occupied position and highest qualification.

Age, occupied position and highest qualification group statistics				
Orientation factors	Correlation statistics	Age	Occupied position	Highest qualification
Business development and improvement	Correlation Coefficient	0.311*	-.007	-.405**
	Sig. (2-tailed)	0.014	0.954	0.001
	N	62	62	62
Business growth	Correlation Coefficient	0.243	0.045	-0.247
	Sig. (2-tailed)	0.057	0.730	0.053
	N	62	62	62

From table 4.31 above the results reveals the presence of a moderate ($p < 0.5$) and statistical significant positive relationship ($p \sim 0.01$) between the perceived success factor business development and improvement and age with a p-value of 0.014 and correlation coefficient of 0.311. Business growth and age also reveals a weak positive relationship with p at 0.243 and p-value at 0.057.

From table 4.31 above the results reveals a lack of relationship between occupied position and perceived business success factors.

Once again from table 4.31 above the results reveals the presence of a moderate ($p < 0.5$) and statistical significant negative relationship ($p < 0.01$) between the perceived success factor business development and improvement and highest education level with a p-value of

0.001 and correlation coefficient of -0.405. Business growth and highest education level also reveals a weak negative relationship with ρ at 0.247 and p-value at 0.053.

4.9 RELATIONSHIP BETWEEN ENTREPRENEURIAL ORIENTATION AND PERCEIVED BUSINESS SUCCESS CONSTRUCTS

Table 4.32: relationship between perceived success factors (independent variables) and

Correlation between entrepreneurial orientation and perceived business factors			
Orientation factors	Correlation statistics	Perceived business factors	
		Business development and improvement	Business growth
Competitive aggressiveness	Correlation Coefficient	0.207	0.274*
	Sig. (2-tailed)	0.107	0.031
	N	62	62
Innovativeness	Correlation Coefficient	0.662**	0.402**
	Sig. (2-tailed)	0.000	0.001
	N	62	62
Risk	Correlation Coefficient	0.412**	0.195
	Sig. (2-tailed)	0.001	0.128
	N	62	62
Proactive_F1	Correlation Coefficient	0.226	0.342**
	Sig. (2-tailed)	0.078	0.007
	N	62	62
Proactive_F2	Correlation Coefficient	0.153	0.180
	Sig. (2-tailed)	0.234	0.163
	N	62	62
Proactive_F3	Correlation Coefficient	0.327**	0.321*
	Sig. (2-tailed)	0.010	0.011
	N	62	62
Autonomy_F1	Correlation Coefficient	0.518**	0.312*
	Sig. (2-tailed)	0.000	0.014
	N	62	62
Autonomy_F2	Correlation Coefficient	0.339**	0.019
	Sig. (2-tailed)	0.007	0.884
	N	62	62

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

From table 4.32 above the results reveals the presence of a strong ($\rho < 0.6$) and statistical significant positive relationship ($p < 0.01$) between the perceived success factor business development and improvement and innovativeness with a p-value of 0.00 and correlation coefficient of 0.662. There is also a weak to moderate relationship business development and improvement and the following orientation factors: autonomy F1, autonomy F2, risk and proactive F3. The only factors that are not significantly influenced by business development and improvement are competitive aggressiveness and pro-activeness F2 (identification and monitoring of market trends).

From table 4.31 above the following orientation factors seem to have a weak to moderate and significant relationship with business growth: competitiveness aggressiveness, innovativeness, pro-activeness F1, pro-activeness F3 and autonomy F1. While the following orientation factors' results a reveals a lack of statistically significant relationship with business growth: risk, pro-activeness F2 and autonomy F2.

4.10 RELIABILITY OF THE MEASUREMENT INSTRUMENT (QUESTIONNAIRE)

Reliability of the measuring instrument or questionnaire is concerned with findings of the research and relates to the credibility of the finding. The cronbrach's alpha coefficients were calculated in order to assess the internal consistency between the items of the measuring instruments. To assess the internal consistency of the items measuring the various factors under investigation, cronbrach's alpha coefficients were calculated (brynmann & bell, 2007:164). A high internal consistency implies a high degree of generalizability across the items within the test or measurement. Therefore, the results from entrepreneurial orientation and perceived success factors reveals that both have an acceptable to good reliability, with no variable below cronbrach's alpha value of 0.5 (refer to table 4.33) with the exception of pro-activeness sub-component 2 which revealed a negative value due to a negative covariance amongst the items which violates the model assumptions.

Table 4.33: Summary of cronbrach's alpha of the questionnaire.

Factor	Cronbrach's alpha
Business development and improvement	0.618
Business growth	0.702
Competitive aggressiveness	0.640
Innovativeness	0.628
Risk	0.751
Proactive_F1	0.551
Proactive_F2	-0.202
Proactive_F3	0.655
Autonomy_F1	0.759
Autonomy_F2	0.545

4.11 SUMMARY

In this chapter the results and discussion of the empirical study was presented. The data gathering process was explained and presented in figure 4.X depicting the research model which was employed. The questionnaire and the method followed in it's selection is well described and the sections included with each section's breakdown were also explained. The questionnaire's results were captured and presented in tables and figures. The results were divided into different segments such as entrepreneurial orientation, perceived business success and demographic information. The entrepreneurial orientation is further divided into factors with discussions of the five constructs of innovativeness, pro-activeness, autonomy, competitive aggressiveness and risk taking followed by a factor analysis. The perceived business success is divided into two segments with its own constructs namely business growth and business improvement & development. The construct discussion is followed by a factor analysis.

An overall rating of all items relating to entrepreneurial orientation and perceived business success was presented respectively. The relationship between constructs of perceived business success, entrepreneurial orientation and demographic variables was presented and discussed. A multiple regression was presented as a means of establishing the presence or lack of relationship between perceived business growth constructs (dependent variables) and entrepreneurial orientation constructs (independent variables).

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In today's environment of rapid change and shortened product and business model lifecycle, the future profit streams from existing operations are uncertain. Businesses such as the automotive company under study need to consistently seek out new opportunities and therefore firms may benefit from adapting entrepreneurial orientation (Rauch et al., 2008:8).

Entrepreneurial orientation of employees and managers working for the company might play a role in the company's survival and subsequent success, eventually achieving company vision of being manufacturing site of choice with the group. Efforts to anticipate demand, latest technological developments and aggressively position new products or service offerings to meet that demand often result in enhanced performance (Ireland, Hitt & Simon, 2003).

Often employees are discouraged from spending time corporate entrepreneurial activities because managers feel that it takes time away from their primary functions, which might be production related. There is a great believe in the manufacturing industry in general that corporate entrepreneurial orientation is the only way South African companies can remain competitive (Perpelkin, 2009:4). Findings from the study seem to support that supports that literature review, a discussion will follow.

In the view of the entrepreneurial orientation of company employees results will be presented and recommended to the company management in order to assist the company and it's employees to establish and harness the strength of entrepreneurial orientation as a tool to develop a surviving and eventually thriving successful business.

5.2 CONCLUSIONS

The objective of the study was to investigate the relationship between the entrepreneurial orientation of the company and employees and the perceived success of the business. The conclusion and recommendation on the entrepreneurial orientation questionnaire is presented in this section and consist of the conclusion on the demographical data of respondents; age, gender, race, occupied position, department and education experience of

respondents; entrepreneurial orientation and perceived success of the participating company employees.

5.1.1 ASSESSMENT OF CONSTRUCTS MEASURING ENTREPRENEURIAL ORIENTATION

According to Lumpkin & Dess, (1996:136) entrepreneurial orientation refers to strategy of making process and styles of firm that engage in entrepreneurial activities. Five dimensions, namely: autonomy, risk taking, innovativeness, pro-activeness and competitive aggressiveness were identified and used for characterising and distinguishing key entrepreneurial process, which is a firms' entrepreneurial orientation. The general consensus is that the presence of these dimensions is a positive indication of a company's entrepreneurial orientation. From the survey results four out of the five, namely autonomy, competitive aggressiveness, innovativeness and pro-activeness's averages or means fall within the same category, that is **uncertain to agree** while they disagree with the fact that the company is not afraid to embark on risky projects or adventures. While majority of the respondents believe that the company is highly proactive, moderately innovative and competitively aggressive. In general respondents agree that the company is entrepreneurially orientated.

Conclusions on whether the entrepreneurial orientation dimensions exist in the company and how strong they are will now be discussed.

5.1.1.1 Pro-activeness

The respondents strongly agree that the company develops products/services with customers in mind. Furthermore respondents strongly agree that the company continuously monitors market trends and identifies future needs of customers as well as continuously seeks out new products/processes/services. The conclusion is that the company is very proactive.

5.1.1.2 Innovativeness

The respondents strongly agree that the company has widely held belief that innovation is an absolute necessity for the business's future, their business is continually pursuing new opportunities, and places a strong emphasis on new and innovative products/services/processes. The conclusion is that the company is very innovative. The conclusion is that the company is very innovative.

5.1.1.3 Competitive aggressiveness

The respondents agree that the company is very aggressive and intensely competitive, their competitive position has improved over the past few years, and their company effectively assumes an aggressive posture to combat industry trends that may threaten company survival or competitive position. The conclusion is that the company is competitively aggressive.

5.1.1.4 Autonomy

Majority of respondents believe that they have enough autonomy in my job without continual supervision to do their work, they are encouraged continually to look at things in new ways, company employees are encouraged to manage their own work and have flexibility to resolve the problems. While employees are uncertain about whether their business has flexible job descriptions, that an employee with a good idea is given free time to develop that idea, whether their company is characterised by low levels of red tape/bureaucracy, whether employees in their company are allowed to make decisions without going through elaborate justification and approval procedures and whether the company allows them to be creative and try different methods to do their job. The conclusion is that the company moderately affords its employees the autonomy required in order for them to be entrepreneurially orientated.

5.1.1.5 Risk-taking

The respondents are uncertain - agreement on whether owing the environment, their company believes that bold, wide-ranging acts are necessary to achieve the business objectives, that when confronted with uncertain decisions the company typically adopts a bold posture in order to maximize the probability of exploiting opportunities and whether the company supports many small and experimental projects, knowing that some will ultimately fail. While respondents disagree that the term "risk-takers" is considered a positive attribute for employees in the company as well as the notion that managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track. The conclusion is that the company is shy to take risk which can stifle employee projects and discourage them from coming with innovative ideas in the future.

5.1.2 ASSESSMENT OF CONSTRUCTS MEASURING PERCEIVED BUSINESS SUCCESS

From literature review it was mentioned a measuring perceived business success is one way for the company to establish whether it's entrepreneurial strategy has been successful or not. Dess *et al.* (1997:678) asked the following question: "What are performance indicators for firms operating in an entrepreneurial strategy making mode?" they continued providing

the following answer: “on the one hand there seems to be a strong normative bias toward the inherent value in entrepreneurial behaviour and an assumption or explicit depiction of a positive relationship between behaviour and desired organisational outcomes such as sales growth and profit.” The relationship between perceived business success and entrepreneurial orientation constructs will be discussed in section 5.1.5.

The respondents agree that the company has enjoyed business success in the last couple of years. Results of perceived business success constructs, business growth and business development and improvement will now be discussed in detail.

5.1.2.1 Business growth

The respondents agree that the company has experienced growth in profit over the last few years, the company has experienced growth in turnover over the past few years, that the image (structure) of the business relative to our competitors has grown over the past few years, that the company has experienced growth in market share over the past few years and that the morale (job description) has improved over the past few years. The conclusion is that business growth has been on the rise in the last few years.

5.1.2.2 Business development and improvement

The respondent strongly agree that the company’s efficiency (doing things right) has improved over the past few years, and that over the past few years, changes in company process, services and product lines have been quite dramatic. While they are in agreement that company employees are committed to the business, that during difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made and that in their company employees are viewed as the most valuable asset of the business. The conclusion is that business development and improvement has improved in the last few years.

5.1.3 CONCLUSION ON THE RELATIONSHIP BETWEEN DEMOGRAPHICAL PROFILE AND ENTREPRENEURIAL ORIENTATION

5.1.3.1 Gender, age and race

More than half of the respondents are male that is 63.93 % compared to 36.07% females. Gender only has weak influence on the respondents’ entrepreneurial orientation with proactiveness having the strongest influence. Therefore an employee’s gender hardly have any bearing on entrepreneurial orientation of that employee in the company. The conclusion is that age is not a clear predictor of entrepreneurial orientation. Years of experience and knowledge could possibly yield a better comparison.

Almost 75% of the respondents are black while 21% of them are white with coloured and Indian respondents being too few to yield any meaningful statistics. Race has a weak influence on entrepreneurial orientation with competitive aggressiveness indicating the strongest influence followed by innovativeness. Autonomy, pro-activeness and risk-taking are not influenced by race at all. The conclusion is that an employee's race has no significant bearing on his or her entrepreneurial orientation.

Almost 59% of respondents are between the age of 30 and 39 years, 21% of them are young than 29 while 11% of them are between the age of 40 and 49 years of age. Respondents between ages of 50 and 59 make up the remaining 10 % of respondents. Age has a weak influence on employee pro-activeness and it hardly has any significant influence on all other entrepreneurial orientation factors. The conclusion is that an employee's age has no influence on whether he is entrepreneurial or not.

5.1.3.2 Highest education level, occupied position and department

Respondents with diplomas constitutes 39.68%, those with degrees constitutes 33.33% while those with post graduate degrees make up 15.87%. Respondents with a certificate make up 7.94% while those with matric and lower than matric make up 1.59% each. Education level has a weak but statistically significant negative relationship on entrepreneurial orientation factor autonomy. That means the more educated an employee is the more he or she seems to lose his or her autonomy. The rest of the factors are not significantly influenced by an employee education level. This finding is confusing because would expect the results to be the other way around. The conclusion is that an employee's education level has no significant influence on his or her entrepreneurial orientation.

Skilled employees makes up 38.10%, supervisor or team leaders makes up 25.40% of the respondents, junior managers or superintendents makes up 19.05%, semi-skilled employees makes up 9.52% while middle management makes up 7.94% of the respondents. Occupied position has a weak but statistically significant positive relationship on entrepreneurial orientation factor autonomy. That means the higher an employee climbs the corporate ladder the more he or she gains his or her autonomy. The rest of the factors are not significantly influenced by an employee's occupied job position. The conclusion is that an employee's job position has no significant influence on his or her entrepreneurial orientation.

Production staff makes up 57.14% of the respondents, the lab makes up 14.29%, engineering makes up 11.11%, the finance department makes up 4.76% while human resource and logistics departments makes up 3.17% each. Due to the higher number of production respondents in relation to the other department it was not possible to perform reliable statistical analysis of the departmental demographic profile.

5.1.4 CONCLUSION ON THE RELATIONSHIP BETWEEN DEMOGRAPHIC PROFILE AND PERCEIVED BUSINESS SUCCESS.

5.1.4.1 Gender, age and race

More than half of the respondents are male that is 63.93 % compared to 36.07% females. Gender has no influence on the respondents or company's perceived business success. The conclusion is that age is not a clear predictor of an employee's perceived business success.

Almost 75% of the respondents are black while 21% of them are white with coloured and Indian respondents being too few to yield any meaningful statistics. Survey results shows that race has no influence on the respondent's or company's perceived business success. The conclusion is that race is not a good predictor of an employee's perceived business success.

Almost 59% of respondents are between the age of 30 and 39 years, 21% of them are young than 29 while 11% of them are between the age of 40 and 49 years of age. Respondents between ages of 50 and 59 make up the remaining 10 % of respondents. Age has a moderate influence on employees' perceived business success construct of business development and improvement. However age doesn't have influence on perceived business success construct of business growth. The conclusion is that an employee's age does have influence on his perceived business success construct of development and improvement.

5.1.4.2 Highest education level, occupied position and department

Respondents with diplomas constitutes 39.68%, those with degrees constitutes 33.33% while those with post graduate degrees make up 15.87%. Respondents with a certificate make up 7.94% while those with matric and lower than matric make up 1.59% each. Education level has a moderate and statistically significant positive relationship on perceived business success construct of business development and improvement. The conclusion is that an employee's education level does have an influence on his perceived business success construct of business development and improvement.

Skilled employees makes up 38.10%, supervisor or team leaders makes up 25.40% of the respondents, junior managers or superintendents makes up 19.05%, semi-skilled employees makes up 9.52% while middle management makes up 7.94% of the respondents. Occupied position influence an employee's both perceived business success constructs business development and improvement, and business growth. The conclusion is that an employee's job position has a significant influence on his or her perceived business success.

Production staff makes up 57.14% of the respondents, the lab makes up 14.29%, engineering makes up 11.11%, the finance department makes up 4.76% while human resource and logistics departments makes up 3.17% each. Due to the higher number of production respondents in relation to the other department it was not possible to perform reliable statistical analysis of the departmental demographic profile.

5.1.5 CONCLUSION ON RELATIONSHIP BETWEEN ENTREPRENEURIAL ORIENTATION AND PERCEIVED BUSINESS SUCCESS

Entrepreneurial orientation dimensions can be used to measure the company's perceived business success. Dess *et al.* (1997:678) said that on the one hand there seems to be a strong normative bias toward the inherent value in entrepreneurial behaviour and an assumption or explicit depiction of a positive relationship between behaviour and desired organisational outcomes such as sales growth and profit.

According to Frese *et al.* (2002) entrepreneurial orientation is a psychological concept in the sense of an attitude. Business owners have to be high in entrepreneurial orientation in a difficult environment, because threatening and dynamic condition commands more innovation and aggressiveness (Frese *et al.*, 2002). Frese *et al.* (2002:276) findings indicate that entrepreneurial orientation, referring to the dimensions of innovativeness, autonomy, competitiveness and risk-taking was positively related to success." Business owners who develop new ideas on products, services and technologies, who are more self-directed, who risk more and who challenge their competitors more are more successful than people with a low degree of entrepreneurial orientation" (Frese *et al.*, 2002:276).

Results reveal the presence of a strong and statistical significant positive relationship between the perceived success construct of business development and improvement and entrepreneurial orientation construct of innovativeness. There is also a weak to moderate relationship business development and improvement and the following orientation factors: autonomy, risk and pro-activeness. The only factors that are not significantly influenced by business development and improvement are competitive aggressiveness and pro-activeness. The conclusion is that entrepreneurial orientation constructs have a positive relationship on employees' perceived business success construct of business development and improvement.

The results also reveal a weak to moderate relationship between the following entrepreneurial orientation constructs and perceived business success construct of business growth: competitiveness aggressiveness, innovativeness, pro-activeness F1, pro-activeness F3 and autonomy F1. While the following orientation constructs' results a reveals a lack of

statistically significant relationship with business growth: risk, pro-activeness F2 and autonomy F2. The conclusion is that entrepreneurial orientation constructs have a positive relationship on employees' perceived business success construct of business growth.

Therefore in conclusion both perceived business success constructs of business development and improvement, and business growth are positively influenced by entrepreneurial orientation constructs. The survey results support literature view which said that entrepreneurial orientation constructs influence perceived business success.

5.2 RECOMMENDATIONS

In the eye of employees the company scored high on pro-activeness, innovativeness and competitive aggressiveness while they were poor to uncertain when it comes to autonomy and risk-taking. Employees on average believe that the company has been successful in the last couple of years. Now the question what is it that the company can do to improve it's entrepreneurial orientation. Recommendations include:

- In order to survive the current financial crisis the company has to become more entrepreneurially orientated than ever before.
- Corporate entrepreneurship can be one of the tools that the company can utilise to remain competitive without MIDP.
- The company must support many small and experimental projects even if they know that some will ultimately fail because some of them will be successful.
- Company management must consider risk taking as a positive attribute for employees in throughout the business.
- Managers should encourage innovative employees to bend rules and rigid procedures in order to keep promising ideas on track.
- When confronted with uncertain decisions company management should adopt a bold posture in order to maximize the probability of exploiting opportunities.
- The company should allow employees space to be creative and try different methods to do their job.
- Company management should give innovative employees such those involved in continuous improvement flexible job descriptions rather than formal job descriptions.
- If an employee comes up with a good idea he or she should be given free time to develop that idea.

- Management should remove red tape or bureaucracy in order to speed up decision making so that new ideas are implemented in an effective manner.
- Innovative employees should be allowed to make decisions without going through elaborate justification and approval procedures.
- Employees should be encouraged to manage their own work and have flexibility to resolve the problems.
- When dealing with competitors the company should adopt a very competitive "undo-the-competitors" posture.
- Management should encourage eagerness for generating new ideas among employees in the company.
- Management must introduce an incentive system for the best innovative idea that has generated or saved the company a certain amount of money.
- Management build an entrepreneurial culture throughout the company, employee mindset should be changed production to process or continuous improvement.

5.3 ACHIEVEMENT OF THE OBJECTIVES

The success of this study is based upon the achievement of the primary and secondary objectives indicated in section 1.3 of this study.

5.3.1 PRIMARY OBJECTIVES REVISITED

The primary objective of the study is to investigate the entrepreneurial orientation of the employees working in an automotive component manufacturing company in South Africa and secondly to determine if the perceived success of the industry in which they operate, namely the automotive component manufacturing industry is depended on the company and employee's entrepreneurial orientation. Test for a relationship between entrepreneurial orientation and demographic profile as well as to determine if there is a relationship between a company employee's perceived business success and employee demographic profile. This objective was achieved - in chapter four the results and analysis of the entrepreneurial orientation questionnaire is presented. Entrepreneurial orientation and perceived success were investigated in chapter four.

5.3.2 SECONDARY OBJECTIVES REVISITED

Secondary objectives include the following:

- To gain insight into entrepreneurship through conducting a literature study. Achieved in chapter 2.
- To study the concept of entrepreneurial orientation. Achieved in chapter 2 and 4.
- To study what perceived success of a business entails. Achieved in chapter 2 and 4.
- To study the auto catalytic converter industry. Achieved in chapter 3.
- To determine challenges experienced by entrepreneurial employees and managers working for large multinational companies. Achieved in chapter 2 and 4.
- To examine the entrepreneurial orientation of managers and employees working for large multinational companies. Achieved in chapter 4.
- To examine the current perceived business success of the company. Achieved in chapter 4'.
- To draw conclusions from the empirical study and offer practical recommendations to managers and employees working in large multinational organisations. Achieved in chapter 5.

5.4 SUGGESTION FOR FURTHER RESEARCH

The majority of the respondents who participated in this study were from production department. Only 63 out of a population of approximately 350 employees responded to the questionnaire. The study was conducted in only one company in Gauteng Province of South Africa.

A suggestion for further study would be to conduct similar studies targeting the whole company population instead of a sample. A comparison of different group manufacturing sites in entrepreneurial orientation would be very interesting too. Other automotive companies around the countries can also be included in the study in order to get a holistic view into the problem throughout the country among employees in other provinces. This would allow for comparison between employees in different departments or companies.

5.5 SUMMARY

This chapter provided the conclusions recommendations of the empirical study for this research. Conclusions were presented on the demographical profile of respondent, including their gender, age, race, highest education level and position occupied in the company. The entrepreneurial orientation results and analysis of employees in the company have been interpreted and conclusions were made. The findings on the perceived success of the industry were presented and both the dependent variable - business growth and business development and improvement was interpreted.

Recommendations for company employees and management to implement in order to improve entrepreneurial orientation which will lead to business success throughout the organisation were presented. The primary and secondary objective of the study was revisited and evaluated to determine whether or not those objectives have been achieved. Recommendations for further study were also proposed.

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APPENDICES

7.1 APPENDIX A: QUESTIONNAIRE

CORPORATE ENTREPRENEURIAL CLIMATE QUESTIONNAIRE

Dear respondent

Thank you for your time and participation in this survey

Since readmission into the global business community more than 20 years ago South African organisations have been struggling to compete with their often more technologically advanced and highly skilled competitors from other countries. The situation was perpetuated by the current economic climate triggered by 2008's recession. In these conditions lots of South African companies find it difficult to remain competitive more especially when faced with stiff competition from other emerging economies such as China, India, Brazil, Nigeria etc.

In this tough competitive environment, corporate entrepreneurship (where the whole business acts in an entrepreneurial manner) can be the vehicle for business survival and competitiveness, and many businesses and scholars now recognise corporate entrepreneurship as a critical factor in business success.

By means of this survey an attempt is made to measure the corporate entrepreneurial climate in the organisation. Your honest opinion regarding the various statements will be value.

The survey is divided into three sections:

Part A: is the Entrepreneurial Climate Questionnaire.

Part B: the Perceived Success of an Organisation.

Part C: consists of Biographical Information.

Please complete every statement/question to ensure the validity and reliability of the study.

GENERAL INSTRUCTIONS

All question/statements can be answered by marking the relevant box with an X

Use the following key to indicate your preference

GRADE	TERM USED
5	Strongly agree
4	Agree
3	Uncertain
2	Disagree
1	Strongly disagree

Please select the number which best describes your opinion about a specific question or statement. In the example below, the respondent agreed to the statement listed.

Statement		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
A06	The vision and strategies of our business often help me in setting priorities.	1	2	3	4	5

The questionnaire consists of 30 statements. Please indicate the statement to which you agree or disagree with each statement. Please mark the application block with an X.

Statement		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
A01	Our business has increased the number of services/products offered during the past two years. Innovative	1	2	3	4	5
A02	I have enough autonomy in my job without continual supervision to do my work. Autonomy	1	2	3	4	5
A03	Owing to the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business objectives. Risk	1	2	3	4	5
A04	Our business allows me to be creative and try different methods to do my job. Autonomy	1	2	3	4	5
A05	Our business is very often the first to introduce new products/services/processes. Proactive	1	2	3	4	5
A06	Our business effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competitive position. Competitive aggressiveness	1	2	3	4	5
A07	Employees are encouraged continually to look at things in new ways. Autonomy	1	2	3	4	5
A08	Our business is characterised by low levels of red tape/bureaucracy. Autonomy	1	2	3	4	5
A09	Our business develops products/services with customers in mind. Proactive	1	2	3	4	5

A10	Our business has widely held belief that innovation is an absolute necessity for the business's future. Innovative	1	2	3	4	5
A11	Our business is continually pursuing new opportunities. Innovative	1	2	3	4	5
A12	Employees in our business understand the need of our customers. Proactive	1	2	3	4	5
A13	Our business continuously seeks out new products/processes/services. Proactive	1	2	3	4	5
A14	Our business has flexible job descriptions rather than formal job descriptions. Autonomy	1	2	3	4	5
A15	Employees in our business are encouraged to manage their own work and have flexibility to resolve the problems. Autonomy	1	2	3	4	5
A16	Our business continuously monitors market trends and identifies future needs of customers. Proactive	1	2	3	4	5
A17	An employee with a good idea is often given free time to develop that idea. Autonomy	1	2	3	4	5
A18	When confronted with uncertain decisions, our business typically adopts a bold posture in order to maximize the probability of exploiting opportunities. Risk	1	2	3	4	5
A19	Our business supports many small and experimental projects, knowing that some will ultimately fail. Risk.	1	2	3	4	5
A20	Employees in our business are allowed to make decisions without going through elaborate justification and approval procedures. Autonomy	1	2	3	4	5
A21	Our business knows when it is in danger of acting overly aggressively (this could lead to erosion of our business's reputation or to retaliation by competitors). Competitive aggressiveness.	1	2	3	4	5
A22	In dealing with competitors our business typically adopts a very competitive "undo-the-competitors" posture. Competitive aggressiveness.	1	2	3	4	5
A23	The term "risk-takers" is considered a positive attribute for employees in our business. Risk	1	2	3	4	5
A24	There is eagerness among employees in our business	1	2	3	4	5

	for generating new ideas. Innovative					
A25	Our business places a strong emphasis on new and innovative products/services/processes. Innovative	1	2	3	4	5
A26	Managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track. Risk	1	2	3	4	5
A27	Our business supports many small and experimental projects, knowing that some will ultimately fail. Risk.	1	2	3	4	5
A28	Our business is very aggressive and intensely competitive. Competitive aggressiveness	1	2	3	4	5
A29	Our business 'competitive position has improved over the past few years. Competitive aggressiveness	1	2	3	4	5
A30	Our business develops products/services with customers in mind. Proactive	1	2	3	4	5
A31	Our business typically initiates actions which competitors respond to. Proactive	1	2	3	4	5

SECTION B: PERCEIVED SUCCESS OF THE ORGANISATION.

This section consists of 10 statements, related to the perceived success of the organisation. Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

Statement		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
B01	Our business' efficiency (doing things right) has improved over the past few years.	1	2	3	4	5
B02	Our employees are likely committed to our business.	1	2	3	4	5
B03	Over the past few years, changes in our process, services and product lines have been quite dramatic.	1	2	3	4	5
B04	Our business has experienced growth in turnover over the past few years.	1	2	3	4	5
B05	In our business employees are viewed as the most valuable asset of the business.	1	2	3	4	5
B06	Our business has experienced growth in profit over the last few years.	1	2	3	4	5
B07	During difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made.	1	2	3	4	5
B08	The image (structure) of our business, relative to our competitors, has grown over the past few years.	1	2	3	4	5
B09	The morale (job description) has improved over the past few years.	1	2	3	4	5
B10	Our business has experienced growth in market share over the past few years.	1	2	3	4	5

SECTION C: BIOGRAPHICAL INFORMATION

The following information is required to assist with the statistical analysis of data for comparison amongst different interest groups. Responses will be treated confidentially. Your assistance in providing this important information will be highly appreciated. Mark the applicable block with an **X**.

C01	Indicate your age group	≤29	30-39	40-49	50-59	60+
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C02	Indicate your age gender	Male	Female
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C03	Indicate your race	Black	White	Coloured	Indian
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C04	Indicate your management level	
	Top management	
	Middle management	
	Junior management or superintendent	
	Supervisor or team leader	
	Skilled employee e.g engineer, analyst, accountant, HR officer etc.	
	Semi-skilled employee e.g process controller, security officer, operator etc.	

C05	Indicate your highest academic qualification	
	Lower than matric	
	Matric	
	Certificate	
	Diploma (Technical College or Technikon)	
	Degree	
	Post graduate degree	

C06	Indicate your division	
	Executive Management	
	Production	
	Quality	
	Laboratory	
	Engineering	
	Human Resource	
	Finance Department	
	Logistics	
	Information Technology	
	Marketing & Sales	
	Other (EHS, Security, etc)	

THANK YOU VERY MUCH FOR YOUR TIME AND VALUABLE CONTRIBUTION

7.2 APPENDIX A: FULL FACTOR ANALYSIS

Component Matrix ^a										
	Component									
	1	2	3	4	5	6	7	8	9	10
a10	.704		-.327	-.260				-.274		
a18	.663		.307				-.336			
a7	.641	-.247	-.415					-.232		
a15	.612	-.375	-.250						-.254	
a23	.598			.201			-.473	-.241		
a19	.542	-.361	.349					-.279		
a4	.528		-.449			.294		.210		
a24	.521		-.507		-.254		.299			
a25	.513	.362			-.285			-.264		-.235
a28	.511	.459	.310				.273			.295
a20	.509	-.337	.285		.272	.269			-.288	
a13	.497	.423			.221				-.214	
a26	.496			.486		.242				
a17	.488		.270		-.393	.258		.482		
a21	.480		.380	-.298					-.211	-.322
a8	.453	-.345			.431	-.205	-.313	.314	.246	
a11	.411	.367			.406		.388			
a31	.407	.211	.304	.236	.384	.246			.248	-.256
a9	.407	.276		-.282		-.276	.290		.215	
a1		.570				.216			.499	
a14		-.561	.212				.331	.377		
a16	.288	.549	-.286						-.224	.267
a6		.443	.245	.283	.235	-.407	-.207			
a27	.409	-.431	.442		-.267		.216	-.273	.253	
a22	.361	.400	.434			-.208				
a30	.452	.231		-.604						-.293
a12	.350	-.210		-.523		.297				.330
a29	.344	.244		-.468			-.381			
a2	.466		-.370		.469		.207	.221	.293	
a5	.239	.347	.219	-.238		.504		.231	-.286	-.330
a3	.433			.368	-.355	-.451		.210		-.207

Extraction Method: Principal Component Analysis.
a. 10 components extracted.