UNIVERSITY OF KWAZULU-NATAL

# Entrepreneurial Orientation and Business Challenges: A Study of eThekwini-based Construction Companies

By

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# Abstract

The construction industry in South Africa has been identified by Government to address the high unemployment rate in the country while simultaneously improving the country's infra-structure needs ie. roads, water, sanitation and housing programmes. This is apparent from the initiatives that have been implemented to develop emerging Black Economic Empowerment (BEE) Small and Medium Enterprises (SMEs) into the industry. However, contrary to Government's ambitions, there is a high failure rate of these SMEs in the construction industry and it has become urgent to research into the factors that will facilitate SME survival. In response to this concern, this study identifies the importance of entrepreneurial orientation in coping with the challenges facing SMEs in the construction sector. It is a widely growing phenomenon of entrepreneurship theory and the literature review advocates that entrepreneurial orientation contributes to improved business performance and competitive advantage. It is a measure of the entrepreneur's ability to be innovative, proactive and risk averse and these characteristics are identified as precursors to business success. The focus of this study is to evaluate the entrepreneurial orientation of eThekwini-based SMEs together with their perceptions of the business challenges prevalent in the construction industry. One hundred and six (106) contractors were invited to participate in this research and sixty three (63) respondents returned completed questionnaires through online facilities. The findings show that respondents exhibit strong actualisation of entrepreneurial orientation. Data analysis through inferential statistics indicates that high actualisation of entrepreneurial orientation correlates with reduced perceived levels of business challenges. It is recommended that training institutions and Government mentorship programmes incorporate entrepreneurial orientation development amongst SME entrepreneurs to facilitate improved business success among them. There is no evidence of similar research being conducted previously, especially on the South African construction industry, therefore this study represents new research.

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# CHAPTER ONE

## Introduction

### 1.1 Introduction

The construction industry in South Africa is viewed as a major source of employment creation while simultaneously addressing the need for infrastructure development. Pahad (2008) adds that small and medium enterprises (SMEs) are also essentially required to contribute to the country's economic growth and reduction of the prevalent wealth inequalities. Despite this view, it is apparent that there is a high failure rate of companies operating in this sector – specifically SME organisations (Fatoki, 2012). This study seeks to create an understanding of the construction environment from an entrepreneurial perspective to profile SME construction companies according to their entrepreneurial orientation and the business challenges they experience. This chapter identifies the problem statement for the study together with the stakeholders that stand to benefit. A presentation of the objectives and the study's proposed methodology is also detailed and it concludes with a brief outline of the chapters to follow.

### 1.2 Problem Statement

In its relatively new democracy, South Africa faces numerous economic, political and social challenges, of which the massive and growing unemployment rate is identified as a key challenge. Information published by Statistics SA (Quarterly Labour Force Survey, Quarter 1, 2014), reports that the unemployment rate in South Africa for the first quarter of 2014 is at 25.2%. This is an alarmingly high unemployment rate despite the initiatives from both the Government and private sectors to facilitate job creation (Gordhan, 2012).

According to Herrington, Kew and Kew (2010) a growing body of increasingly unemployed and unemployable youth is burdening Government's limited budgets which already has many demands on it. They argue that the existing formal sector of South Africa's economy is unable to create adequate employment opportunities for the rapidly growing labour force, over and above the escalating youth unemployment crisis.

Another challenge faced by the South African Government is the provision of household infrastructure and basic services. This is an essential component for social and economic development which has resulted in the adoption of the National Infrastructure Plan in 2012 (South African Government, 2012). In his 2013 Budget Speech, the Minister of Finance, Pravin Gordhan committed to investing R827 billion towards infrastructure development to target the improvement of schools, healthcare, water, sanitation, housing and electrification. It was acknowledged that the aim was to facilitate economic transformation while simultaneously creating job opportunities and delivering basic services.

To address these challenges, one of the primary mechanisms identified for economic development is entrepreneurial activity since it contributes to job creation, innovation and its welfare effect, therefore resulting in a growing policy interest at a national level (Herrington, 2010). To this end, government has prioritised small business and entrepreneurial development.

Academics, government and industry are in agreement that entrepreneurship plays an important role towards the economic prosperity and social upliftment of both the current and future generations. The eradication of unemployment and the simultaneous provision of basic infrastructure through entrepreneurial activity therefore places the construction sector as an important player in the economy of South Africa (CIDB, 2012). Indeed, it has now become necessary to further research entrepreneurship development and to identify tools and methods of improving the sustainability of SME contractors that operate within the construction sector.

Entrepreneurial orientation is one such stream of research and is shown to influence business success through increased performance, growth and profitability. It is

linked with organisational performance whereby high levels of entrepreneurial orientation is associated with high levels of business performance (Covin & Slevin, 1989; Lumpkin & Dess, 1996). This study therefore utilises the constructs of entrepreneurial orientation to evaluate SME owner's inclination for entrepreneurship and aims to address the question: What is the entrepreneurial profile of eThekwini-based SME contractors?

### 1.3 Focus of the Study

This study focuses on the South African construction industry by establishing the entrepreneurial orientation of SME owners within this sector. Entrepreneurial orientation is evaluated at an individual level by focussing on the dimensions of innovation, proactiveness and risk-taking as advanced by Lumpkin and Dess (1996). The level of entrepreneurial orientation exhibited will facilitate an understanding of entrepreneurship actualisation in the construction sector and assist to identify areas for improvement since it is viewed as an essential attribute of high performing firms (Covin & Slevin, 1989). The perceptions of the business challenges these SMEs experience is also evaluated to establish an understanding of the relationship that exists between entrepreneurial orientation and business challenges. High actualisation of entrepreneurial orientation could result in the reduced articulation of business challenges experienced due to its association with high performance firms.

This study primarily focusses on a population of eThekwini-based contractors registered with the Construction Industry Development Board (CIDB) and actively involved in civil engineering work. Contractors were identified based on their CIDB grading to target SMEs that best suited the profile of SME companies.

### 1.4 Motivation for the Study

There is, to the author's knowledge, no evidence of previous research having been conducted on South African construction companies to measure entrepreneurial

orientation. This study therefore aims to address this gap and provide the following benefits:

- A measurement of SME entrepreneurial orientation in the construction industry.
- A measurement of their perceptions of the business challenges they experience.
- An understanding of the influence of entrepreneurial orientation on the perceived level of business challenges amongst SME contractors.

Business performance, according to Wiklund (1999), is defined as “a compound measure incorporating dimensions of growth as well as financial performance” and is positively influenced by high entrepreneurial orientation tendencies. The constructs of innovation, proactiveness and risk-taking, which characterises entrepreneurial orientation, can therefore impact on the perceptions and articulation of the business challenges SME owner’s experience. This would develop their attitudes to risk and business challenges whereby positive attitudes encourage improved business performance. Therefore this study seeks to investigate the relationship between entrepreneurial orientation and the SME owner’s perception of business challenges experienced. It is envisaged that the following stakeholders will benefit from this study:

- Established and emergent SME construction companies seeking to achieve improved business performance.
- Government sectors and private developers engaging SME contractors can assess the entrepreneurial profiles of emerging SMEs to solicit suitable contractors.
- SME training institutions can incorporate entrepreneurial orientation development into their curricula for SME development and training.
- Finance institutions can utilise entrepreneurial orientation assessments as a tool to evaluate risk for SME financing ventures.

It is accepted that the outcome of this study may be of limited scope, however it does provide a base for longitudinal studies to be performed in the future to assess entrepreneurial orientation within the South African context. Entrepreneurial orientation studies may not be limited to the construction sector and it is proposed that other sectors which support entrepreneurship development should also expand on this research.

## 1.5 Research Questions

The sub questions that support the primary research question identified in the problem statement include the following:

- What is the entrepreneurial orientation profile of eThekwini-based SME contractors as measured by the dimensions of innovativeness, proactiveness and risk-taking?
- How do SME owners in the construction sector perceive the business challenges they experience?
- Is there a correlation between entrepreneurial orientation and the articulation of business challenges?

## 1.6 Objectives

The objectives of this study are the following:

- To establish the entrepreneurial orientation profile of eThekwini-based SME contractors by evaluating their actualisation of entrepreneurial orientation according to the dimensions of innovativeness, proactiveness and risk-taking.
- To establish the perceived business challenges of eThekwini-based SME contractors.
- To examine the relationship between entrepreneurial orientation and perceived business challenges.

## 1.7 Proposed Methodology

A literature review is conducted to establish an understanding of entrepreneurial orientation and the dimensions that it embodies. This is done using academic data from books, electronic sources and journals. The review provides an understanding of entrepreneurial orientation and its relevance to entrepreneurship development. A quantitative research approach is adopted to facilitate an objective study so that conclusions could be based on statistical data.

For the primary research, a survey is carried out amongst eThekwini-based SME construction companies registered on the CIDB database. Questionpro software is utilised to invite respondents to participate in the study by completing a self-administered questionnaire. Entrepreneurial orientation is measured using the Individual Entrepreneurial Orientation instrument (Bolton & Lane, 2012) while business challenges is measured on a questionnaire which contained general and industry specific questions developed for this study. Data is then collated and analysed to measure the entrepreneurial orientation and business challenge profile of the respondents. Chapter 3 provides further details of the research methodology.

## 1.8 Chapter Outline

This study follows a generic framework as itemised below:

- Chapter One provides an introduction to the study and outlines the problem statement, research questions and objectives, and identifies stakeholders that will benefit from this study.

- Chapter Two is the literature review which provides a theoretical background for the research and formulates the conceptual framework for this study. Entrepreneurial orientation is introduced and reviewed to identify its relevance to entrepreneurship development together with business challenges experienced in the South African construction sector.

- Chapter Three details the research methodology utilised to collect and analyse data from the respondents and the quantitative techniques employed in this study.

- Chapter Four is the presentation and discussion of the results from the research conducted.

- Chapter Five provides a discussion of the research findings for this study together with conclusions and recommendations. The benefits of this research and the limitations of the study are also identified and presented.

## 1.9 Summary

Entrepreneurial development is widely regarded as a primary mechanism to address economic development in South Africa. Research suggests that entrepreneurial orientation can influence business success through increased business performance, growth and profitability. This study therefore utilises the constructs of entrepreneurial orientation to assess the entrepreneurial inclination of SME contractors. This chapter provided an overview of the study by outlining the research proposal and the need for the study, together with the beneficiaries and the objectives of the study.

# CHAPTER TWO

## Review of Entrepreneurial Orientation Literature

### 2.1 Introduction

This chapter reviews the state of the construction industry in South Africa and the role of SME construction companies. The contribution of SMEs are recognised and explored within this sector. The concept of entrepreneurial orientation is introduced to the reader and the constructs of entrepreneurial orientation through detailed literature reviews are presented to establish its relevance for SME entrepreneurial development. Business challenges specific to the construction sector which contributes to business failure amongst SMEs are also reviewed. Based on the outcome of the literature review, propositions for this study are conceptualised.

### 2.2. Background

According to research from Statistics South Africa (Quarterly Labour Force Survey, Quarter 1, 2014), the unemployment rate in South Africa for the first quarter of 2014 is estimated at 25.2%. This is of huge concern and one of the major challenges that needs to be urgently addressed. Government has therefore targeted the development of SMEs in an attempt to alleviate the high rate of unemployment (Abor & Quartey, 2010) because it is widely regarded as an important source for job creation while also contributing to the country's economic growth and prosperity (Ntsika, 2000).

With attention on the construction industry, there has been a concentrated focus on creating black-owned companies through BEE initiatives (Mummenthey & du Preez, 2010). This has resulted in the establishment of numerous SMEs being formed by either professional or experienced black employees who gained exposure from larger (mainly white-owned) companies (Thwala, 2008). It is established that SMEs have not achieved sustainable growth and their failure rate of 75% is amongst the world's highest (Fatoki, 2012).

Wong &Thomas (2010) argue that the risk of business failure exists in every industry however they cite that construction companies are particularly vulnerable. This is due to the high levels of risk involved, excessive competition and constant fluctuations in work volume within this sector. They rate the construction industry as having a low entry barrier which encourages the start-up of new entrants thereby promoting increased competition. Government's concerted efforts to stimulate entrepreneurship through the development of SMEs has also given rise to many smaller companies entering the market (Thwala & Phaladi, 2009). This has resulted in the construction sector attracting a high number of inexperienced entrepreneurs of which many face financial, managerial and technical constraints (CIDB, 2012). It is therefore not surprising that there is a high failure rate of between 70% and 80% of SMEs in the construction sector according to research by Adeniran and Johnston (2011).

The importance of SME development is broadly acknowledged by role-players for its contribution towards economic prosperity (Cant, 2012), however the high failure rate of SMEs suggests that they do not have the ability to alleviate poverty and create sustainable employment (Adeniran & Johnston, 2011). It is therefore imperative to further research the development of SMEs to understand the factors that will enable them to improve their success rate (Bowen, et al., 2009).

## 2.3 The need for Entrepreneurial Orientation

Although it is appreciated that there are many factors both internally and environmentally which could contribute to SME failure, Awang, et al. (2010), cite the weakness of SMEs to harmonise their entrepreneurship strategy as being a major contributing factor. This is also validated by Aktan and Bulut (2008) who assert that an entrepreneurial approach to strategy making is vital for organisational success due to the rapidly evolving and competitive environment SMEs operate in. Entrepreneurship literature refers to this entrepreneurial strategy making process as entrepreneurial orientation and it is supported by van Geenhuizen, et al. (2008) as an antidote to business problems for organisations that want to achieve sustained competitive advantage.

The relationship between entrepreneurial orientation and business performance has certainly dominated entrepreneurship literature (Covin & Slevin, 1989; Miller, 1983; Venkatraman, 1989; Wiklund, 1998, 1999; Zahra, 1991). In the South African context, there has been limited empirical studies which has focussed on the impact of entrepreneurial orientation on SME performance (Callaghan & Venter, 2011; Farrington & Matchaba-Hove, 2011). Although these studies have found significantly positive relationships between entrepreneurial orientation and SME performance, to the author's knowledge, there has been no research conducted to investigate the relationship between entrepreneurial orientation and business challenges experienced amongst SMEs.

This study therefore aims to fill this gap by investigating the relationship between entrepreneurial orientation of eThekwini-based SMEs in the construction sector and their perception of the business challenges they experience in order to provide recommendations for improvement and thereby reduce SME business failure.

## 2.4 Overview of the South African Construction Industry

The South African Construction industry is large and this sector is a major contributor to the national GDP (Industry Insight, 2012). At the end of 2012, the total investment in construction as a percentage of GDP was recorded at 9%. According to Statistics South Africa (2013), the gross income for the year 2011 within the construction industry was R 267 014 million with the civil engineering sector accounting for R 104 670 million. The distribution of the total income among all sectors of the construction industry is shown in Figure 2.1 below.

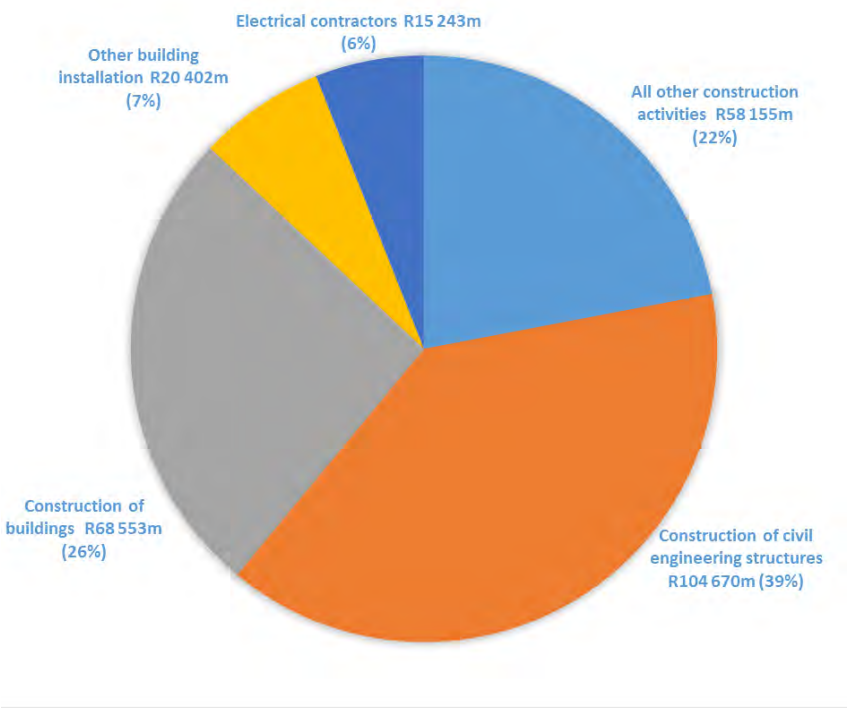



Figure 2.1 – Income in the construction industry

Source: Adapted from STATS SA, 2011.

Figure 2.1 identifies the civil engineering sector as the largest contributor accounting for 39% of the industry's total income. This sector is funded mainly by government and state owned organisations and is primarily made up of economic infrastructure investment such as water, sanitation, transport, energy and mining according to Industry Insight (2012).

It is therefore not surprising that the construction industry is regarded as a key sector for the creation of jobs to alleviate South Africa's high unemployment rate. Research by Statistics South Africa (2013), shows there were 483 651 people employed in the construction industry at the end of June 2011 and the majority of employment was created in the civil engineering sector as shown in figure 2.2 below.

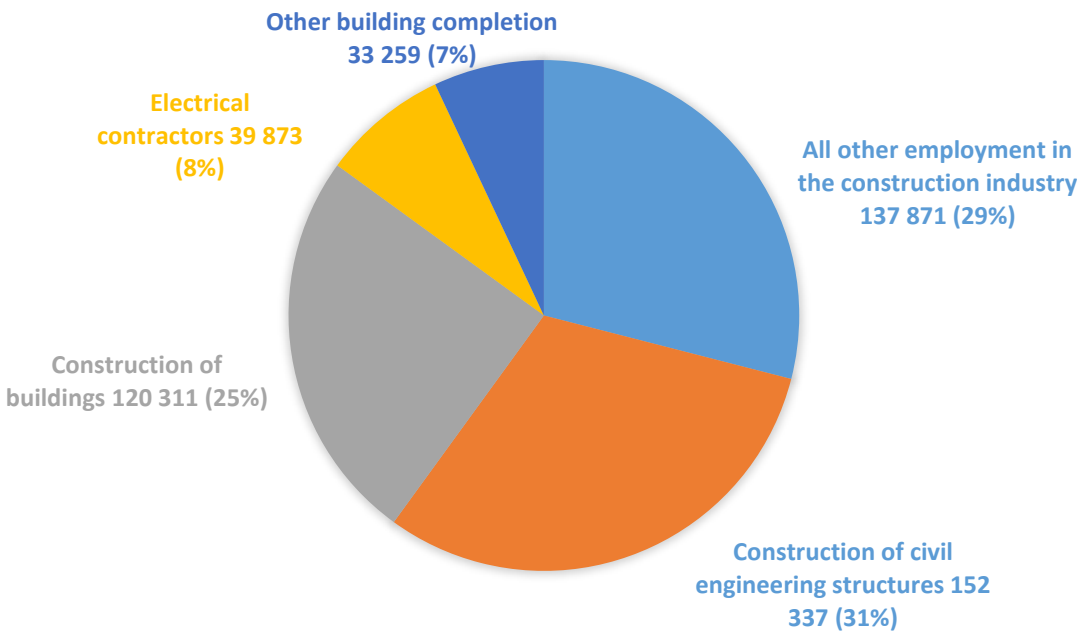



Figure 2.2 - Employment in the construction industry
Source: Adapted from STATS SA, 2011.

The generation of work within the civil engineering sector alone is estimated at 152 337 jobs which constitutes 31% of the total employment created by the construction industry.

## 2.5 The Role of Small and Medium-sized Contractors

SMEs are significant contributors towards the economic wellbeing of any country (World Bank, 2007). They are regarded as instrumental mechanisms for job creation, innovation and long term economic growth and development (OECD, 2004). According to Moss (2007), countries, particularly those in Africa, require more SMEs in order to create prosperity and overcome the challenges of poverty and the high prevalence of unemployment. Dlungwana & Pantaleo (2004) corroborate these findings and assert that SMEs play a vital role in any country's economy. The South African government has adopted the same perspective and has therefore focussed

on SME development as a policy imperative to address the country's high unemployment rate and poverty challenges (Mahembe, 2011).

According to Statistics South Africa (2013), SMEs (including micro enterprises) created the majority of employment within the industry. Figure 2.3 below illustrates the distribution of employment created among the various enterprises with SMEs providing work opportunities for 58% of all employees within the construction industry.

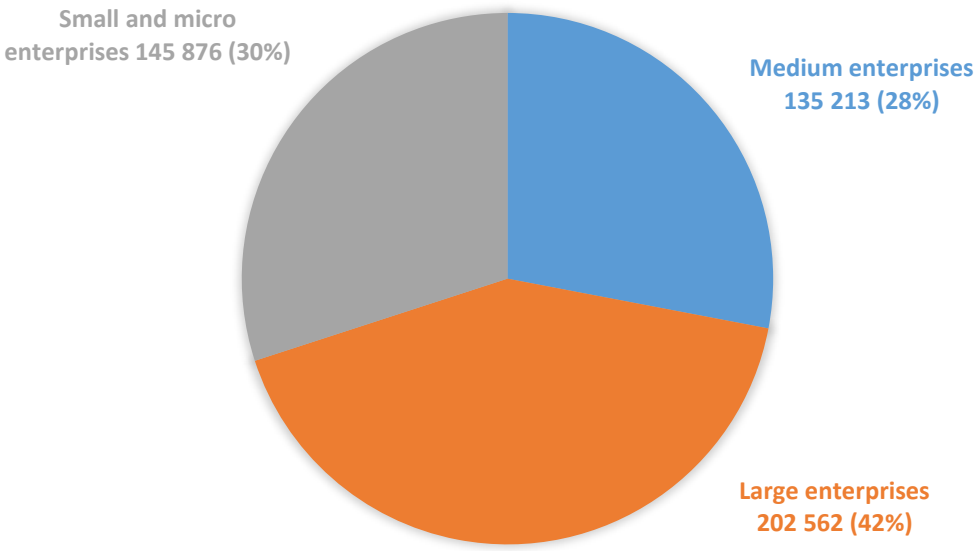



Figure 2.3 - Income by enterprise size in the construction industry
Source: Adapted from STATS SA, 2011.

Of the total 483 651 jobs created within the industry at the end of June 2011, large enterprises are estimated to have only created 202 562 jobs at a representation of 42% of the total. These figures certainly provide strong evidence for the importance of SMEs towards the creation of work opportunities to alleviate unemployment.

According to CIDB (2012), there are approximately 8300 construction companies registered on the CIDB database with an estimated 76% being black-owned.

Information from the South African Federation of Civil Engineering Contractors (SAFCEC, 2004) also corroborates that the majority of South Africa's SME construction companies are black-owned and operated which is in line with Government policies. Research by Statistics South Africa (2013), highlights that SMEs within the construction industry has generated a combined share of 36% of the construction industry's total income in the year 2011 as shown in Figure 2.4 below.

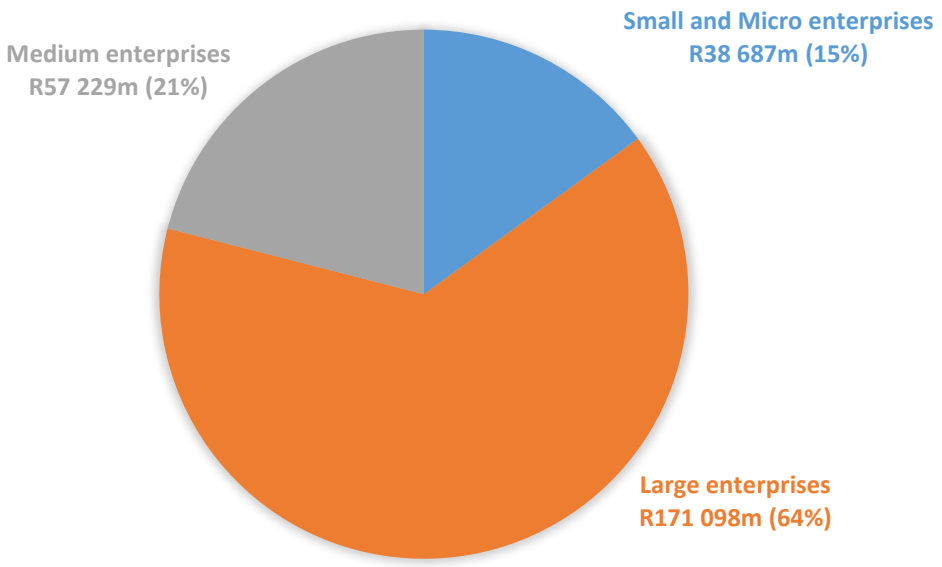



Figure 2.4 - Income by enterprise size
Source: Adapted from STATS SA, 2011.

The Construction Industry Development Board (CIDB, 2010) reports that there is a large number of SME contractors at the lower end of their database (grade 1) as compared to the upper end (grade 9) which has fewer large contractors. SMEs are therefore placed in a highly competitive environment which results in reduced profits. This is cited as the key factor which inhibits their growth despite the aspirations of SME owners and managers. Despite this challenge, these statistics provide strong argument for the importance of SMEs towards the economic prosperity and growth of the South African economy.

## 2.6 Defining SMEs

SME enterprises are defined in the National Small Business Amendment Act No.2, 2003 into classes of micro, very small, small and medium enterprises. In order to categorise the class or size of a business, factors such as the number of full-time employees, total annual turnover and the business' gross asset value are considered. These factors vary across the different industry sectors and the construction sector specifically is categorised as detailed in Table 2.1 below.

Table 2.1. Categorisation of SMMEs

| Sector | Size or Class | Total full-time equivalent of paid employees Less than | Total annual turnover less than | Total gross asset value (fixed property excluded) less than |
|---|---|---|---|---|
| Construction | Medium | 200 | R 26.00m | R 5.00m |
| | Small | 50 | R 6.00m | R 1.00m |
| | Very Small | 20 | R 3.00m | R 0.50m |
| | Micro | 5 | R 0.2m | R 0.10m |

Source: Adapted from National Small Business Amendment Act, 2003

## 2.7 SMEs in the Construction Industry

To regulate the construction industry in South Africa, the Government has established the Construction Industry Development Board (CIDB) by an Act of Parliament (Act 38 of 2000) in October 2000. The CIDB is therefore a statutory body which aims to drive South Africa's integrated development strategy by registering, regulating and managing the industry. It is mandatory for contractors to be registered with the CIDB should they intend to engage in public sector contracts however it is not enforced on firms engaging work in the private sector. This registration allows contractors to be graded according to their experience and financial capability. They are only allowed to contract on projects in their respective

categories and therefore reduces the risk of non-performance among contractors (CIDB, 2008).

The construction industry is made up of many disciplines. The CIDB register classifies contractors into the construction discipline in which they specialise ie. civil engineering, general building, electrical engineering, mechanical engineering and specialist work (CIDB, 2007). Contractors are further graded according to their highest turnover achieved and capital available to determine their CIDB grade. These grades range from 1 to 9 whereby a grading of 1 allows a contractor to tender and undertake work up to the value of R200 000.00 whereas on the other end of the scale, a grade 9 contractor has no limitations. Table 2.2 below details the grading levels of contractors registered on the CIDB database and the value of contracts they are limited to.

Table 2.2. Schedule of CIDB grading classification

| Contractor Grading Designation | Contract value less than or equal to: (R) |
|---|---|
| 1 | 200 000 |
| 2 | 650 000 |
| 3 | 2 000 000 |
| 4 | 4 000 000 |
| 5 | 6 500 000 |
| 6 | 13 000 000 |
| 7 | 40 000 000 |
| 8 | 130 000 000 |
| 9 | No Limit |

Source: Adapted from Government Gazette No. 8986, 2008

For the purposes of this research which aims to focus on SMEs and not micro and large enterprises, construction SMEs are identified as those contractors with a CIDB grading of 4, up to and including CIDB grade 7 contractors since their turnover limits are between R2 million and up to R40 million as detailed in Table 2.2. This is the closest fit to the SME categorisation of turnover limits between R 3 million and R 26 million as identified earlier by the National Small Business Amendment Act No. 26,

2003 as detailed in Table 2.1. It is therefore noted that the Grade 7 CIDB contractors are on the borderline of being classified as a large enterprise since their maximum turnover limits can exceed R 20 million however their minimum limit of R13 million allows them to be classified as an SME. Similarly, Grade 4 CIDB contractors are also on the borderline of being classified as micro enterprises. For the purposes of this study, Grade 4 and 7 CIDB contractors are therefore categorised as SMEs and are included in this study.

## 2.8 Understanding Entrepreneurial Orientation

Entrepreneurial orientation is a term used by researchers of entrepreneurship to describe the entrepreneurial strategy-making processes of key decision makers within an organization to maintain their organizational purpose, achieve their vision and to create competitive advantage (Rauch, Wiklund, Lumpkin & Frese, 2009). According to early literature on this subject, Mintzberg (1973) affirms that entrepreneurial orientation is a construct that has its origin in strategy-making processes and incorporates planning, analysis, decision making, and many aspects of an organisation's culture, value system, and mission (Hart, 1992). Entrepreneurial orientation is therefore representative of policies and practices which generate the resultant entrepreneurial decisions and actions (Rauch, et al., 2009).

### 2.8.1 Differentiating Entrepreneurship from Entrepreneurial Orientation

According to Lumpkin and Dess (1996), entrepreneurial orientation and entrepreneurship are distinguishable from each other. In the context of new venture creation, entrepreneurial orientation is recognized as a process construct which relates to the "methods, practices and decision-making styles managers use" which effectively addresses *how* it is achieved. Entrepreneurship however, is related to the content of entrepreneurial decisions by addressing *what* is undertaken and is based on decisions, for example, the type of business to be undertaken. This differentiation leads to the reasoning that entrepreneurial orientation is essentially related to how entrepreneurs implement entrepreneurship in order to achieve their career ambition (Jun & Deschoolmeester, 2003).

### 2.8.2 Individual Entrepreneurial Orientation

As defined earlier, entrepreneurial orientation is essentially representative of the entrepreneurial behaviour displayed in conducting business. Literature review of studies in this field show that it has been applied at an individual level, whereby the behaviour of business owners and managers are assessed on a personal level, or it can apply at an organisational level by measuring the firm's entrepreneurial actions through their policies and practices (Kraus, Frese, Friedrich & Unger, 2005).

Unlike firm-level entrepreneurial orientation, individual entrepreneurial orientation is measured using psychological concepts and measures and is therefore not well accepted among economists. Despite this scepticism, Kraus, et al. (2005) argue that individual measurements has indeed been regularly used and highlight the extensive use of Covin & Slevin's (1986) entrepreneurial orientation questionnaire measure which is contended to be a psychological assessment of individual entrepreneurial orientation. Furthermore, it is based on self-reports by individuals who are predominantly managing directors and owners (Zahra, Jennings & Kuratko, 1999) therefore strengthening the argument for the recognition of individual entrepreneurial orientation.

Bolton and Lane (2012), also advocate that an organisation's entrepreneurial nature is shaped by the individual behaviours of managers within the organisation. Rauch, et al. (2009), support this view and argue that the owners of SMEs strongly influence the organisation's entrepreneurial orientation based on their meta-analysis of 51 studies on entrepreneurial orientation. They argue that the top management of a company is instrumental in creating the entrepreneurial orientation of the organisation as advanced by Covin and Slevin (1989) thereby further supporting the acceptance of entrepreneurial orientation at an individual level.

Individual entrepreneurial orientation is therefore supported by academics in the field of entrepreneurship. It is particularly relevant in SME organisations due to their size and the strong influence of the business owner on the firm therefore this research is structured to evaluate entrepreneurial orientation amongst eThekwini–based SMEs at an individual level.

### 2.8.3 Establishing the Dimensions of Entrepreneurial Orientation

Entrepreneurial orientation is a construct which is defined by the behavioural traits of entrepreneurs (Covin & Slevin, 1989; Miller, 1983). Miller (1983) describes an entrepreneurial firm as “one that engages in product-market innovation, undertakes somewhat risky ventures and is first to come up with “proactive” innovations, beating competitors to the punch”. Therefore innovativeness, proactiveness and risk-taking originated from this concept and has since been used extensively to measure entrepreneurship (Covin & Slevin, 1989; Rauch, et al., 2009).

Lumpkin and Dess (1996) have added two more dimensions to those advanced by Miller (1983) and they have introduced the constructs of autonomy and competitive aggressiveness to measure entrepreneurial orientation. Many researchers do not accept the inclusion of these two constructs since it is argued that autonomy is an internal factor of a supportive organisational climate and therefore has no contribution to the measurement of entrepreneurial orientation (Scheepers, Hough & Bloom, 2008). Furthermore, it is asserted that competitive aggressiveness is incorporated in the proactiveness construct and therefore should not be measured in isolation (Scheepers, 2008).

Research conducted by Wales, Gupta and Mousa (2011), identify that the most widely utilised combinations of entrepreneurial dimensions was those of innovativeness, risk-taking and proactiveness as advanced by Miller (1983). Table 2.3 provides a summary of the various unidimensional combinations of entrepreneurial orientation dimensions as identified by Wales, et al. (2011) in their review of 158 scholarly journal publications. Interestingly, 123 of the 158 articles as listed below, adopted the unidimensional approach.

Table 2.3 Summary of Entrepreneurial Orientation Dimensional Combinations.

| Entrepreneurial Orientation Construct Dimensions | Article Count |
|---|---|
| Innovativeness, risk-taking and proactiveness | 98 |
| Innovativeness and risk-taking | 8 |
| Risk-taking and proactiveness | 5 |
| Innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy | 4 |
| Risk-taking, proactiveness and competitive aggressiveness | 2 |
| Innovativeness and proactiveness | 2 |
| Innovativeness, risk-taking, proactiveness and competitive aggressiveness | 1 |
| Innovativeness, risk-taking, competitive aggressiveness and autonomy | 1 |
| Innovativeness, risk-taking and autonomy | 1 |
| Risk-taking, proactiveness, competitive aggressiveness and autonomy | 1 |
| **TOTAL** | 123 |

Source: Adapted from Wales, Gupta, and Mousa, 2011.

This research therefore adopts the commonly accepted constructs of innovation, proactiveness and risk-taking as advanced by Miller (1983) to evaluate the individual entrepreneurial orientation of entrepreneurs.

#### 2.8.3.1 Innovativeness

Schumpeter (1934) pioneered the role of innovation in the entrepreneurial process whereby it is postulated that through the process of “creative destruction”, entrepreneurs are able to create wealth by disrupting the existing environment. This results in the introduction of new products or services and facilitates the growth of new firms since resources are shifted from existing complacent firms. Therefore innovativeness creates the development of unique competencies which allows organisations to differentiate themselves from their competitors.

Innovativeness is described as the ability of the entrepreneur to be creative and experimental in introducing new products and services into the market (Rauch, et al., 2009). They also display technological leadership through the research and

development of new processes. Wiklund (1999), refers to innovativeness as the pursuance of unconventional and creative approaches to address challenges and opportunities. Morris and Kuratko (2002), generalise innovation as the creation of new products, processes, services, technologies and business models.

Kraus, et al. (2005) assert that entrepreneurial innovativeness does not necessarily have to be revolutionary or original. The implementation of existent first world business practices by developing countries is argued as not being an absolute novelty, however it would be contextually regarded as being innovative. Therefore the willingness of entrepreneurs to be unconventional and experimental allows them to continually seek improved work processes.

The construct of innovativeness in entrepreneurial orientation is regarded as an important factor to characterise entrepreneurship (Sharma & Dave, 2011). Despite this claim, innovativeness is not a concept which can be easily implemented. Although it may be the catalyst for new product development, Morris, et al. (2010) cautions that innovative entrepreneurs face the challenge of making existing products, which may possibly still be successful, obsolete. Therefore the introduction of new products need to be marketed by carefully considering the effects the launch would have on their existing lines. They also warn that another dilemma associated with being innovative is the extent of being the first to market. Although in many technological industries it is advantageous to be a first mover, this does not guarantee success as these entrepreneurs are also the most likely to make critical mistakes due to their haste, which can allow followers to enjoy greater success by improving on their product. Entrepreneurs that focus on innovativeness, specifically in the field of product development, are therefore not necessarily guaranteed positive outcomes.

Although these disadvantages of being innovative are acknowledged and needs to be treated with caution, academic literature in entrepreneurial orientation strongly supports the need for entrepreneurs to be innovative.

According to Benjaoran (2008), SME contractors are generally not highly innovative. They rarely optimise the use of information technology and commonly operate manual, paper-based administration techniques while relying on their experience and intuition. Yang, et al. (2007) also state that there is a preference by most SMEs

to record and process data using Excel spreadsheets while the advanced use of information technology is mainly prevalent in larger organisations. The lack of specialised resources and cash constraints is identified as the main reason for this limitation since computerised systems are generally expensive to implement and maintain, over and above the costs incurred to implement staff training and development for the use of these systems. Although purists may argue that the implementation of information technology (IT) is not a true indicator of an innovative orientation, again the adoption of these techniques to depart from the conventional systems suggests otherwise since innovativeness does not necessarily involve radical changes (Lumpkin & Dess, 1996).

The requirement for entrepreneurs to be innovative and to continuously challenge mundane and outdated systems is widely advanced by academics of entrepreneurial orientation because it contributes to competitive advantage through business differentiation. It also allows entrepreneurs to create new products and processes which would contribute to business performance and efficiency. These benefits will develop SME owners to dominate their environment and stay ahead of their competitors. This research therefore aims at evaluating the innovativeness inclination of SME entrepreneurs in the construction sector and its influence on their perceptions of business challenges experienced.

PROPOSITION 1. *Higher actualisation of innovativeness will result in an entrepreneur articulating lower levels of business challenges.*

#### 2.8.3.2 Proactiveness

Entrepreneurship literature lists proactiveness as another well-established construct of entrepreneurial orientation (Covin & Slevin, 1986, 1989; Miller, 1983; Miller & Friesen, 1982; Venketaraman, 1989). Proactiveness refers to the personal initiatives taken by entrepreneurs to shape their environmental conditions through their self-starting and persistent orientation (Frese, et al., 2000).

Miller (1983), views proactiveness as a dimension of strategy making and relates it to the assertiveness of entrepreneurs to be more active rather than reactive and has used the following three items to measure proactiveness:

- Following versus leading competitors in innovation
- Favouring the tried and true versus emphasizing growth, innovation and development and
- Trying to cooperate with competitors versus trying to undo them.

Venkatraman (1989), has conducted studies on the strategic orientation of business enterprises and he deconstructs proactiveness as an entrepreneur's continuous search for new market opportunities and experimentation with potential responses to changing environmental trends which is evidenced in the following three ways:

- Seeking new opportunities that may or may not be related to the present line of operations
- Introducing new brands and products ahead of competitors and
- Strategically eliminating operations that are in the mature or declining stages of the life cycle.

According to Kreiser, et al. (2002), proactive entrepreneurs are constantly scanning the market environment to seek new opportunities and it is this characteristic which allows them to generally achieve first-mover status. Lieberman and Montgomery (1988) promote the benefits of first mover advantage as being an organisation's best strategy for market capitalisation. It affords them the benefits of being market leaders while attracting unusually high profits and brand recognition.

Therefore it is not uncommon for proactive entrepreneurs to continuously reinvent themselves and challenge traditional approaches to product and service development, marketing improvement and staff management due to their aggressive competitive orientation (Covin & Slevin, 1989). It is suggested that SME owners who are inclined to being proactive would derive the benefits associated with this construct and therefore have a lower articulation for the business challenges they may be subjected to.

PROPOSITION 2. *Higher actualisation of proactiveness will result in an entrepreneur articulating lower levels of business challenges.*

#### 2.8.3.3 Risk-taking

Very early literature on entrepreneurship documents the view that entrepreneurs are differentiated from hired employees by their acceptance of the riskiness and uncertainty of self-employment (Cantillon, 1734). Although this is the most basic risk that all entrepreneurs face, their risk exposure is not limited to the start-up phase only since risk is entrenched in every aspect of the business whenever an unconventional decision is taken. This is corroborated by Morris' (2010) view that anything new involves risk or some likelihood that the actual results will differ from expectations. Therefore risk taking is a dimension of entrepreneurship which involves a willingness to pursue opportunities that has the possibility of resulting in losses or major performance inconsistencies.

According to Timmons and Spinelli (2009), the law of economics and finance dictates that there is a high-risk/high-reward and low-risk/low-reward relationship in mature, efficient and relatively well established markets. They advocate that the same is not applicable in entrepreneurial markets. This is substantiated by many highly profitable venture investments having been spawned from relatively low-risk start-ups. Risk-taking should therefore not be viewed as reckless decision making which is extreme and uncontrollable. It should be exercised where there is a reasonable awareness of the degree of risk involved. These risks are prevalent in the financial, technical, marketing and personal aspects of the entrepreneurial venture and every attempt should be made to manage them. Hamel and Prahalad (1994) urge entrepreneurs to exercise frequent and lower degrees of risks in order to achieve sustainable long-term success as opposed to sporadic, higher intensity risks which may prove detrimental to the company's success.

According to Dickson and Giglierano (1986), there are two sides to the risk equation from an entrepreneurial standpoint. They label one as "sinking the boat" risk to describe companies that initiate poorly planned concepts through bad timing, chasing mature markets, inadequate marketing approaches and inappropriate pricing levels. The other side of the risk equation is labelled "missing the boat" risk to describe companies that do not timeously pursue profitable concepts due to long developmental timeframes which may allow their competitors to be first movers. These entrepreneurs are over cautious in order to mitigate their risks and are

therefore equally susceptible to risk failure as entrepreneurs that are overzealous. This highlights the dilemma that entrepreneurs face since their risk exposure becomes a function of the outcome and warrants that their decisions be carefully considered.

Although there is evidence that risk-taking is an unpredictable measure of an entrepreneur's probability of future success, it is however strongly associated as having a positive impact on entrepreneurial performance and growth (Sharma & Dave, 2011). Begley and Boyd (1987) suggest that entrepreneurs have a higher risk taking propensity than non-founders therefore this construct is also widely used as a measure of entrepreneurial orientation. SME owners that inhibit high risk-taking tendencies can enjoy the benefits of differentiating their firms from their competitors. This would allow them to work in niche markets and less competitive environments and it is therefore reasonable that they would therefore articulate fewer and lower levels of business challenges.

PROPOSITION 3. *Higher actualisation of risk-taking will result in an entrepreneur articulating lower levels of business challenges.*

### 2.8.4 Theoretical Conceptualisation of Entrepreneurial Orientation

The study of entrepreneurial orientation has been based on two primary theoretical conceptualisations. They have been identified as a unidimensional approach or a multidimensional approach, determined by the way the individual constructs of entrepreneurial orientation are evaluated. The unidimensional approach views entrepreneurial orientation as a unified conceptual entity (Miller, 1983) in which the different dimensions of entrepreneurial orientation are aggregated for an overall scoring. According to Miller (1983), entrepreneurial firms are required to inhibit high levels of all the dimensions at once. Therefore entrepreneurial orientation is measured by using an average score of innovativeness, proactiveness and risk-taking.

According to a comprehensive qualitative review undertaken by Wales, et al. (2011) of empirical entrepreneurial orientation literature, 123 of the 158 articles that were sampled adopted the unidimensional conceptualisation of entrepreneurial orientation. Consistent with Miller's (1983) conceptualisation, studies indicate that the three dimensions of innovativeness, risk-taking and proactiveness show moderate to high correlations with each other in practice (Covin, et al., 2006; Rauch, et al., 2009). The high frequency of empirical studies examining the dimensions in aggregate strongly suggests that there is a convergence in the literature on the unidimensional conceptualisation of entrepreneurial orientation.

The multidimensional conceptualisation is advanced by Lumpkin and Dess (1996) and it is asserted that the dimensions of entrepreneurial orientation vary independently of each other. They argue that firms can be high on some dimensions and low on others. Therefore the determination of a firm's level of entrepreneurial orientation is the sum of scores for each dimension or similarly as a weighted linear combination. By implication, firms that score poorly in one dimension can improve their level of entrepreneurial orientation by scoring higher in another dimension. Table 2.4 below shows the number of journal articles exploring each dimension of entrepreneurial orientation in a multidimensional context.

Table 2.4. Summary of Variables employed within Multidimensional Entrepreneurial Orientation research

| Variable | Article Count |
|---|---|
| Proactiveness | 36 |
| Risk-taking | 36 |
| Innovativeness | 34 |
| Competitive aggressiveness | 11 |
| Autonomy | 6 |

Source: Adapted from Wales, Gupta, and Mousa, 2011.

From Table 2.4, it is interesting to note that even in the multidimensional conceptualisation of entrepreneurial orientation, the predominant dimensions investigated are innovativeness, risk-taking and proactiveness.

Academic literature on these conceptualisations show that entrepreneurial orientation studies are inconsistent since some researchers have adopted either a unidimensional approach or a multidimensional approach while some studies have been based on a combination of both approaches (Wales, et al., 2011). The vast majority do however employ the unidimensional approach to entrepreneurial orientation which is therefore also used in this research.

### 2.8.5 The Relationship between Entrepreneurial Orientation and Performance

According to Ireland, et al. (2009) entrepreneurial orientation is viewed as an effective means of contributing to a firm's success. This is based on the understanding that the key elements of entrepreneurial orientation assist firms to target lucrative markets or product opportunities and provide competitive advantage over their competitors. Aktan, et al. (2008) also associate a firm's entrepreneurial orientation with resultant product and market diversification together with impressive financial results. According to Huang and Chiang (2010), firms can achieve sustainable competitive advantage through the innovation of new products and services. It is therefore evident that a strong entrepreneurial orientation inclination supports the prospect of increased business performance.

Despite the vast evidence confirming that entrepreneurial orientation improves a firm's competitiveness, empirical literature is inconclusive about the impact of entrepreneurial orientation on firm performance. Research by Farrington and Matchaba-Hove (2011) shows that a firm's success is not impacted by all the dimensions of entrepreneurial orientation. Moreno and Casillas (2008) also find no direct relationship between entrepreneurial orientation and business growth. To overcome this gap in the literature, this research takes a different approach by investigating the impact of entrepreneurial orientation on the business challenges of a firm. It is postulated that SME owners who articulate lower levels of business

challenges would be more successful since they would view these challenges as opportunities and therefore create strategic advantages to promote their businesses. This is the basis for the development of a proposition for this study that entrepreneurs with high actualisation of entrepreneurial orientation will have lower levels of perceived business challenges.

## 2.9 Business Challenges Faced by SMEs

Industry Insight (2012) reports that there were 158 liquidations of construction companies in South Africa for the year-ending March 2012. Although this is an improvement from the previous year's total of 222 liquidations as at March 2011, it does highlight the high prevalence of failure and the challenges of doing business in the construction sector. According to research conducted on American construction companies by Arditi, Koksal and Kale (2000), more than 80% of failures were attributable to five factors namely, poor profitability (27%), weakness of the construction industry (23%), high operating expenses (18%), inadequate capital (8%) and heavy institutional debt (6%). They highlight that apart for industry weakness, all other factors were related to budgetary issues and therefore identified this as the main reason for construction company failure.

Studies by Kivrak and Arslan (2008) on the failure of Turkish construction companies revealed that the influential factors were related to inadequate business experience and the country's economic conditions. Their study was conducted on forty SME construction companies and an analysis of the sub-factors related to inadequate experience confirmed that cash flow and poor client relationships where the driving forces for the failure.

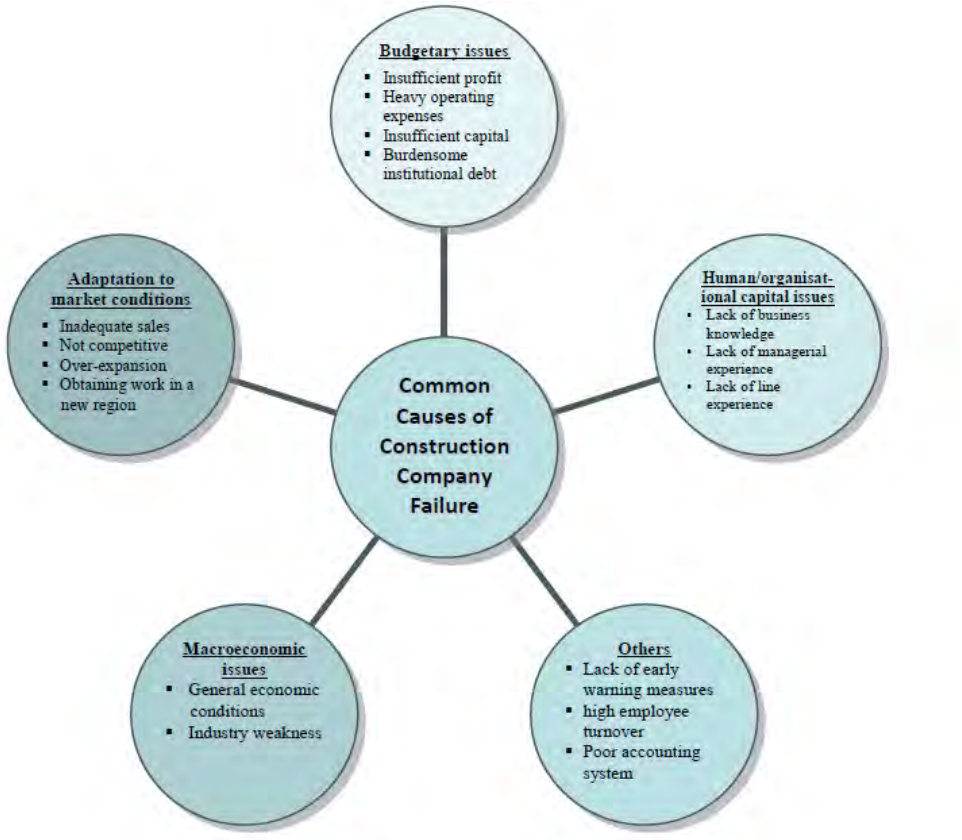
Research on Saudi Arabian construction companies by Osama (1997) showed that the factors contributing the most to business failure were difficulty in acquiring work, inadequate experience, poor cash flow management and the lack of managerial experience.

Budgetary problems is therefore commonly identified for the failure of construction companies. This is supported by Kangari (1988) who asserts that more than half of construction business failures are attributable to unrealistic profit margins. This

stems from their profitability which is determined essentially by the profit margins and pricing strategies construction companies adopt to secure bids. Therefore Arslan, Tuncan, Birgonul, and Dikmen (2006) advocate that construction companies need to carefully determine profit margins in the preparation of bid proposals. Due to the high competition for work, they acknowledge that many firms are compelled to reduce their profits and this would increase their default risk substantially.

According to Jaafar, et al. (2004), business challenges for SME contractors include the inability to procure steady workflow, difficulty in obtaining working capital, inability to source skilled labour and constraints in material supply. These challenges adversely affect productivity and cash flow which contributes to their failure and the high rate of construction firms being financially liquidated. Rwingera and Venter (2004) also support this view and adds that SMEs lack adequate management skills, access to financial resources and proper planning and record keeping. These business challenges are summarised in Figure 2.5 below.

Figure 2.5 Common Causes of Construction Company Failure




Source: Adapted from Wong and Thomas, 2010.

### 2.9.1 Inadequate Management Skills

The lack of management skills amongst SMEs is also cited as a common reason for SME failure in construction companies (Thwala & Phaladi, 2009). This forms the basis of poor management in terms of cash flow, human resources and risk which significantly contributes to business failure. Organisations that have strong managers generally outperform their competitors due to their business experience.

### 2.9.2 Lack of Finance

SME contractors are more susceptible to failure unlike larger contractors in the South African environment. Windapo and Cattel (2011) recognise the ability of large contractors to generate high turnovers thereby allowing them to achieve high profits / return on investments. This makes it easier for them to recover from major setbacks since they can build a healthy cash position. It also facilitates investment in assets such as construction equipment which makes them competitive when tendering for work.

SME contractors do not have the ability to make investments in plant and equipment as readily as larger, established firms (Croswell & McCutcheon, 2003). They rely on traditional and old-fashioned approaches to construction which primarily involves the implementation of labour-intensive methods. Although these methods of construction generate employment and remain low cost, it is not conducive for large scale contracts. Furthermore, SME contractors are not presented with the opportunity to increase their asset base which stigmatises their growth and development in terms of improving their CIDB grading.

### 2.9.3 Inability to Attract Skilled Personnel

According to Mahadea and Pillay (2008), it is costly for SMEs to employ skilled personnel based on the inclination of workers to move from company to company in pursuit of better salaries and perks. This cost is inevitably countered by employing junior or inexperienced workers to the detriment of the organisation since SMEs lack access to training and mentoring which is also a burden on management resources.

The World Bank Report (2007) finds that medium sized firms are more prone to human resource constraints as compared to smaller firms. Smaller firms, identified as those employing less than fifty employees, have simpler business processes and personal interaction between managers and employees therefore enabling the identification of incompetent workers.

### 2.9.4 Market Volatility

According to Dlungwana, et al. (2002), the construction industry in South Africa is a major role player in the economy and is also highly reliant on government contracts. Since South Africa is a developing country, service delivery and expanding infrastructure is cited as priority by the Government.

This dependence makes the construction industry highly volatile because it is affected by the state of the country's economy. It therefore bears the brunt of reduced activity during periods of recession due to cut backs on infrastructure spending. The Department of Public Works (1999) state that in a suppressed economy, the construction industry enters a slump thereby affecting the sustainability of SME contractors due to the volatility of demand. Research by Miles (1997) identifies that the construction industry shed an estimated thirty-five percent of its workforce during a recessionary period in the mid 1970's and a further thirty percent in the late 1980's and early 1990's thereby highlighting the volatility of this sector. SMEs in the construction industry that are unable to deal with this volatility of the construction market are prone to increased business challenges and ultimately become casualties of failed businesses.

## 2.10 Entrepreneurial Orientation and Business Challenges

Entrepreneurial orientation has received a lot of conceptual and empirical attention from entrepreneurship academics (Rauch, et al., 2009). It is encouraged by researchers as an effective means to improve business performance because of the key elements it encompasses (Fatoki, 2012). Entrepreneurial orientation, as

evaluated along the constructs of proactiveness, innovativeness and risk taking is also associated with the improved competitive advantage of organisations.

Business owners of smaller companies directly influence their firm's entrepreneurial orientation due to them being closely involved in most aspects of operating the business (Covin & Slevin, 1989). This is therefore particularly relevant to SMEs due to their firm size. Higher actualisation of entrepreneurial orientation can be simply achieved by the owner embracing attitudes that will encourage this.

It is propositioned that positive entrepreneurial orientation will lead to a positive outlook of the business and therefore an improved ability to effectively handle the business challenges encountered. Business owners that embrace proactiveness, innovativeness and adopt a high propensity for risk-taking should view business challenges differently from owners that do not. They are indeed better equipped to handle the business challenges the firm faces and this opinion forms the basis for this study.

PROPOSITION 4. *Higher actualisation of entrepreneurial orientation will result in an entrepreneur articulating lower levels of business challenges.*

## 2.11 SUMMARY

This chapter provides an overview of entrepreneurship with specific attention on the South African construction sector and identifies that the current state of entrepreneurship is concerning despite the dire need for it to address the country's high unemployment and economic disparity. The literature review presents the possibility that focussing on entrepreneurial orientation may help to improve entrepreneurial development and business success among SMEs active in the construction industry. The evolution of entrepreneurial orientation and the constructs that define it are provided. The South African construction industry is described together with the business challenges that SMEs encounter in order to establish the propositions for this research.

# CHAPTER THREE

## Research Methodology

### 3.1 Introduction

This chapter details the research methodology utilised for this study and the manner in which data was collected. Furthermore, the tools, tests and techniques adopted for analysing and data interpretation are also discussed.

### 3.2 Aim of the Study

The success of entrepreneurs in South Africa, specifically those within the construction sector, needs to be addressed to facilitate an environment that will contribute to the reduction of unemployment. The literature review in Chapter Two has highlighted this need together with the challenges that are prevalent. In response, entrepreneurial orientation has been demonstrated to be associated with improved business performance and resultant business success. Higher inclinations towards entrepreneurial orientation has therefore been propositioned to reflect lower articulations of perceived business challenges by SME owners. By evaluating the business challenges experienced, relative to entrepreneurial orientation levels, this research aims to identify an approach to improve entrepreneurial success amongst eThekwini-based small and medium contractors.

### 3.3 Respondents and Location of the Study

According to Sekaran and Bougie (2009), effective research requires the population of a study to be clearly defined to enable a representative sample size to be determined in order to draw a generalisable conclusion.

For the purposes of this study, the target population was SME construction companies and was determined from information sourced off the Construction Industry Development Board (CIDB) website registry. Since this research focussed

specifically on eThekwini-based contractors, the registry was filtered to identify only contractors with registered addresses within the eThekwini region. According to the data available from the CIDB registry, the eThekwini (previously Durban) geographical footprint is defined as per the area boundaries determined by the South African Post Office (SAPO). The process for defining the population is described below.

The literature review identifies that the CIDB categorises contractors from Grade 1 through to Grade 9 according to the maximum value of contracts they are capable of managing. As this study focusses on SMEs, the contractor grading that was closest to meeting the criteria for SME organisations according to the National Small Business Amendment Act (2003) for the Construction sector based on turnover, as per table 3.1, below were considered.

Table 3.1 Small Business Classification

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|---|---|---|---|---|
| **Sector or subsector in accordance with the Standard Industrial Classification** | **Size of class** | **The total full-time equivalent of paid employees** | **Total turn-over** | **Total gross asset value (fixed property excluded)** |
| | | | | |
| | Medium | 200 | R26m | R5m |
| Construction | Small | 50 | R6m | R1m |
| | Very Small | 20 | R3m | R0.50m |
| | Micro | 5 | R0.20m | R0.10m |
| | | | | |

Source: Adapted from National Small Business Amendment Act No. 26, 2003

The population therefore comprised of construction companies registered as Durban-based companies on the CIDB register, whose annual turnover according to the National Small Business Act (2003), was between R3 million and R26 million. Since the definitions of SMEs according to the National Small Business Act (2003)

and the CIDB grading categories were not aligned, the two had to be integrated. This resulted in this study focussing on SMEs graded on the CIDB database as level 4 to level 7 contractors (inclusive) as detailed in table 3.2 below.

Table 3.2 CIDB Contractor grading incorporating Small Business Classification.

| Sector | Size or Class | Total full-time equivalent of paid employees less than | Total annual turnover less than | | Aligned CIDB Grading | Number of Durban registered CIDB Contractors Civil Eng. (CE) |
|---|---|---|---|---|---|---|
| Construction | Medium | 200 | R 26.00m | | 6 and 7 | 42 |
| | Small | 50 | R 6.00m | | 5 | 33 |
| | Very Small | 20 | R 3.00m | | 4 | 31 |
| | | | | | **TOTAL POPULATION** | **106** |

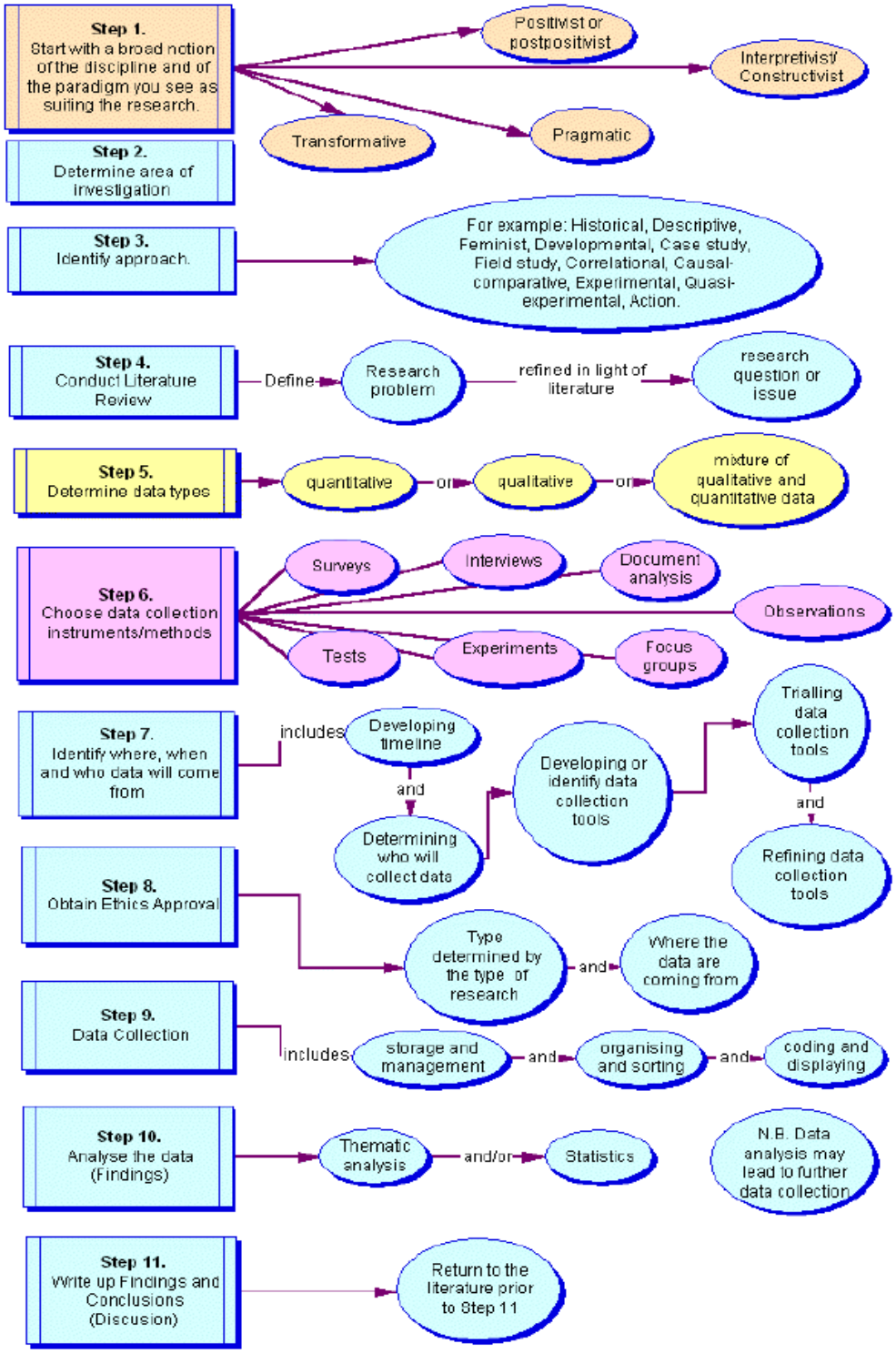
The construction industry is diverse within itself and comprises of contractors in many disciplines viz. civil engineering (CE), general building (GB), mechanical engineering (ME), electrical engineering (EE) and special works (SW). In order to allow this study to be manageable and focussed, the CIDB register was further filtered for contractors with a civil engineering (CE) classification thereby identifying those with a grading classification of 4 to a level 7 (inclusive). The population for this study was then determined to be 106 civil engineering contractors from information off of the CIDB register as accessed on the 10th May 2013.

### 3.4 Research Approach

Sekaran and Bougie (2009) define research as “an organised, systematic, data-based, critical, objective, scientific enquiry or investigation into a specific problem”. Researchers conduct an in-depth analysis in order to get a better understanding of a specific issue in order to derive a clear perspective (Denscombe, 2010). Figure 3.1 below details a diagrammatic representation of the research process that has

been adopted for this study based on the suggestions of Mackenzie and Knipe (2006) and the pertinent stages are discussed further.

Figure 3.1. The Research Process




Source: Adapted from Mackenzie and Knipe, 2006

Although the representation in Figure 3.1 is linear, it is realistically cyclical in practice since the researcher has to continuously revisit earlier steps as the research progresses and this may result in subtle or significant changes.

The research process identifies in step 5 (Figure 3.1) that there are three different research approaches which could be utilised:

- Qualitative research,
- Quantitative research or
- Mixed methods approach ie. a combination of both qualitative and quantitative research.

Qualitative research according to Hair, et al. (2007), is based on inductive reasoning since it is explorative and discovery orientated. This type of research is generally undertaken to explore the nature of problems where very few studies may have been conducted previously (Seekaran & Bougie, 2009).

For the purposes of this study a quantitative research approach is adopted whereby statistical and scientific data is used to analyse the variables of interest and relationships deduced through multiple statistical techniques. This type of research, according to Saunders, et al. (2012), is defined as research where data collection techniques eg. questionnaires or data analysis procedures, eg. graphs are utilised to gather numerical data and aims to determine whether the hypothesis of a study is true or false. It is a process of collecting, manipulating and interpreting raw data to acquire information that supports the decision making process (Render, Stair & Hanna, 2009). Since quantitative research is based on facts from statistical analysis, it is claimed to be scientific, precise and justifiable thereby producing results that are valid and reliable (Jonker & Pennink, 2010).

Since this study is based on previous research of entrepreneurial orientation, it is not necessary to develop an initial understanding of the issues. There is also no need to explore new ideas as in the case of qualitative research. Based on the outcomes of prior research, most commonly entrepreneurial orientation and business performance, this study seeks to test the relationships between variables,

specifically those of entrepreneurial orientation and the perceptions of business challenges SME owners experience.

The data collection instrument chosen for this research, as per step 6 of Figure 3.1, is through questionnaires administered to construction companies on the CIDB database listed in the Durban area. Questionpro software, which is an online survey tool, is used to create the questionnaire and facilitate distribution to all the survey participants. This type of online distribution is regarded as being fast and efficient while still being inexpensive (White, 2000). It provides respondents with the opportunity to reply at their convenience while reducing any bias as there is no interviewer present. Unfortunately, there are disadvantages associated with online surveys and the predominant one is that a high delivery success rate is not guaranteed which therefore may result in a low response rate from participants. This is also corroborated by Adams, et al. (2007) whereby he asserts that the response rate generated from electronically mailed surveys is anticipated at less than twenty percent. The option to administer the questionnaire in person was disregarded due to the logistical task of setting up appointments to meet with prospective respondents as contractors are generally not office bound. This would have also required excessive time and travelling costs therefore Questionpro online software was utilised.

Ethics approval as identified in step 8 of Figure 3.1, is obtained from the University of Kwazulu-Natal's research office (refer appendix 2). This procedure ensures that the research does not transgress any rules and that the survey is ethically conducted. Respondents are informed that they are under no obligation to participate in the study and that they can withdraw from the study at their will. Ethics approval serves to protect the author and the participants of the study.

The data collected, according to step 9 of Figure 3.1, is exported from Questionpro to SPSS (Statistical Package for the Social Sciences) software program after being coded for statistical analysis, a process described by Sekaran and Bougie (2010) as the assignment of numbers to responses. This facilitates the assessment of relationships and the cross comparison of data which exist amongst the variables.

### 3.5 Development of the Questionnaire.

Respondents are invited to participate in the study by first acknowledging a covering letter which informed them of the nature of the study and requested their consent to participate (refer appendix 1). The questionnaire was structured into three main sections which comprised demographical information of the participants, entrepreneurial orientation scoring and business challenge scoring. All questions are close-ended to assess the variables of interest thereby facilitating the quantitative approach for this research. Unlike qualitative research which is based on open-ended questions, it is anticipated that the questionnaire will be easier to complete thereby generating a higher response rate while enabling easier and more efficient data analysis (Adams, et al., 2007).

#### 3.5.1 Demographics

This section of the questionnaire involved questions on the demographics of the small business owner and firmographics (ie. profile of their business). Responses are solicited for the following variables in the questionnaire:

- Gender
- Race
- Age
- Years of existence
- Business type
- Number of employees
- Estimated turnover and
- Highest education level

All questions are structured to obtain a single response from the respondents to generate a simple yet comprehensive understanding of the research population. It is expected that the demographical information will have an influence on the survey results attained and is necessary for the refinement of future studies.

### 3.5.2 Measurement of Entrepreneurial Orientation

The development of the entrepreneurial orientation questionnaire is based on the variables from previous studies by Bolton and Lane (2012) to measure individual entrepreneurial orientation. The testing and validation of this instrument was conducted on 1102 students from a regional university in the USA which measured three distinct dimensions of entrepreneurial orientation viz. innovativeness, risk-taking and proactiveness.

Three statements measure risk-taking by evaluating the participant's responses to statements involving their action for venturing into the unknown, investing in activities that have the potential to yield high returns and taking acting boldly in risky situations. The innovativeness dimension is evaluated by four statements according to responses related to the respondent's appetite for engaging in unconventional activities, favouring unique approaches to repetition, experimentation in learning and originality skills adopted in problem solving. Three statements measure the proactiveness dimension whereby foresight in dealing with problems, planning ahead on projects and responsiveness in initiating action on projects.

This study evaluates the entrepreneurial orientation of participants from their responses to questions on a five point Likert scale (1=strongly disagree, 2=disagree, 3=neutral, 4= agree and 5= strongly agree). Entrepreneurial orientation is scored both as a multidimensional and a unidimensional concept. Multidimensional scoring is done by measuring the individual dimensions of entrepreneurial orientation whereby the mean scores for each variable is aggregated.

The unidimensional scoring is determined by aggregating the mean scores of the individual dimensions into a single score. High scores on the index indicate high levels of entrepreneurial orientation and low scores represent low actualisation of entrepreneurial orientation.

Table 3.3 below details the dimensions of entrepreneurial orientation as measured in this study.

Table 3.3 Measurement of Individual Entrepreneurial Orientation

| Item | Dimension | Description |
|---|---|---|
| Q9 | Risk-taking | I like to take bold action by venturing into the unknown. |
| Q10 | Risk-taking | I am willing to invest a lot of time and / or money on something that might yield a high return |
| Q11 | Risk-taking | I tend to act “boldly” in situations where risk is involved. |
| Q12 | Innovativeness | I often like to try new and unusual activities that are not typical but not necessarily risky. |
| Q13 | Innovativeness | In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before. |
| Q14 | Innovativeness | I prefer to try my own way when learning new things rather than doing it like everyone else. |
| Q15 | Innovativeness | I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems. |
| Q16 | Proactivity | I usually act in anticipation of future problems, needs or changes. |
| Q17 | Proactivity | I tend to plan ahead on projects. |
| Q18 | Proactivity | I prefer to “step-up” and get things going on projects rather than wait for someone else to do it. |

Source: Adapted from Bolton and Lane, 2012.

### 3.5.3 Measurement of Business challenges

There is a high diversity of business challenge indicators and it is accepted that these are not standardised, nor applicable, to all organisations. Although it can be generalised, some organisations may not view certain indicators as challenges while others may experience varying degrees of intensity. It is likely that the entrepreneurial inclination of the business owner will determine his articulation of the business challenges experienced whereby those that are more entrepreneurially

orientated are likely to articulate the business challenges as those that they can cope with. They will therefore view these challenges as business opportunities.

The questionnaire to evaluate SME owner's articulation of business challenges in the construction sector is developed for this study by profiling the dimensions of:

- General business challenges: Participants are requested to articulate the challenges they experience when dealing with issues of inflation, unemployment, crime, aids, rapidly changing technologies and new government legislation.

- Construction industry-specific challenges: Business challenges within the construction industry relating to competing in a limited market size, the increased competition from new company start-ups together with the business owner's knowledge of the construction market and his competitors is assessed.

- Skills challenges: The personal skills of the business owner is evaluated by his articulation of challenges related to his technical skill, construction industry experience, management training and management skill.

- Management challenges: Business owners are requested to score their perceptions of the challenges they experience with regard to time management, planning and delegation of duties.

- Work/life balance challenges: These challenges are evaluated by the business owner's scores regarding the effects of work on his health, family and social life.

- Human resource challenges: The business owners articulation of human resource challenges are measured based on labour related challenges which encompass his ability to employ suitable staff, labour productivity, labour turnover and handling labour laws.

- Finance Challenges: The financial aspects of operating the business is evaluated and these deal with access to credit, financial planning, his knowledge of finance and bookkeeping. Business failure due to poor financial management is widely cited and our evaluation also involves his perception of cash flow, credit and debtors management.

- Business growth: The SME owner's articulation of the business growth challenges he experiences aims to evaluate the areas of turnover and employee growth. His view on profitability and the success of the business is also requested.

Business challenges is evaluated in this study as a unidimensional concept whereby the variables of all the dimensions listed above are scored and then aggregated to determine a single overall score.

### 3.6 Tests used for Statistical Analysis

According to Tavakol and Dennick (2011), internal consistency tests are essential to confirm the validity and reliability of both the measurement instrument and the data received. This study utilises Cronbach's Coefficient Alpha to test for internal consistency of the questionnaire which is a measure of its ability to consistently measure the variables of interest. Typical values for Cronbach's alpha range from zero to one where higher scores indicate a higher reliability and generally in most social science research situations a score above .70 is considered "acceptable". Cronbach's alpha is technically speaking not a statistical test however it is a coefficient of reliability (or consistency). High values for alpha do not imply that the measure is unidimensional therefore in order to provide evidence that the scale being measured is unidimensional, additional analyses needs to be performed.

Spearman rho test is also used in this study to understand whether there is an association between the variables being tested. This is a non-parametric test that measures the strength of association between two ranked variables.

Descriptive statistics is utilised to describe and present the basic features of the data received. According to Adams, et al. (2007), it is used to summarise data collected to facilitate an understanding of the information through the use of graphs and frequency analysis. Descriptive analysis therefore enables the identification of patterns and data distribution of the study variables through simple summaries and generally forms the basis of most quantitative studies.

This study also utilises frequency analysis to examine the demographical information of the respondents. The minimum, maximum, mean and standard deviation scores are calculated through data analysis to generate an understanding of respondent's perceptions of the study variables and the variation of their responses. The minimum and maximum scores indicate the range of the responses, the mean values indicate the central tendency and the standard deviation identifies the amount of variability in the data received (Sekaran & Bougie, 2010).

Spearman rho tests is used to determine the relationship between the variables of this study for entrepreneurial orientation and business challenges. This is defined as a nonparametric test and an appropriate test for establishing correlations between any two variables on a nominal or an ordinal scale (Sekaran & Bougie, 2010). In this study the variables of entrepreneurial orientation are correlated both at a unidimensional and multidimensional level using Spearman's rho test.

Inferential statistics, described by Keller (2009) as a process of forecasting or approximating based on the sample data of a population, is also used in this study. It is a method that allows the inference of statistical data from the sample to the rest of the population. For this purpose, Student's t-test is used to assess whether the means of two groups of variables are statistically different from each other (Trochim, 2000). Its formula is a ratio whereby the top part is the mathematical difference between the two sets of means and the bottom is a measure of the variability or dispersion of the scores. This form of analysis enables us to evaluate the difference between the mean scores of two groups relative to the spread or variability of their scores.

## 3.7 Summary

This chapter provides an overview of the quantitative research methodology adopted for this study. The individual entrepreneurial orientation model as advanced by Bolton and Lane (2012) is consolidated with the developed questionnaire to investigate the SME owner's articulation of the business challenges experienced thereby allowing both models to be correlated. The proposed statistical tests involving descriptive and inferential statistics which will be utilised for the data analysis is also presented and discussed.

# CHAPTER FOUR

## Results and Discussion

### 4.1 Introduction

This chapter details the findings of this research and includes the analysis of the results relative to the aims and the objectives of this study whereby entrepreneurial orientation is evaluated along the constructs of innovativeness, risk-taking and proactiveness and correlated to the SME owner's articulation of the business challenges experienced. It is propositioned that high actualisation of entrepreneurial orientation will influence his articulation of the challenges he experiences. The analysis of demographical, entrepreneurial orientation and business challenge trends are presented through the use of frequency and descriptive statistics. Statistical analysis using Spearman's rho test and Student's t-test statistical tools are presented and analysed to determine the results.

### 4.2 Research Instrument

A pilot study was conducted on a sample of five respondents once the questionnaire was finalised. The aim of the pilot study was to ascertain the simplicity of the questionnaire to facilitate ease of understanding by the respondents. The pilot study was conducted on a one-on-one basis with the participants to observe any problems that may be encountered. It therefore served the purpose of ensuring that respondents would not have difficulty in answering the questions posed to them (Saunders, et al., 2012). An assessment of the pilot questionnaire suggested some revisions were required to the wording of a few questions to remove ambiguous statements. Apart from these, the questionnaire was deemed suitable for the study. It was administered via Questionpro and respondent's feedback then exported to SPSS programme for analysis.

### 4.3 Reliability and Validity Tests

Both the Kolmogorov-Smirnov and Shapiro-Wilk normality tests indicate a significance level of .000. This value is less than .001 and is indicative of the data

not being normally distributed and therefore requiring the use of a non-parametric tests.

Cronbach's Coefficient Alpha was used to establish the Internal Consistency Reliability for the questionnaire used in this study as shown in Table 4.1 below.

Table 4.1 Reliability statistic

| Cronbach's Alpha | N of Items |
|---|---|
| 0.848 | 42 |

Cronbach's Alpha on N=42 items scored 0.848 which shows that the scale is reliable and has high internal consistency. Cronbach's Alpha is > 0.7 (α=0.848, n=42). This also indicates that the measurement instrument is able to consistently measure the variables of interest and that the various items of measure are strongly inter-related.

The Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy was < 0.5, thereby indicating that the sample was inadequate to perform a factor analysis. Thus factor analysis is omitted from the analyses.

Table 4.2 KMO Results

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.248 |
| | Approx. Chi-Square | 2428.47 |

## 4.4 Descriptive Statistics

The sample consisted of eThekwini-based SME construction companies. They were identified from information sourced off the CIDB database and consisted of

companies with a CIDB grading between, and including, 3CE and 7CE contractors. This resulted in 106 companies being identified to participate and a 59% response rate was achieved since 63 respondents completed the survey. The socio-demographic variables to profile these respondents were summarised using descriptive summary measures: expressed as mean (standard deviation) for continuous variables and percentages for categorical variables. Eight questions were posed to them in order to establish a comprehensive demographic understanding of the sample and to confirm that they suited the profile of the targeted population ie. small and medium enterprises within the construction industry.

### 4.4.1 Respondent's profile

4.4.1.1. Gender

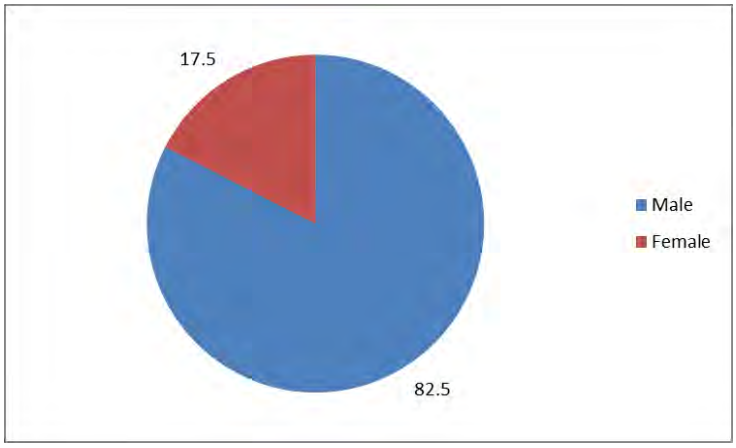



Figure 4.1. Gender distribution of respondents (%)

Based on the responses received, the majority of the respondents are males (82.5%) while females comprised of only 17.5%. This difference can be attributed to the fact that the construction industry is dominated by males and women rarely view this sector as a source of employment.

The Khuthaza Construction Forum (Khuthaza, 2014), a section 21 non-profit company which provides support for the development of women in the construction

sector, reports that there are approximately 40% women-owned companies registered on the CIDB database in grades 2 to grade 4. This is confirmed by the CIDB statistics that demonstrate there are approximately 47% women owned construction companies registered on their database. These women owned enterprises are classified in the lower grading of 1 to 4 and it is noted that very few move into the higher grades of 5 to 8.

Since this research targeted SME companies with CIDB grading between 4 and 7, it is possible that there are more women owned enterprises in grade 1 and 3. This band did not form part of this study. It is pleasing to note however that women are active in the construction industry.

4.4.1.2. Race

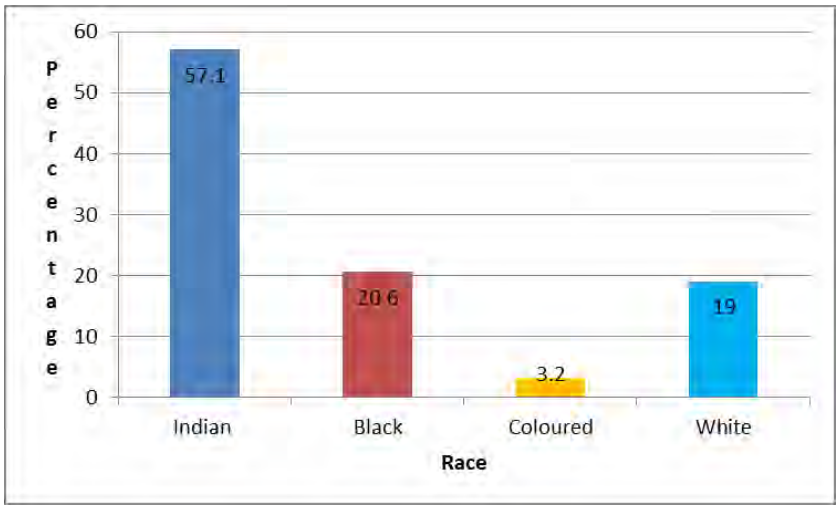



Figure 4.2. Race distribution of respondents (%)

The majority of the respondents are Indian and accounted for 57.1% of the responses while Blacks made up for 20.6% followed by Whites at 19% and Coloureds with 3.2%.

In view of Government's drive to improve the employment quota of Black contractors through BEE initiatives, it was expected that they would form the majority of the responses. This result is however to be expected as Indians form a large portion of the population of Kwa-Zulu Natal. In the eThekwini Municipality region, Indians

account for 16.7% of the population and is the second largest population group after Blacks at around 73.8% (eThekwini Municipality, 2012).

4.4.1.3. Age

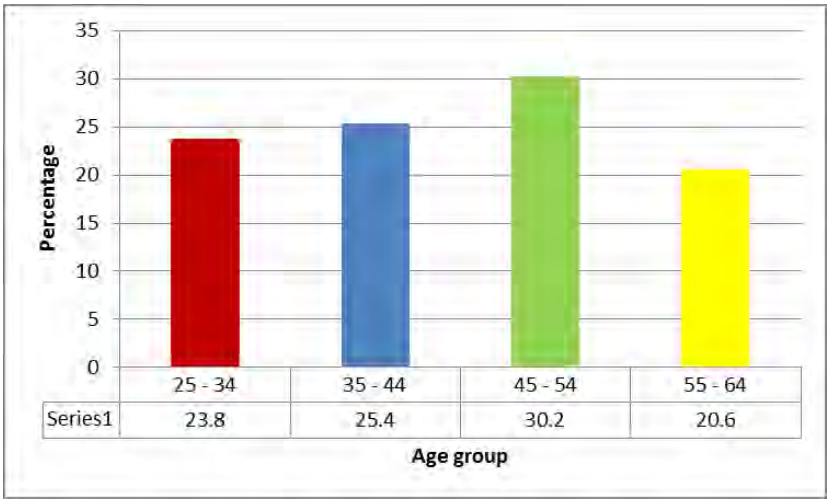



Figure 4.3. Age distribution of respondents (%)

30.2% of the respondents were in the 45-54 years category and formed the majority of the responses. Age categories were fairly evenly distributed across the sample with 25.4% representative of the 35-44 years category, 23.8% from 25-34 years and followed by 20.6% being in the 55-64 year group.
The sample therefore was fairly representative of all age categories.

4.4.1.4. Years Company has been in Business

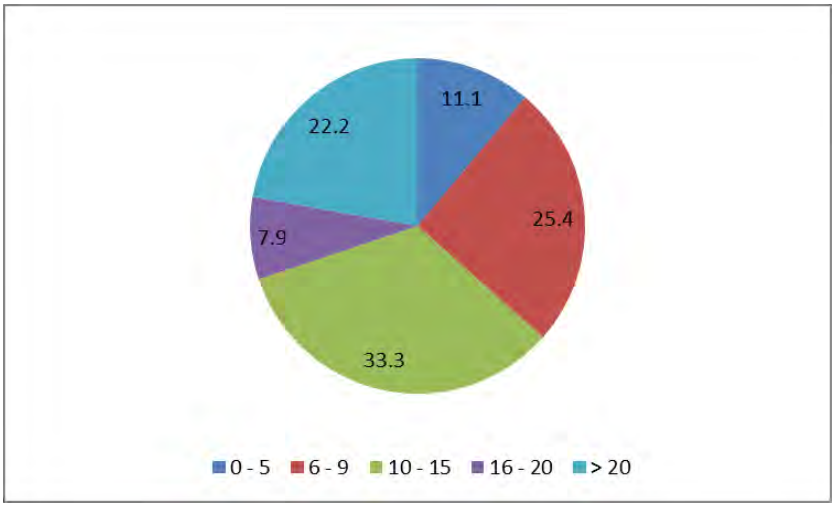



Figure 4.4. Number of Years Company has been operational (%)

The majority of the respondents (33.3%) indicated that their business has been in operation for more than 11 years. 25.4% of businesses fell into the 6-10 year category followed by 22.2 % which has been operational for more than 20 years. 11.1% of the respondents indicated that they were fairly new entrants to the construction sector and in existence for between 0-5 years followed by the least respondents of only 7.9% representing the 16-20 year category.

4.4.1.5. Business Type

According to Figure 4.5 below, the majority of the respondents (77.8%) indicated that their business operated as a close corporation. Private companies accounted for 20.6 % while only 1.6% were sole traders.

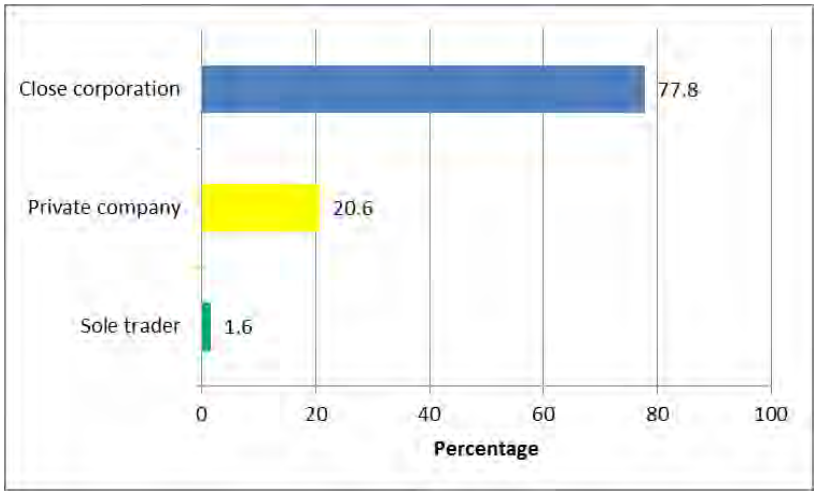



Figure 4.5. Type of Business

The results suggest that close corporations (CCs) are the preferred type of business amongst SME construction companies. According to the Small Enterprise Development Agency (SEDA), unlike private companies, there are few formalities to establishing close corporations which makes it easy and cheap to establish. Another important difference is that CCs do not have to be audited which allows for the accounting function of the business to be done by anyone with a recognised accounting qualification. It is therefore reasonable for the majority of respondents (77.8%) to choose this type of business.

The legal implications of operating as a close corporation are also less onerous on the members since the law views them separate from the business. Assets and debts of the business belong to the close corporation and not the members. The reverse also applies. Since the literature review identified that there is a high failure rate of entrepreneurs in South Africa, it is understandable that SMEs would therefore protect their personal assets by establishing close corporations.

4.4.1.6. Number of Employees

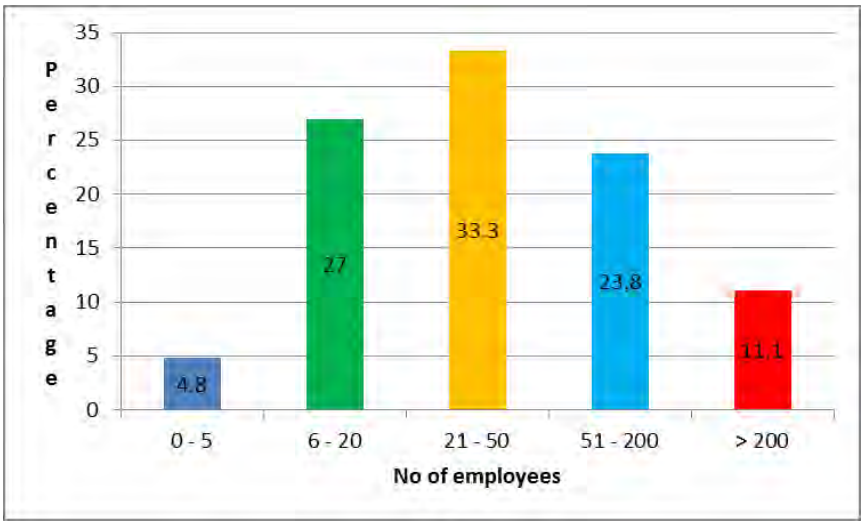



Figure 4.6. Number of employees

Most respondents (33.3%) indicated that they employed between 21 to 50 employees at the company followed by 27% employing between 6 to 20 employees. Results show that 23.8% had between 51 to 200 employees while 11.1% employed more than 200 employees. A relatively small response of 4.8% employed between 0 to 5 employees suggesting that they were micro organisations according to the Small Business Classification (refer table 3.1).

These results indicate that 84.1% of the respondents generally meet the criteria to be defined SMEs based on the number of workers each respondent employed. As identified in the literature review, the targeted participants to this study were categorised to employ 20 to 200 employees and it is acknowledged that 15.9% of the respondents either employed more than 200 employees or less than 20. Although 11.1% of respondents did indicate that they employed more than 200

employees, it is plausible that participants may have included casual employees in their count which may have affected their response.

4.4.1.7. Estimated Turnover

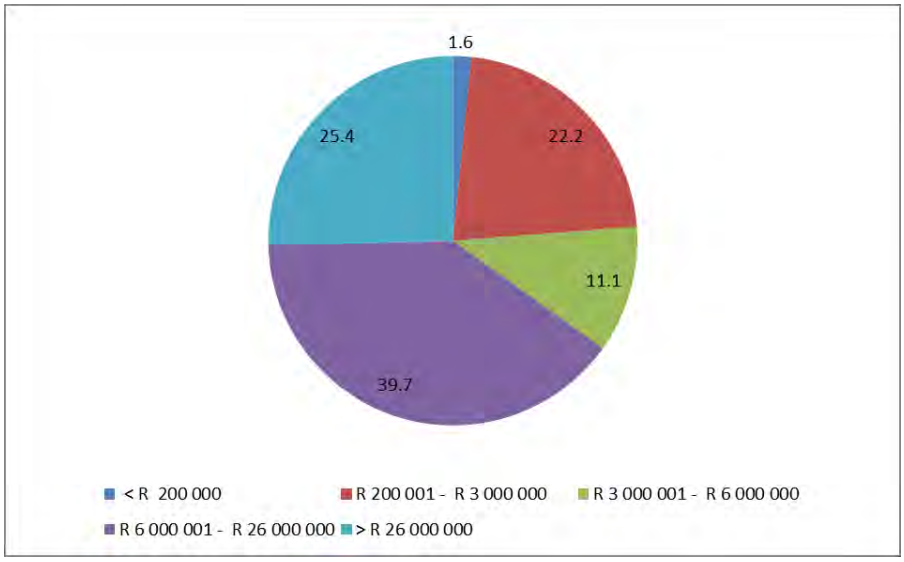



Figure 4.7. Estimated turnover

With regard to estimated turnover of their company, more than a third (39.7%) indicated that their company's turnover was between R6 mil – R26 mil (figure 4.7). Turnover in excess of R26m was generated by 25.4% of respondents and according to the definition of small businesses, these are classified as large companies and therefore fall within the CIDB grading of 6 and 7.

The targeted participants to this study were expected to turnover between R200 000 to R40m per annum. From the results obtained, only 1 out of the 63 respondents (1.6%) indicated that their turnover was less than this which could mean that they were exiting the industry, downsizing their operations or possibly struggling to secure work.

4.4.1.8. Level of Education

Only a quarter (24.2%) of the respondents reported to have a degree qualification (figure 4.8 below). Respondents with post matric qualifications comprised of 63% of the sample while 34% held matric qualifications only. Only 3.2% of the

respondents did not possess any formal education. The response shows that the majority of SME construction companies are managed by qualified personal.

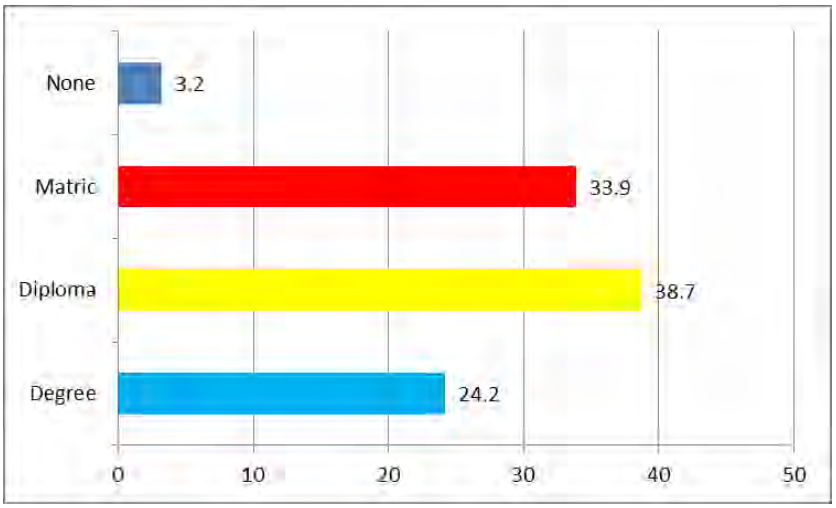



Figure 4.8. Academic qualification of respondents (%)

This finding suggests that respondents are generally academically trained and are not being opportunistic in joining the construction industry. Since it is established that most business owners do attend tertiary institutions, stakeholders that promote entrepreneurial development need to engage with them at tertiary institutions to develop their entrepreneurial skills. Our findings suggest that entrepreneurs are educated and qualified individuals therefore curriculum at tertiary institutions need to incorporate programmes that focus on entrepreneurial development.

Although the questionnaire did not identify the type of qualification the respondent had attained, and whether it was aligned with the construction industry, it does highlight that managers of SMEs have undergone academic training and development and suggests that entrepreneurs are inclined to pursue higher education.

### 4.4.2. Entrepreneurial Orientation Results

Entrepreneurial orientation was measured using the sub-scales of risk-taking, innovation and proactiveness as identified in the literature review and based on previous empirical studies. The results of the analysis are detailed below for the individual constructs of risk-taking, innovation and proactiveness. The overall

entrepreneurial orientation dimension is also calculated whereby the performance measures were aggregated to get a combined performance index.

4.4.2.1 Risk-taking

There were three statements posed to the respondents to identify their risk taking behaviours. These were recorded on a 5 point Likert scale. Results show that the majority of the respondents (79.4%) agree/strongly agree that they are willing to invest both their time and money in the pursuit of achieving high returns. Items measuring “acting boldly in risky situations” and “taking bold action by venturing into the unknown” garnered relatively similar scores, notably positive responses of 53.9% and 52.3% respectively.

**Table 4.3: Summary of risk taking statements**

| **Risk taking statements#** | **SD %** | **D %** | **N %** | **A %** | **SA %** | **Mean (St Dev)** |
|---|---|---|---|---|---|---|
| I like to take bold action by venturing into the unknown | 4.8 | 11.1 | 31.7 | 46.0 | 6.3 | 3.38 (0.94) |
| I am willing to invest a lot of time and / or money on something that might yield a high return. | 1.6 | 0.0 | 19.0 | 54.0 | 25.4 | 4.02 (0.77) |
| I tend to act boldly in situations where risk is involved. | 1.6 | 11.1 | 33.3 | 46.0 | 7.9 | 3.48 (0.86) |
| Aggregate mean (St Dev) | 10.87 (2.00) | | | | | |

#SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

Therefore more than half of the respondents positively agree to all the three statements with a mean scoring of 3.38 or higher (table 4.3). The overall mean score was 10.87 (St dev = 2.00) from a possible score range between 3 – 15 where SD=1 and SA=5. This suggests that the majority of the respondents were inclined to be high risk-takers.

As advanced by Cantillon (1734), and indicative of their strong risk profile, the respondents to this study are therefore viewed as entrepreneurial SMEs that have differentiated themselves from hired employees by their acceptance of the risk and uncertainty associated with self-employment. Since Sharma and Dave (2011) advocate that risk taking is strongly associated as having a positive impact on entrepreneurial performance and growth, these SME owners are more likely to be successful entrepreneurs.

#### 4.4.2.2 Innovativeness

Four Likert type statements were used to score innovativeness amongst the respondents (Table 4.4). Positive inclination towards innovativeness was scored 5 points for respondents who strongly agreed (SA) with the statements, strongly disagree (SD) scored a minimum of 1 point.

More than 60% of the respondents agree/strongly agreed with three statements measuring their preference for “trying new and unusual activities”, “developing their own way when learning new things” and adopting “original approaches to problem solving”. The mean scores for each statement was higher than 3.25 out of a possible range 1 to 5. The aggregate mean score of 14.35 from possible scores between 4 and 20 suggests that the majority of the respondents exhibit high levels of innovativeness.

The innovativeness measure of the respondents to this study is high and contrary to the findings of Benjaoran (2008) that SMEs are not highly innovative. It is assumed that the measures put in place by Government to educate and improve the welfare of SMEs is accountable for this improvement. The advancement of technology and access to information also enables SMEs to be more informed of developments and therefore contribute to them being more innovative.

**Table 4.4: Summary of innovativeness statements**

| Innovation statements[#] | SD % | D % | N % | A % | SA % | Mean (St Dev) |
|---|---|---|---|---|---|---|
| I often like to try new and unusual activities that are not typical but not necessarily risky. | 4.8 | 4.8 | 20.6 | 58.7 | 11.1 | 3.67 (0.92) |
| In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before. | 1.6 | 20.6 | 36.5 | 33.3 | 7.9 | 3.25 (0.93) |
| I prefer to try my own way when learning new things rather than doing it like everyone else. | 0.0 | 4.8 | 27.0 | 46.0 | 22.2 | 3.86 (0.82) |
| I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems. | 1.6 | 6.3 | 28.6 | 60.3 | 3.2 | 3.57 (0.73) |
| Aggregate mean (St Dev) | 14.35 (2.22) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

High actualisation of innovativeness amongst entrepreneurs are associated with wealth creation by disturbing the prevailing environment through the process of “creative destruction” (Schumpeter, 1942). This suggests that the respondents to this study are able to facilitate the growth of new companies due to their high inclination towards innovativeness. They are also able to differentiate themselves from their competitors which allows them to gain a competitive advantage and to explore new opportunities that may arise.

4.4.2.3 Pro-activeness

Table 4.5 summarises participants’ perceptions regarding pro-activeness. It is established that almost all the respondents are very proactive as the mean score for each statement is four (4) or higher from five point Likert scale statements. The

overall mean score of 13.03 from a possible scoring range of 3 to 15 also indicates that the respondents exhibit high levels of proactivity.

All respondents (100%) agreed/strongly agreed that they were proactive on projects instead of allowing others to do so. The only negative responses (1.6%) for this dimension of entrepreneurial orientation was observed for the variables of “acting in anticipation of future problems” and “planning ahead on projects”.

**Table 4.5: Summary of proactiveness statements**

| **Pro-activeness statements[#]** | **SD %** | **D %** | **N %** | **A %** | **SA %** | **Mean (St Dev)** |
|---|---|---|---|---|---|---|
| I usually act in anticipation of future problems, needs or changes. | 0.0 | 1.6 | 20.6 | 54 | 23.8 | 4.00 (0.72) |
| I tend to plan ahead on projects. | 0.0 | 1.6 | 4.8 | 44.4 | 49.2 | 4.41 (0.66) |
| I prefer to “step-up” and get things going on projects rather than wait for someone else to do it. | 0.0 | 0.0 | 0.0 | 38.1 | 61.9 | 4.62 (0.49) |
| Aggregate mean (St Dev) | 13.03 (1.40) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

The construct of proactiveness in entrepreneurial orientation is well established and is associated with the entrepreneur’s self-starting and persistent character to shape their environmental conditions (Frese, et al., 2000). They are regarded as individuals who enjoy being in control and therefore inhibit qualities to make them effective leaders and managers. They are also inclined to challenge conventional approaches to operating a business due to their aggressive competitive orientation (Covin & Slevin, 1989).

As SME owners operating in a very competitive construction market, the respondent’s to this study need to be self-starters to survive therefore it is not surprising that they show a high predisposition for being proactive.

#### 4.4.2.4 Overall Entrepreneurial Orientation

Overall, the average score for Entrepreneurial Orientation was determined as 3.83 with a standard deviation of 0.39 (Table 4.6). This result indicates that the respondents have good awareness of entrepreneurial orientation as also indicated by their high scoring on the individual constructs.

**Table 4.6: Summary of entrepreneurial orientation score**

| Construct | N | Min | Max | Agg. Mean | Mean (M) | Std. Dev |
|---|---|---|---|---|---|---|
| Risk-taking | 63 | 1 | 5 | 10.87 | 3.62 | 2 |
| Innovativeness | 63 | 1 | 5 | 14.35 | 3.59 | 2.22 |
| Proactiveness | 63 | 1 | 5 | 13.03 | 4.34 | 1.4 |
| **Entrepreneurial Orientation** | | | | | **3.83** | **0.39** |

The results confirm that the respondents have a high inclination for innovativeness (M=3.59), are higher risk-takers (M=3.62), and their strongest agreement is that they are proactive (M=4.34). The resultant mean score for overall entrepreneurial orientation of (M=3.83) out of a range of 1 to 5 indicates that they have a high predisposition for this approach which would influence their management style and actions. Since increased innovativeness and higher risk taking inclinations are associated with improved business performance, these entrepreneurs are more likely to realise increased business performance. This is corroborated by Rauch's (2009) meta-analysis which suggests that the correlation between entrepreneurial orientation and business performance is significant.

#### 4.4.2.5 Comparison with other Studies

As highlighted in the literature review, the entrepreneurial orientation construct can be determined at an organisational and at an individual level. This study focussed on owner / managers within SME organisations and it is argued that due to the size of these companies, founders and managers have greater influence on the business and its operations and therefore the determination of entrepreneurial orientation at an individual level is appropriate. Consequently, this study utilised the measurement

instrument developed by Bolton and Lane (2012) and the results of this study suggest that eThekwini–based SMEs in the Construction sector have a strong entrepreneurial orientation.

There has been discussion papers on individual entrepreneurial orientation that bears relevance to our study. Kollmann, et al. (2007) suggest that by establishing individual entrepreneurial orientation, it is possible to determine the factors that have an influence on entrepreneurial individuals across cultures. They associate high levels of individual entrepreneurial orientation with cultures that rank masculinity, individuality, achievement and universalism highly. This is based on Hofstede's (2003) four cultural indices to measure cultural dimensions and the following definitions are offered:

- Masculinity refers to the degree of stress placed on materialism.
- Individualism refers to the degree of emphasis placed on an individual's accomplishment.
- Achievement describes how power and status are determined within a culture and
- Universalism refers to the level of law applicable within a country.

Their study of individual entrepreneurial orientation also propositions that high levels of individual entrepreneurial orientation is associated with countries that have less regulated economies.

Kollmann, et al. (2007) also proposed that high individual entrepreneurial orientation is associated with the amount of resources accessible in an individual's environment. It is argued that government's drive to mentor and promote entrepreneurial development in the South African construction sector is facilitating a lot of resources to be made available, either through funding, training, mentorship or work opportunities. This is corroborated by GEM (2011) where it is evidenced that Government is certainly creating a supportive environment for entrepreneurship through policies such as the New Companies Act, Broad-Based Black Economic Empowerment (BBBEE) Act and tax incentives for micro-businesses.

### 4.4.3 Business Challenges

Business challenges experienced by SME owners was measured by getting the respondents to articulate the challenges they are exposed to. These were measured by categorising business challenges as general, industry-specific, skills, management, work/life balance, human resource, financial and business growth challenges. These categorised challenges were then aggregated to determine a composite score for further analysis. The results of the analysis are detailed below.

#### 4.4.3.1 General Business Challenges

Participants were asked to respond to six Likert type statements regarding general business challenges which is regarded as challenges applicable to all enterprises doing business within South Africa. Results show that more than half of the respondents agree to five of the six statements with a mean score of 3.67 or more. Overall mean score for business challenges was 22.68 from a possible range of 6 – 30 (Table 4.7). This indicates that small construction firm owners articulate general business challenges as a serious issue that affects them and their business.

Crime related challenges received the highest scoring from all the variables in this category of business challenges. These results are supported by Collinson (2006) whose research on small businesses also found that they were most often victims to robberies. South Africa generally has high crime statistics however the construction industry is plagued since a large portion of work is undertaken in townships and developing areas where there are high incidents of unemployment and poverty. Locals view contractors as soft targets and pilfer anything that is salvageable for sale to scrap yards and other unscrupulous contractors within the area. Therefore it is not surprising that theft is viewed as a serious challenge. Apart from the actual cost suffered to replace the item, contractors also incur insurance, security and repair costs to make good the damages (Mboyane & Ladzani, 2011). Since they are liable for the site until completion, they are also burdened with further associated losses due to time, material and labour overruns which inevitably results in penalties being levied for late completion.

**Table 4.7: Summary of statements regarding general business challenges**

| General Business Challenge | SD % | D % | N % | A % | SA % | Mean (St Dev) |
|---|---|---|---|---|---|---|
| Inflation | 1.6 | 1.6 | 11.1 | 42.9 | 42.9 | 4.24 (0.84) |
| Unemployment | 4.8 | 12.7 | 25.4 | 25.4 | 31.7 | 3.67 (1.19) |
| Crime | 3.2 | 1.6 | 12.7 | 31.7 | 50.8 | 4.25 (0.97) |
| Aids | 4.8 | 9.5 | 17.5 | 34.9 | 33.3 | 3.83 (1.14) |
| Rapidly changing technologies | 11.1 | 25.4 | 31.7 | 20.6 | 11.1 | 2.95 (1.17) |
| New government legislation | 7.9 | 6.3 | 20.6 | 33.3 | 31.7 | 3.75 (1.20) |
| Aggregate mean (St Dev) | 22.68 (4.06) | | | | | |

#SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

Due to the competitiveness within the construction sector to secure work, it is common for Contractors not to price for this risk since it would increase their pricing and result in them being unsuccessful in winning the bid.

4.4.3.2 Construction industry challenges

With regard to specific challenges facing the construction industry, two Likert type statements are posed to the participants. It is found that the average score for these two statements are 4.08 and 3.79 (table 4.8). This indicates that respondents view these variables as major challenges.

The majority of respondents, constituting 77.80%, responded positively that they viewed the construction market as being of limited size. Many industry commentators such as Databuild, agree with this view and there is strong criticism levelled at Government since it is argued that lengthy bureaucratic procedures and the slow rollout of national projects are to blame (Databuild, 2013). However they also cite the fact that construction projects are subjected to the volatility of the

national economy which generally booms in a strong climate. South Africa has still not fully recovered from the 2008 global economic crisis and this is also contributing to the poor roll-out of construction work.

**Table 4.8: Summary of statements regarding construction industry specific challenges**

| **Construction industry specific challenges[#]** | **SD %** | **D %** | **N %** | **A %** | **SA %** | **Mean (St Dev)** |
|---|---|---|---|---|---|---|
| Limited market size where there are not enough contracts | 0.0 | 7.9 | 14.3 | 39.7 | 38.1 | 4.08 (0.92) |
| Increased competition due to new companies starting up | 3.2 | 9.5 | 27 | 25.4 | 34.9 | 3.79 (1.12) |
| Aggregate mean (St Dev) | 7.87 (1.61) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

4.4.3.3 Personal Skills challenges

Table 4.9 summarises statements regarding personal skills challenges. Results show that the average score for this category of business challenges experienced is below 2.70. These results indicate that more respondents did not view skills challenges as a serious problem and are more neutral on the matter. Overall, the aggregated mean score was 10.76 (range: 4 – 20) therefore also indicating the same.

Most respondents were confident about their personal abilities and skills to manage a business in the construction industry. Their perceived capability is an indication of their belief that they possess the required skills, knowledge and experience and is validated by the fact that a high percentage of the respondents held tertiary qualifications (62.3%). They also possessed extensive experience as the majority

of the respondents (88.90%) indicated that they had been in business for more than five years.

**Table 4.9: Summary of statements regarding personal skills challenges**

| Skills challenges statements[#] | SD % | D % | N % | A % | SA % | Mean (St Dev) |
|---|---|---|---|---|---|---|
| A lack of technical skill | 25.4 | 27 | 9.5 | 28.6 | 9.5 | 2.70 (1.38) |
| Insufficient experience and knowledge about the Construction Industry. | 27.0 | 23.8 | 19.0 | 19.0 | 11.1 | 2.63 (1.34) |
| A lack of management training | 23.8 | 19 | 25.4 | 20.6 | 11.1 | 2.76 (1.33) |
| A lack of management skill | 20.6 | 30.2 | 20.6 | 19.0 | 9.5 | 2.67 (1.27) |
| Aggregate mean (St Dev) | 10.76 (5.17) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

According to the GEM Report (2004), it is interesting to note that individuals who have high perceived capabilities are regarded as being four to six times more likely to become entrepreneurs (Herrington, et al., 2009) and this bodes well for the respondents to this study.

4.4.3.4 Management challenges

Statements regarding management challenges are summarised in table 4.10. Results show that participants scored an average of 3.38 or more for each of the statements. These indicate that they were carrying out their work routinely and did not view themselves as being overly pressurised in executing their management functions. For example, 81% (51 respondents) of the sample agreed/strongly agreed that they constantly try to involve employees in planning and decision making and 86% (54 respondents) similarly responded that they set time apart each day/week to plan and prioritise activities for the day/week. The respondents are confident in their ability to manage their companies

**Table 4.10: Summary of statements regarding management challenges**

| Management challenges statements[#] | SD % | D % | N % | A % | SA % | Mean (St Dev) |
|---|---|---|---|---|---|---|
| I set time apart each day/week to plan and prioritise activities for the day/week | 0.0 | 11.1 | 3.2 | 46.0 | 39.7 | 4.14 (0.93) |
| Daily routine/operational tasks tend to take up most of my time | 0.0 | 12.7 | 15.9 | 44.4 | 27.0 | 3.86 (0.96) |
| I constantly try to involve employees in planning and decision making | 0.0 | 4.8 | 14.3 | 33.3 | 47.6 | 4.24 (0.87) |
| I prefer to do most of the work as I want to be in control of what is happening in my business | 6.3 | 14.3 | 28.6 | 36.5 | 14.3 | 3.38 (1.10) |
| Aggregate mean (St Dev) | 15.62 (2.59) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

Results indicate that 80.9% of the respondents have strong delegation skills and 85.7% involve a lot of planning in the running of their business. The results show that only 51% of the respondents preferred to do most of the work themselves. This indicates that delegation of duties seems to be the preferred method of running the business.

According to studies by Thornhill and Amit (2003), they argue that SME owners often do not have the necessary experience or training to manage their businesses. Ihua (2009), adds that lack of management skills results in poor management decisions being taken by SME owners and this is identified as a serious constraint on the growth of small businesses. However, the respondents to this study indicate that they have strong planning and management skills as evidenced by the above results. Based on their business experience (through number of years in business) and their education levels, the evidence suggests that management challenges is not an area of concern for them in operating their business.

4.4.3.5 Work/life balance challenges

With regard to work/life balance, 60% (38) of respondents indicate that their family/friends regularly complain that they spend too much time at work and 46% (29) report that since having their own business, their social and family life has suffered due to time pressure (Table 4.11).

**Table 4.11: Summary of statements regarding work/life balance challenges statements**

| **Work/life balance challenges statements[#]** | **SD %** | **D %** | **N %** | **A %** | **SA %** | **Mean (St Dev)** |
|---|---|---|---|---|---|---|
| My family/friends regularly complain that I spend too much time at work | 9.5 | 9.5 | 20.6 | 38.1 | 22.2 | 3.54 (1.22) |
| Since having my own business, my social and family life has suffered due to time pressure | 7.9 | 25.4 | 20.6 | 28.6 | 17.5 | 3.22 (1.24) |
| My business consumes my whole life | 7.9 | 31.7 | 25.4 | 17.5 | 17.5 | 3.05 (1.24) |
| I regularly suffer from ill health | 49.2 | 33.3 | 9.5 | 7.9 | 0.0 | 1.76 (0.93) |
| Aggregate mean (St Dev) | 11.57 (3.67) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

The overall aggregated mean score for this category of business challenges is 11.57 out of a possible scoring of 1 to 20. Three of the four items from this category scored high responses and these were related to SME owners spending most of their time and attention on their business to the neglect of their family and friends.

Although these results are disconcerting it is however regarded as a common trend among SME owners. The Wall Street Journal (2013) interviewed prominent businessmen from industry and discussed the problem of work-life balance. It was revealed that SMEs generate satisfaction from their business and eventually it becomes their way of life. The business becomes interwoven with family time eg.

vacations, etc. which entrepreneurs need to accept. Technology is also viewed as the contributing factor since cellular phones and emails allows business owners to be constantly “on the job”. This can be attributable for complaints from family and friends that SME owners are consumed by their business.

4.4.3.6 Human resource challenges

Statements regarding human resource challenges are shown in table 4.12. It is found that the average score for all the statements are 3.59 or higher. These results indicate that more participants agree that the challenges identified in this category is viewed as serious challenges. For example, 74% and 73% reported that low labour productivity and new labour laws respectively are human resources challenges for their company.

**Table 4.12: Summary of statements regarding human resource challenges**

| **Human resource challenges[#]** | **SD %** | **D %** | **N %** | **A %** | **SA %** | **Mean (St Dev)** |
|---|---|---|---|---|---|---|
| An inability to attract and find suitable staff | 0.0 | 11.1 | 20.6 | 44.4 | 23.8 | 3.81 (0.93) |
| Low labour productivity | 3.2 | 7.9 | 14.3 | 42.9 | 31.7 | 3.92 (1.04) |
| New labour laws | 3.2 | 6.3 | 17.5 | 42.9 | 30.2 | 3.90 (1.01) |
| High labour turnover | 6.3 | 9.5 | 23.8 | 39.7 | 20.6 | 3.59 (1.12) |
| Poor labour relations | 4.8 | 9.5 | 20.6 | 46 | 19 | 3.65 (1.05) |
| Aggregate mean (St Dev) | 18.87 (4.02) | | | | | |

[#]SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

The human resource challenge, specifically the inability to attract suitable staff, is a major problem and forms the corner-stone of the challenges within the construction sector. Without properly trained and adequately skilled staff undertaking specialised

construction work, contractors are doomed to perform shoddy work and over-run time and budgets. Herrington, et al. (2009) argue that South Africa's skills shortage is due to the workforce being inadequately educated and trained. They further contend that the quality of primary and secondary education is dismal and therefore a contributing factor to the untrained workforce.

4.4.3.7 Financial Challenges

With regard to financial challenges, the majority of the participants agreed / strongly agreed that heavy operating expenses (73%) and poor debt control (78%) were challenges in their businesses (Table 4.13). Difficulty in obtaining finance/credit was viewed as a challenge by less than half (47.60%) of the respondents who either agreed / strongly agreed with this statement. This indicates that government's drive to provide financial assistance to SMEs has not entirely reached out to all SMEs. Therefore more training and SME education needs to be provided so entrepreneurs are fully aware of all development initiatives, specifically financing assistance, that are accessible to them.

**Table 4.13: Summary of statements regarding financial challenges**

| **Financial challenges** | **SD %** | **D %** | **N %** | **A %** | **SA %** | **Mean (St Dev)** |
|---|---|---|---|---|---|---|
| Difficulty in obtaining finance/credit | 7.9 | 15.9 | 28.6 | 25.4 | 22.2 | 3.38 (1.22) |
| Heavy operating expenses | 4.8 | 3.2 | 19 | 47.6 | 25.4 | 3.86 (1.00) |
| Poor collection of money from Clients (eg. late payments, etc.) | 7.9 | 3.2 | 11.1 | 38.1 | 39.7 | 3.98 (1.17) |
| Aggregate mean (St Dev) | 11.22 (2.71) | | | | | |

#SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

The overall aggregated mean score for financial challenges was 11.22 from a range of 1 to 15 points and this indicates that SME business owners view this as a major challenge in their business.

Studies by Bowen, et al. (2009) confirm our results that financial challenges is one of the major business constraints which commonly affects SME businesses and negatively affects small business growth. This is also corroborated by Herrington, et al. (2009) and they also contribute the failure of small businesses to this challenge. The SME construction businesses very often sub-contract work from larger contractors instead of dealing directly with the client. They may therefore be queued for payment if the main contractor is not paid timeously which augments their challenge. SMEs that cannot control their finances are inevitably doomed to stagnation or failure since it is argued that all strategic intentions and plans cannot be implemented without adequate resources, of which finance is deemed a primary resource (Tang, et al., 2008).

#### 4.4.3.8 Business Growth Challenges

With regard to business growth, there were four positively phrased statements on the questionnaire. Higher scoring indicates that these variables are not challenges for the respondents. From the results obtained, a majority of the respondents indicate that they did experience business growth (Table 4.14) since more than half of the respondents mention that their business experienced growth in turnover (57%) and growth in employees (60%) in the last two years. It is interesting to note that 53% of the respondents indicate that they regard their business as being very successful compared to only 6.3% indicating that their businesses are unsuccessful.

Most respondents to this study indicate that they have experienced business success either through turnover or employee growth. With regard to profitability, 47.6% remained neutral whereas 33.3% either agreed / strongly agreed. Profitability is subjective therefore it can be assumed that the respondents are, at the very worst, breaking even or meeting their profitability expectations.

**Table 4.14: Summary of statements regarding business success**

| Statements regarding Business Success | SD % | D % | N % | A % | SA % | Mean (St Dev) |
|---|---|---|---|---|---|---|
| My business has experienced growth in turnover in the last two years | 0 | 7.9 | 34.9 | 39.7 | 17.5 | 3.67 (0.86) |
| My business has experienced growth in employees in the last two years | 3.2 | 11.1 | 25.4 | 44.4 | 15.9 | 3.59 (0.99) |
| My business is very profitable | 6.3 | 12.7 | 47.6 | 31.7 | 1.6 | 3.10 (0.87) |
| I regard my business as very successful | 0 | 6.3 | 41.3 | 39.7 | 12.7 | 3.59 (0.80) |
| **Aggregate mean (St Dev)** | 13.95 | | | | | |

#SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, St Dev = Standard Deviation

## 4.5 Inferential Statistics

Inferential statistics was used to determine the relationship which existed between the study variables and dimensions as well as to identify the level of influence each construct of entrepreneurial orientation had on business challenges.

### 4.5.1 Proposition 1: Correlation of Innovation and Business Challenges

The proposition developed to evaluate the relationship between innovativeness and business challenges is as follows:

PROPOSITION 1. *Higher actualisation of innovativeness will result in an entrepreneur articulating lower levels of business challenges.*

In order to test this relationship, Students t-test is carried out to compare their mean scores. Results indicate that the overall mean score for business challenges (3.17) was significantly lower than that of average innovation scores (3.59) ($p < 0.001$) (Table 4.15). This suggests that respondents with higher levels of innovativeness articulated fewer business challenges therefore validating our proposition.

**Table 4.15: Mean comparison between business challenges and innovativeness**

Two-sample t test with equal variances

| Variable | Obs | Mean | Std. Err. | Std. Dev. | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| var 2 | 63 | 3.587302 | 0.069781 | 0.55387 | 3.447811 | 3.726792 |
| var 13 | 63 | 3.169643 | 0.046141 | 0.366233 | 3.077408 | 3.261877 |
| Combined | 126 | 3.378472 | 0.0456561 | 0.512488 | 3.288113 | 3.468831 |
| diff | | 0.417659 | 0.0836563 | | 0.2520794 | 0.583238 |

diff = mean (var 2) - mean (var 13) t = 4.9926
Ho: diff = 0 degrees of freedom = 124
Ha: diff < 0 Ha : diff != 0 Ha : diff > 0
Pr (T < t) = 1.0000 Pr ( ITI > ltl) = 0.0000 Pr (T > t) = 0.0000

Innovativeness, as a construct of entrepreneurial orientation, can therefore be regarded as an important attribute required by entrepreneurs to reduce business challenges. Although the construction sector is not generally viewed as being very innovative, it may be argued that innovation can be applied to many aspects of the business eg. administration, costing, tendering, etc. Entrepreneurs are encouraged to be innovative to differentiate themselves from their competitors in order to acquire a competitive edge. Monotonous, run-of-the-mill type work methods serve only to constrain entrepreneurs. Those that do not embrace technology therefore run the risk of limiting their ability to be more productive and possibly more profitable.

### 4.5.2 Proposition 2: Correlation of Proactiveness and Business Challenges

The proposition developed to examine the relationship between proactiveness and business challenges is as follows:

PROPOSITION 2. *Higher actualisation of proactiveness will result in an entrepreneur articulating lower levels of business challenges.*

By applying the Students t-test to evaluate the mean scores between proactiveness and business challenges, we are able to understand the relationship that exists. Results highlight that overall mean score for business challenges (3.17) is

significantly lower than the overall score for pro-activeness (4.34) ($p < 0.001$) (Table 4.16).

**Table 4.16: Mean comparison between business challenges and pro-activeness**

Two-sample t test with equal variances

| Variable | Obs | Mean | Std. Err. | Std. Dev. | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| var 3 | 63 | 4.344444 | 0.0589331 | 0.467767 | 4.226639 | 4.46225 |
| var 13 | 63 | 3.169643 | 0.046141 | 0.366233 | 3.077408 | 3.261877 |
| Combined | 126 | 3.757044 | 0.0644177 | 0.723087 | 3.629553 | 3.884534 |
| diff | | 1.174802 | 0.0748472 | | 1.026658 | 1.322945 |

diff = mean (var 3) - mean (var 13) t = 15.696

Ho: diff = 0 degrees of freedom = 124

Ha: diff < 0 Ha : diff != 0 Ha : diff > 0

Pr (T < t) = 1.0000 Pr (|T| > |t| ) = 0.0000 Pr (T > t) = 0.0000

This indicates that respondents who have a high inclination for being pro-active articulate fewer business challenges and confirms that our proposition is valid. It is argued that SME business owners that are proactive will anticipate business challenges before they manifest as genuine threats to their business. Proactiveness will enable them to act on the challenges before they can impact on the business.

### 4.5.3 Proposition 3: Correlation of Risk-taking and Business Challenges

The proposition developed to evaluate the relationship between risk-taking and business challenges is:

PROPOSITION 3. *Higher actualisation of risk-taking will result in an entrepreneur articulating lower levels of business challenges.*

When comparing between business challenges and risk taking, it is found that the mean score for risk taking ($m = 3.62$) was significantly higher than that of business challenges ($m = 3.17$) ($p < 0.001$) (Table 4.17). This indicates that respondents who had a high inclination for risk-taking articulated fewer challenges and therefore validates our proposition.

**Table 4.17: Mean comparison between business challenges and risk taking**

Two-sample t test with equal variances

| Variable | Obs | Mean | Std. Err. | Std. Dev. | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| var1 | 63 | 3.624603 | 0.0841918 | 0.668252 | 3.456306 | 3.7929 |
| var13 | 63 | 3.169643 | 0.046141 | 0.366233 | 3.077408 | 3.261877 |
| Combined | 126 | 3.397123 | 0.0519602 | 0.583251 | 3.294287 | 3.499959 |
| diff | | 0.45496 | 0.0960066 | | 0.2649365 | 0.644984 |

diff = mean (var 1) - mean (var 13) t = 4.7388

Ho: diff = 0 degrees of freedom = 124

Ha: diff < 0 Ha : diff = 0 Ha : diff > 0

Pr (T < t) = 1.0000 Pr (|T| > |t| ) = 0.0000 Pr (T > t) = 0.0000

SME business owners are inherently risk-takers since they have chosen to experience the challenges associated with operating their own business compared to the relative security of being an employee. They therefore have a keener tendency to consider risky decisions which allows them to pursue high risk / high reward strategies for their business. Risk-taking has been described in the literature review to be associated into every phase of the business and these include financial, technical, marketing and personal aspects. It is argued that business challenges are also existent in similar aspects of the business therefore business challenges and risk are interwoven. Wherever a business challenge is identified, the SME owner has to implement counter-measures or strategies to mitigate the challenge. As this study shows, SME owners that have strong tendencies for risk-taking will embrace business challenges as opportunities and therefore have a lower perception of challenges.

### 4.5.4 Proposition 4: Correlation of Entrepreneurial Orientation and Business Challenges

This study primarily seeks to establish the influence of SME owner's entrepreneurial orientation on their perceived business challenges. Entrepreneurial orientation is defined along the constructs of innovativeness, proactiveness and risk-taking. In order to establish the overall entrepreneurial orientation of the respondents, the individual scores of each dimension is combined into a single score to develop a unidimensional measure thereby allowing the relationship between entrepreneurial

orientation and perceived business challenges to be evaluated. To achieve this, the following proposition has been advanced:

PROPOSITION 4. *Higher actualisation of entrepreneurial orientation will result in an entrepreneur articulating lower levels of business challenges*

Students t-test is carried out to compare the overall mean scores. Results show that the mean score for business challenges (3.17) is significantly lower than that of overall entrepreneurial orientation (3.82) ($p < 0.001$) (Table 4.18). This indicates that respondents who exhibit high actualisation of overall entrepreneurial orientation articulate fewer business challenges thereby supporting our proposition.

**Table 4.18: Mean comparison between overall business challenges and overall Entrepreneurial Orientation**

Two-sample t test with equal variances

| Variable | Obs | Mean | Std. Err. | Std. Dev. | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| var4 | 63 | 3.825397 | 0.0496773 | 0.394301 | 3.726093 | 3.9247 |
| var13 | 63 | 3.169643 | 0.046141 | 0.366233 | 3.077408 | 3.261877 |
| Combined | 126 | 3.49752 | 0.0428425 | 0.480906 | 3.588679 | 3.75826 |
| diff | | 0.655754 | 0.068 | | 0.521558 | 0.789949 |

diff = mean (var 4) - mean (var 13) t = 9.6719

Ho: diff = 0 degrees of freedom = 124

Ha: diff < 0 Ha : diff = 0 Ha : diff > 0

Pr (T < t) = 1.0000 Pr (|T| > |t|) = 0.0003 Pr (T > t) = 0.0000

Entrepreneurial orientation is widely promoted in entrepreneurship literature to be the antidote to business challenges. This research supports this claim and finds that the constructs of innovativeness, proactiveness and risk-taking empower SME owners to embrace business challenges as business opportunities. This is established on the results of this study which demonstrates that all the constructs of entrepreneurial orientation are positively correlated to the reduced articulation of business challenges that SME owners experience.

## 4.6 SUMMARY

The results of the responses to this study has been presented and analysed. Respondents indicate that they have a high level of entrepreneurial orientation and these were measured along the constructs of proactiveness, risk-taking and innovativeness. The level of business challenges experienced was also presented and in order to draw a correlation with entrepreneurial orientation, Student's t-test was used. Results showed that the relationship between entrepreneurial orientation and business challenges was statistically significant. The individual constructs of entrepreneurial orientation also correlated with the articulation of business challenges experienced and is discussed further in Chapter 5.

# CHAPTER FIVE

## Conclusions and Recommendations

### 5.1 Introduction

This chapter summarises the findings of the study from chapter four and draws conclusions on the aims and objectives of this study. The benefits attained from this study are also evaluated together with the limitations identified. Recommendations for future studies are also presented.

### 5.2 Outcomes of the study

The prevalent high failure rate of SME construction companies requires to be urgently addressed. In this regard, entrepreneurship literature encourages the development of entrepreneurial orientation amongst entrepreneurs due to its positive association on business success and performance. Based on the aim of this study, the entrepreneurship profile of SME construction business owners operational within the eThekwini area is profiled through the use of Questionpro software to conduct a survey amongst 106 contractors within CIDB grading 4 to 7 with a response rate of 59%. Their actualisation of entrepreneurial orientation and its association with their perceptions of business challenges experienced is measured.

Entrepreneurial orientation is determined on a multidimensional and a unidimensional level for correlation analysis with the owner's articulation of business challenges. It is established through statistical analysis using Student's t-test methods that on a unidimensional level, business owners had higher inclinations of entrepreneurial orientation (M=3.83) and lower levels of perceived business challenges (M=3.17). This study also reveals that eThekwini-based contractors exhibit high actualisation of entrepreneurial orientation tendencies as measured multi-dimensionally through the constructs of innovativeness (M=3.59), proactiveness (M=4.54) and risk-taking (M=3.62). Based on these results, the research propositions are accepted that:

- Higher actualisation of innovativeness will result in an entrepreneur articulating lower levels of business challenges.
- Higher actualisation of proactiveness will result in an entrepreneur articulating lower levels of business challenges.
- Higher actualisation of risk-taking will result in an entrepreneur articulating lower levels of business challenges.
- Higher actualisation of entrepreneurial orientation will result in an entrepreneur articulating lower levels of business challenges.

### 5.3 Benefits of the research

This study provides insight into the entrepreneurial orientation inclination of eThekwini-based SME construction companies. It has also served to identify the level of business challenges these organisations experience and therefore closes the gap with regard to the lack of research in this arena. This study's assessment of the relationship between entrepreneurial orientation and business challenges suggest that local SME construction companies perceive lower levels of business challenges due to their high inclination towards entrepreneurship and entrepreneurial orientation. Therefore it is deduced that they exhibit high levels of innovativeness and proactiveness thereby contributing to business success which has positive repercussions for economic prosperity on both a local and national level.

The primary step to overcome business challenges is to identify and understand the challenges experienced. This study has provided an indication of the business challenges SME contractors experience and the following challenges, as evaluated by this study, are ranked based on the results attained:

1. Industry specific challenges is ranked as the biggest challenge that affect SME contractors. This is based on issues relating to contractors operating within a limited market size and affected by increased competition from new entrants.
2. General business challenges is also problematic. The predominant issues such as inflation, crime and continuous change in Government legislature are contributing factors.

3. Work / life balance challenges is identified as a common problem and suggests that SME contractors engage a lot of time and effort into their businesses to the detriment of their personal life and family responsibilities.
4. Human resource and financial challenges ranked equally. These involved issues such as low labour productivity and the inability to employ suitable staff. SME contractors also identified the collection of monies from Clients together with high operational costs as being a challenge.

It is accepted that the outcome of this study may be of limited generalisability since it has focussed only on SME contractors in the eThekwini region, however it does provide all stakeholders with a benchmark for future longitudinal studies. It is envisaged that entrepreneurial orientation studies can be replicated on the entire construction industry and other sectors that involve the development of SME enterprises. As promoted in this study, stakeholders will be able to foster entrepreneurial growth and business success among SMEs by focussing on the activities that stimulate entrepreneurial orientation in small business owners. The constructs of innovativeness, proactiveness and risk-taking needs to be inculcated into entrepreneurship development and training to develop entrepreneurs that seek to improve their performance. It is also prudent to use these constructs to identify potential entrepreneurs and encourage them to enter the industry. Ultimately, this approach will improve the culture of entrepreneurship and contribute to the wellbeing and success of entrepreneurs.

Stakeholders responsible for the development of SME contractors are therefore encouraged to adopt more emphasis on entrepreneurial orientation, specifically its constructs of innovativeness, risk-taking and proactiveness into SME entrepreneurial development programmes. Since the majority of the entrepreneurs that participated in this research indicate that they have some form of tertiary education, it is suggested that these institutions also focus on entrepreneurial development.

Due to the influence of entrepreneurial orientation on SME business success, clients that seek to engage the services of SME contractors are encouraged to incorporate

entrepreneurial orientation evaluations into their assessments in order to identify best suited candidates. This will enable successful ventures to be formed and thus improved business outcomes for both the Client and the SME Contractor.

### 5.4 Recommendations to address business challenges

The literature reviewed in this study shows the need for entrepreneurial orientation in order to foster improved business success. Results indicate that eThekwini-based SME construction companies have a high inclination towards entrepreneurial orientation and its correlation with the business challenges they experience is inversely proportional and therefore an avenue for future investigation to augment improvement. In this regard, stakeholders are important role-players to enable the adoption and promotion of entrepreneurial orientation amongst SME contractors. This study suggests the following initiatives that can be employed:

- Entrepreneurial orientation needs to be included in SME programmes that serve to promote entrepreneurial development. The constructs of proactiveness, risk-taking and innovation need to be expanded upon and inculcated to provide entrepreneurs with attributes to address relevant business challenges. This strategy can be adopted at tertiary institutions and SME development initiatives involving both Government and private programmes.

- Policy-makers need to monitor business challenges experienced by SME contractors and facilitate an environment that is conducive for their development and success. It is advocated that there needs to be a policy shift from introducing SMEs into the market. Instead more focus is required on assisting existing SMEs to overcome their challenges by creating support business units. These units can serve to be industry specific thereby being more focussed and relevant. Challenges that have been identified such as limited work availability, access to finance and skills resourcing needs to be driven and addressed by policy-makers at a national level.

- Entrepreneurial orientation evaluations need to be incorporated into screening tests of potential SMEs looking at entering the industry. Only SMEs that satisfy entrepreneurial orientation tendencies should be advanced for financing or work opportunities while those that do not satisfy the criteria are channelled for developmental training. This will regulate the influx of new companies and promote business success amongst existent SMEs while still promoting SME development and competitive growth. It is imperative that this process does not restrict the influx of new entrepreneurs since this is an important requirement to stimulate innovation and competition within the industry.

The above suggestions are advocated to increase the business success rate of SMEs in the construction industry thereby contribute to the country's economic growth whilst simultaneously reducing the high unemployment rate. Focussing on entrepreneurial success through the promotion of entrepreneurial orientation and the elimination and reduction of the perceived business challenges is arguably the most effective strategy available.

### 5.5 Limitations of the study

The following limitations to this study has been identified:

- The limited time factor to undertake the study reduced the scope of the study to Durban based SME contractors (registered on the CIDB database). This study is therefore not fully representative of the entire construction industry and it is possible that cultural and demographic tendencies peculiar to the respondents may have influenced the outcomes of the study.

- This study utilised a quantitative approach through the dissemination of a questionnaire to gather information from respondents. This resulted in a response rate of only 59%.

- Entrepreneurial orientation was evaluated on three constructs of proactiveness, risk-taking and innovation. This study neglected the effects of other constructs such as autonomy and competitive aggressiveness

(Lumpkin & Dess, 1996) which could alter the entrepreneurial orientation profiling of the respondents.

- The articulation of business challenges by SME contractors was evaluated on a structured questionnaire that did not allow respondents to input their own challenges. It is possible that a more comprehensive understanding could be generated through soliciting information from open-ended questions and interviews.

### 5.6 Recommendations to overcome the limitations

The following recommendations are proposed to address the limitations identified in this study:

- This study focussed only on Durban based SME contractors. A diverse sample incorporating all SMEs in the construction industry is more appropriate to solicit information to identify differences. The outcomes will enable a more comprehensive understanding of the influence of entrepreneurial orientation on business challenges and facilitate a uniform approach towards the mitigation thereof.

- Longitudinal studies to evaluate business challenges will be more effective and will adapt for the continuous changes in Government policies. This study provided a snapshot of business challenges experienced in the current era and is likely to evolve as legislation changes.

- The survey could be redesigned to include all constructs of entrepreneurial orientation in an effort to fully identify the pertinent ones that contribute to reducing perceived business challenges. The theme of entrepreneurial orientation can be further widened to include issues such as entrepreneurial traits and development to facilitate entrepreneurial actualisation. Environmental influences that affect entrepreneurial orientation needs to be identified to be incorporated into training programmes.

- Concurrent qualitative research needs to be designed and implemented in order to solicit first-hand information from SMEs about the challenges they experience. It is accepted that business challenges are wide and varied and not company specific, therefore further in-depth and focussed research is warranted to obtain a comprehensive understanding for the formulation of approaches to alleviate challenges. This will also facilitate a platform for successful strategies to be identified for roll out to struggling SMEs.

- This study may also be subjected to the problems of aggregation of data eg. companies that had greater experience, some more than 20 years in existence, were aggregated with companies that were fairly new. It is recommended that future research adopts an approach that avoids this issue in order to gather more useful results.

- It is recommended that a more robust study be undertaken based on the experimental design of this study. SME owner's articulation of business challenges needs to be evaluated between those with high and low entrepreneurial orientation actualisation. This control group testing would enable us to develop a keener understanding of entrepreneurial orientation and its influence on business owner's articulation of business challenges.

### 5.7 Summary

This study has evaluated the entrepreneurial orientation of Durban-based SME contractors and their articulation of business challenges. It has emerged from this study that eThekwini-based construction contractors have high actualisation of entrepreneurial orientation and this correlates with them articulating low levels of business challenges. Entrepreneurial orientation therefore serves as a precursor for the establishment of enterprises that can cope with business challenges suggesting that they will have an increased probability of attaining business success. Despite this finding, this study recommends that stakeholders adopt policies and strategies to alleviate the high levels of business challenges prevalent in this sector and create an environment that fosters entrepreneurial growth and economic success.

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Appendix 1.

**UNIVERSITY OF KWAZULU-NATAL**
**GRADUATE SCHOOL OF BUSINESS & LEADERSHIP**

**MBA Research Project**
**Reseacrcher: Mr D. Anamalay (084 235 2211)**
**Supervisor: Professor S. Cassim (031 260 1479)**
**Research Office: Ms. P. Ximba**

**Entrepreneurial Orientation and Business Challenges – A study of eThekwini-based Construction Companies.**

Dear Participant,

I am a final year MBA student at the UKZN and currently completing the dissertation module for the course under the supervision of Professor Shahida Cassim from the Graduate School of Business and Leadership.

This questionnaire is designed to study entrepreneurial orientation and the business challenges experienced amongst SME construction companies in the eThekwini region. The information you provide will enable us to understand whether there is a correlation between entrepreneurial orientation and business challenges. The survey should take you approximately 10 – 15 minutes to complete.

Please note that you are under no obligation to complete the questionnaire as it is voluntary. All responses will be treated with strict confidentiality and should you so desire, you are free to withdraw from the questionnaire at any time.

In this questionnaire, you are asked to indicate what is true for you and your company, so there is no "right" or "wrong" answers. Work as rapidly as you can however please ensure that you answer all questions.

Thank you very much for your participation.

Kind regards

Desigan Anamalay

**QUESTIONAIRE**

This questionnaire is to be answered by the primary decision maker of the business. Please make your appropriate selection by clicking or placing an "X" on the options provided:

***DEMOGRAPHICS***

1. Gender

| Male | Female |
|---|---|
| | |

2. Race:

| Asian | Black | Coloured | White |
|---|---|---|---|
| | | | |

3. Age

| 25 - 34 | 35 - 44 | 45 - 54 | 55 - 64 | Over 64 |
|---|---|---|---|---|
| | | | | |

4. How many years has your company been in business?

| 0 - 5 | 6 - 10 | 10 - 15 | 16 - 20 | 21 - 25 | 26 - 30 | 31 - 35 |
|---|---|---|---|---|---|---|
| | | | | | | |

5. How does your business operate?

| | |
|---|---|
| Sole trader | |
| Partnership | |
| Private company | |
| Close corporation | |
| Trust | |

6. How many employees are there in your business?

| 0 - 5 | 6 - 20 | 21 - 50 | 51 - 200 | Over 200 |
|---|---|---|---|---|
| | | | | |

7. What was your estimated turnover for the last financial year? (Please estimate)

| | |
|---|---|
| Less than R 200 000 | |
| R 200 001 – R 3 000 000 | |
| R 3 000 001 – R 6 000 000 | |
| R 6 000 001 + R 26 000 000 | |
| More than R 26 000 000 | |

***8.*** What is your highest level of education?

| None | Matric | Diploma | Degree | Other |
|---|---|---|---|---|
| | | | | |

***EO. Measurement Scale and Items for Entrepreneurial Orientation***

Kindly rate the following statements about your management style on a scale of 1 to 5 by placing an "X" on your selection:

9. I like to take bold action by venturing into the unknown.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

10. I am willing to invest a lot of time and/or money on something that might yield a high return.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

11. I tend to act "boldly" in situations where risk is involved.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

12. I often like to try new and unusual activities that are not typical but not necessarily risky.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

13. In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

14. I prefer to try my own way when learning new things rather than doing it like everyone else.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

15. I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

16. I usually act in anticipation of future problems, needs or changes.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

17. I tend to plan ahead on projects.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

18. I prefer to "step-up" and get things going on projects rather than wait for someone else to do it.

| **Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | | | | | | |

19. The following are macro environmental issues that generally affect most businesses in South Africa. How do you rank these issues as having a negative influence on the success of your business:

(1) Disagree strongly (2) disagree (3) neutral (4) agree (5)strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 19.1 Inflation | 1 | 2 | 3 | 4 | 5 |
| 19.2 Unemployment | 1 | 2 | 3 | 4 | 5 |
| 19.3 Crime | 1 | 2 | 3 | 4 | 5 |
| 19.4 Aids | 1 | 2 | 3 | 4 | 5 |
| 19.5 Rapidly changing technologies | 1 | 2 | 3 | 4 | 5 |
| 19.6 New government legislation | 1 | 2 | 3 | 4 | 5 |

20. How do you rank the following construction industry-related issues as having a negative influence on the success of your business:

(1) Disagree strongly (2) disagree (3) neutral (4) agree (5)strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 20.1 Limited market size where there are not enough contracts. | 1 | 2 | 3 | 4 | 5 |
| 20.2 Increased competition due to new companies starting up. | 1 | 2 | 3 | 4 | 5 |
| 20.3 Lack of knowledge of competitors | 1 | 2 | 3 | 4 | 5 |
| 20.4 Lack of knowledge of the market | 1 | 2 | 3 | 4 | 5 |

21. How do you rank the following personal issues as having a negative influence on the success of your business?

(1) Disagree strongly (2) disagree (3) neutral (4) agree (5)strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 21.1 A lack of technical skill | 1 | 2 | 3 | 4 | 5 |
| 21.2 Insufficient experience and knowledge about the Construction Industry. | 1 | 2 | 3 | 4 | 5 |
| 21.3 A lack of management training | 1 | 2 | 3 | 4 | 5 |
| 21.4 A lack of management skill | 1 | 2 | 3 | 4 | 5 |

22. Indicate to what extent you **agree** with the following statements relating to **management issues**.

(1) disagree strongly (2) disagree (3) neutral (4) agree (5) strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 22.1 I set time apart each day/week to plan and prioritise activities for the day/week | 1 | 2 | 3 | 4 | 5 |
| 22.2 I tend to neglect planning due to time pressure | 1 | 2 | 3 | 4 | 5 |
| 22.3 Daily routine/operational tasks tend to take up most of my time | 1 | 2 | 3 | 4 | 5 |
| 22.4 I am able to spend my time more effectively if I plan better | 1 | 2 | 3 | 4 | 5 |
| 22.5 I view failure as a valuable learning experience | 1 | 2 | 3 | 4 | 5 |
| 22.6 I constantly try to involve employees in planning and decision making | 1 | 2 | 3 | 4 | 5 |
| 22.7 I prefer to do most of the work as I want to be in control of what is happening in my business | 1 | 2 | 3 | 4 | 5 |
| 22.8 I regard change as an integral part of running a business | 1 | 2 | 3 | 4 | 5 |

23. Indicate to what extent you agree with the following statements.

(1) disagree strongly (2) disagree (3) neutral (4) agree (5) strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 23.1 My family/friends regularly complain that I spend too much time at work | 1 | 2 | 3 | 4 | 5 |
| 23.2 Since having my own business, my social and family life has suffered due to time pressure | 1 | 2 | 3 | 4 | 5 |
| 23.3 My business consumes my whole life | 1 | 2 | 3 | 4 | 5 |
| 23.4 I regularly suffer from ill health | 1 | 2 | 3 | 4 | 5 |

24. How do you rank the following **human resource** issues as having a negative influence on the success of your business?

(1) disagree strongly (2) disagree (3) neutral (4) agree (5) strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 24.1 An inability to attract and find suitable staff | 1 | 2 | 3 | 4 | 5 |
| 24.2 Low labour productivity | 1 | 2 | 3 | 4 | 5 |
| 24.3 New labour laws | 1 | 2 | 3 | 4 | 5 |
| 24.4 High labour turnover | 1 | 2 | 3 | 4 | 5 |
| 24.5 Poor labour relations | 1 | 2 | 3 | 4 | 5 |
| 24.6 Poor staff planning | 1 | 2 | 3 | 4 | 5 |
| 24.7 Poorly trained employees | 1 | 2 | 3 | 4 | 5 |

25. How do you rank the following **financial** issues as having a negative influence on the success of my business?

(1) disagree strongly (2) disagree (3) neutral (4) agree (5) strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 25.1 Difficulty in obtaining finance/credit | 1 | 2 | 3 | 4 | 5 |
| 25.2 Failure to do financial planning/budgeting | 1 | 2 | 3 | 4 | 5 |
| 25.3 Failure to analyse financial information | 1 | 2 | 3 | 4 | 5 |
| 25.4 Inadequate bookkeeping | 1 | 2 | 3 | 4 | 5 |
| 25.5 Insufficient knowledge of bookkeeping | 1 | 2 | 3 | 4 | 5 |
| 25.6 Heavy operating expenses | 1 | 2 | 3 | 4 | 5 |
| 25.7 Poor cash flow management | 1 | 2 | 3 | 4 | 5 |
| 25.8 Poor credit management | 1 | 2 | 3 | 4 | 5 |
| 25.9 Poor collection of money from Clients (eg. late payments, etc.) | 1 | 2 | 3 | 4 | 5 |

26. Indicate to what extent you **agree** with the following statements.

(1) disagree strongly (2) disagree (3) neutral (4) agree (5) strongly agree

| | | | | | |
|---|---|---|---|---|---|
| 26.1 My business has experienced growth in turnover in the last two years | 1 | 2 | 3 | 4 | 5 |
| 26.2 My business has experienced growth in employees in the last two years | 1 | 2 | 3 | 4 | 5 |
| 26.3 My business is very profitable | 1 | 2 | 3 | 4 | 5 |
| 26.4 I regard my business as very successful | 1 | 2 | 3 | 4 | 5 |

Thank you very much for your time and corporation. Kindly check through to ensure that you have completed all questions before submitting this questionnaire.

Kind regards

Des Anamalay

Appendix .2.

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

6 May 2013

**Mr Desigan Anamalay 210517433**
**Graduate School of Business and Leadership**
**Westville Campus**

Dear Mr Anamalay

**Protocol reference number: HSS/0267/013M**
**Project title: Entrepreneurial Orientation and Business Challenges – A study of eThekwini-based Construction Companies**

**EXPEDITED APPROVAL**

I wish to inform you that your application has been granted Full Approval through an expedited review process.

**Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.**

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
**Professor Steven Collings (Chair)**

**/pm**

cc Supervisor: Prof S Cassim
cc Academic Leader: Dr E Munapo
cc School Admin.: Ms Wendy Clarke

**Humanities & Social Sc Research Ethics Committee**
**Professor S Collings (Chair)**
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**Founding Campuses:** Edgewood Howard College Medical School Pietermaritzburg Westville