THE IMPACT OF GOVERNMENT- DRIVEN INITIATIVES FOR THE SUCCESS OF SMALL MEDIUM ENTERPRISES (SMES) IN KWAZULU–NATAL, SOUTH AFRICA

By

Silindile Precious Nhlumayo

Submitted in fulfilment of the academic requirements of

Master of Science: Construction Management

Construction Studies

School of Engineering

College of Agriculture, Engineering and Science

University of KwaZulu-Natal

Howard

South Africa

30 November 2017

PREFACE

The research contained in this dissertation was completed by the candidate while based in the Discipline of Construction Studies, School of Engineering of the College of Agriculture, Engineering and Science, University of KwaZulu-Natal, Howard, South Africa.

The contents of this work have not been submitted in any form to another university and, except where the work of others is acknowledged in the text, the results reported are due to investigations by the candidate.
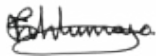
_____

Signed: Prof T. C Haupt (Supervisor)

Date: 30 November 2017

DECLARATION 1: PLAGIARISM

I, Silindile Precious Nhlumayo, declare that:

(i) the research reported in this dissertation, except where otherwise indicated or acknowledged, is my original work;

(ii) this dissertation has not been submitted in full or in part for any degree or examination to any other university;

(iii) this dissertation does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons;

(iv) this dissertation does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

a) their words have been re-written, but the general information attributed to them has been referenced;

b) where their exact words have been used, their writing has been placed inside quotation marks, and referenced;

(v) where I have used material for which publications followed, I have indicated in detail my role in the work;

(vi) this dissertation is primarily a collection of material, prepared by myself, published as journal articles or presented as a poster and oral presentations at conferences. In some cases, additional material has been included;

(vii) this dissertation does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the References sections.

Signed: Silindile Precious Nhlumayo

Date: 30 November 2017

ABSTRACT

Acknowledging the pivotal role that SME's play in the economy of any country, the South African government has introduced several initiatives specifically targeted at promoting the attractiveness, growth and sustainability of the SME sector, the effectiveness of which have not been fully evaluated regarding SME's in the construction sector to determine whether they have achieved the intended outcomes of those initiatives.

The aim of this research is to investigate the role played by construction SMEs towards improving the economy of the country. Moreover, the study seeks to establish whether the government initiatives have an impact on the effective performance of construction SMEs and whether they have achieved their intended outcomes in KwaZulu-Natal, South Africa.

A quantitative research approach was used using a cross sectional questionnaire survey to collect the data and non-probability sampling technique. A total of 201 questionnaires were distributed to active civil engineering (CE) and general building (GB) SME contractors with grades between 2 to 5 in KwaZulu-Natal selected from CIDB construction register database. The total number of 96 questionnaires were returned, representing 48% of the total that were distributed. Moreover 10 questionnaires were distributed to four government entities and five were returned, representing 50% of the total that was distributed. The data was analysed using the Statistical Package for the Social Sciences (SPSS) 25.

The results showed that 58.7% of construction SME's play a pivotal role in employment creation, poverty alleviation, economic growth and balanced society. It also found that 52.7% respondents are aware of Government initiatives, however they are not utilised efficiently. Moreover, the results showed that grades 2 -3 SME contractors are facing more challenges in finance and quality management when compared to grades 4 – 5.

Key words: Government initiatives, Construction SMEs, Growth, Sustainability

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

1.1 Introduction and Background

According to FinMark Trust (2015), Fatoki (2014), Cant and Wiid (2013); Kongolo (2010) and Olawale & Garwe, (2010) SME's are expected to play a pivotal role in creating employment, poverty improvement, economic growth and a balanced society in developing countries. The development of small medium enterprises (SME's) will result in improvements in the economies of nations (Peprah, Mensah and Akosah, 2016; Kongolo, 2010). In 1996, the South African Parliament promulgated the National Small Business Act (102 of 1996) that was to promote and protect the interests of SME's (Parliament Liaison Office, 2014; Underhill Corporate Solutions, 2011). Moreover, the South African government introduced a new Ministry of Small Business Development, which was established in 2014 specifically targeted at assisting the small business sector (SEDA, 2016 and Parliamentary Liaison Office, 2014). Ogbo and Nwachukwu (2012), Islam, Khan, Obaidullah and Alam (2011) and Savlovsch and Robu (2011) claimed that a high percentage of firms around the world are small medium enterprises (SME's), and for the past years they have earned the reputation of developing the economy of various countries. Most of the existing large firms started as small medium enterprises (Katua, 2014).

Several definitions have been used to describe SME's globally as evidenced from Table 1.1. SME's in South Africa and globally have common criteria in terms of definition such as taking into consideration the size or class of the enterprise, the overall number of employees in the enterprise and the yearly turnover (Parliamentary Liaison Office, 2014; Underhill Corporate Solutions, 2011 and Abor and Quartey, 2010). Furthermore, the number of employees and yearly turnover varies by type of business and country, broken down as follows: (1) micro businesses have the maximum of 10 employees, (2) small businesses have the maximum of 100 employees (3) medium size businesses have the maximum of 250 employees and different currencies are used for the annual turnover (Underhill Corporate Solutions, 2011; Savlovsch and Robu, 2011). However, for the purposes of this study, SME's in South Africa are defined as companies with a maximum of 200 employees, yearly turnover of a maximum of R64 million, capital assets of a maximum of R10 million and direct managerial involvement by owners (BANKSETA, 2017 and Underhill Corporate Solutions, 2011).

Table 1. 1: SME definitions

VARIOUS REGIONS/COUNTRIES	SIZE OR CLASS	NUMBER OF EMPLOYEES	ANNUAL TURNOVER
SOUTH AFRICA	Micro	<5	<R200k
	Small	20–49	R3m–R32m
	Medium	50–-200	R5m–R64m
EU	Micro	<10	<€2
	Small	<50	<€10
	Medium	<250	<€250
USA	Micro	–	0
	Small	<100	0
	Medium	<500	0
ASIA (MALAYSIA)	Micro	<5	RM250.000
	Small	5 – 50	RM250.00 - <RMM10m
	Medium	51 -150	RM10m – RM25m
EGYPT	Micro	1–4	0
	Small	5–14	0
	Medium	15–49	0
GHANA	Micro	1–5	$10k
	Small	6–29	$100k
	Medium	30–39	$1m
BRAZIL (COMMERCIAL)	Micro	1–9	0
	Small	10–49	0
	Medium	50–99	0
RUSSIA	Micro	–	–
	Small	15–100	400m RUB max
	Medium	101–250	1bn RUB max

Source: (Underhill Corporate Solutions, 2011)

Poverty, unemployment and inequality are regarded as major concerns in developing countries across the world (Phillips, 2015; Chimucheka and Mandipaka, 2015; Fatoki, 2014; Fatoki and Garwe, 2010 and Kongolo, 2010). South Africa as a developing country is currently faced with high rates of unemployment, a labour force with low levels of skills as well as the resultant problem of poverty, crime and many other socio-economic challenges (SEDA, 2016; Ogbo and Nwachukwu, 2012; Lekhaya, 2011; Kongolo, 2010; Schoeman and Blignaut, 1999). South Africa has an unemployment rate estimated at approximately 27.1% of active population unemployed and a GDP of 0.2% (Statistics South Africa, Quarterly Labour Force Survey, 2016). In addition, Underhill Corporate Solutions (2011) reported that an estimated 27% of the adult population is employed by SME's in developing countries. According to Statistics South Africa (2016) most of the unemployed population in SA are youth making up approximately 30% of the total unemployed. NPC (2030) reported that South African government has targeted to have created 11 million jobs by year 2030.

Governments have tended to develop special initiatives to support SME's in developing countries (GEM, 2014; Fatoki and Garwe, 2010 and White Paper, 1995). Even though, the South African

government had introduced these various initiatives, the Parliament Liaison Office (2014) argues that current government programmes are complex and not easy to navigate. Arguably, the creation of the Department of Small Business will further complicate the development strategy by making it difficult for SME's to know where to turn for support. In South Africa, these initiatives are specifically targeted at promoting the attractiveness, growth and sustainability of the SME sector and to act as the strategic framework to create employment, poverty alleviation and economic growth (GEM, 2014; Fatoki and Garwe, 2010 and White Paper, 1995).

According to Gasa (2012), NCDP (2011), Status Quo Report (2009) and Gazette (2004) there are several government programmes targeted specifically at construction SME's and SME's in general. Most were initiated as early as 1995 and can be clustered as follows:

- DPW is a Eastern Cape Contractor Incubator Development Programme, targeting the development of contractors in cidb grades 2 to 5;
- DPW is a KZN Masakhe Emerging Contractor Development Programme, targeting the development of contractors in cidb grades 2 to 5;
- EPWP is a learner ships are models mainly focuses at emerging contractors in cidb grade 1 to 4,
- Enterprise Development Programmes (EDPs) for, typically, contractors in CIDB Grades 3 to 6 who exhibit potential to develop;
- Emerging Contractor Development Programmes focuses at contractors in CIDB grade 1 to 3,
- The SEDA Construction Incubator (SCI) Programme, targets existing contractor in cidb grade 3 to 5,
- Broad – Based Black Economic Act is one of the government initiative targeted at SME's in general; PPPFA also targets SME's in general.

According to Vilakazi (2016); GEM (2012) and Underhill Corporate Solutions (2011) most of the SME's are not aware of government initiatives. Chimucheka and Mandipaka reported differently stating that most of the SME's are aware of these initiatives, but the support given is inadequate. However, despite the availability and introduction of these policies, programmes and strategies that are meant to develop SME's, not all SME's have realized their full potential by growing economically and creating jobs, and are still challenged with numerous challenges that obstruct them from realizing their intended outcomes such as, for example:

- crime and corruption;
- poor quality products output;
- poor management skills;
- shortage of skilled labour;
- poor business skills

- lack of capital start-ups;
- poor planning;
- lack of resources;
- failure to understand the industry;
- health and safety issues;
- cannot price competitively;
- late payments, and
- cash flow problems (Parliamentary Liaison Office, 2014; Cant and Wiid, 2013; Ogbo and Nwachukwu, 2012; Underhill Corporate Solutions, 2011; Maseko, Manyani, Chiriseri, Tsekea, Mugogo, Chazuza and Muntengezanwa, 2010; Fatoki and Garwe, 2010; Thwala and Phaladi, 2009).

According to the Parliamentary Liaison Office (2014) five out of seven small businesses fail in their first year of establishment. Even though, they operate in the same business environment as larger construction enterprises, they are still challenged as they have limited access to resources (Smit and Watkins, 2012; Beck and Demirguc and Kunt, 2006). It is therefore evident that these challenges are overcome if the vital development and growth of SME's is to be achieved and the economy sustained (Peprah et al., 2016; Kongolo, 2010). Further, according to Kongolo (2010) introducing programmes to support SME's will create better conditions for all especially in their early stages of development. It is against this background that this study seeks to establish whether government initiatives have had any impact on the performance of construction SME's and whether they had achieved their intended outcomes in KwaZulu-Natal, South Africa. Smallbone and Welter (2012) suggest that rather than focusing on the support initiatives, government should look at other ways to improve the development of SME's.

1.2 Problem statement

Acknowledging the pivotal role that SME's contribute in the economy of any country, the South African government has introduced several initiatives specifically targeted at stimulating the attractiveness, development and sustainability of the SME sector, the effectiveness of which have not been fully evaluated regarding SME's in the construction sector to determine whether they have achieved the intended outcomes of those initiatives.

1.3 Research hypotheses

The hypotheses to be tested in this study are:

Research Hypothesis 1 – SME's currently play a pivotal role in South African construction through employment creation, poverty alleviation, economic growth and a balanced society;

Research Hypothesis 2: - The South African Government has introduced initiatives targeted at promoting the attractiveness, growth and sustainability of SME's in construction;

Research Hypothesis 3: - Construction SME's are aware of government initiatives targeted at their growth, development and sustainability;

Research Hypothesis 4: - Construction SME's make frequent use of the support mechanisms provided through these initiatives;

Research Hypothesis 5: – Government-driven initiatives have resulted in the growth and development of all construction SME's that have participated in them.

1.4 Objectives

The objectives of the study are:

Objective 1: To establish the role of SME's in the South African construction sector in terms of economic development and employment creation;

Objective 2: To identify the various initiatives introduced by the South African government targeted at the growth and improvement of the SME sector of the construction industry;

Objective 3: To analyse the level of awareness, nature of the enabling environment and extent of equitable access of construction SME's to the given government initiatives;

Objective 4: To determine whether construction SME's make use of the support mechanisms claimed to be available through these initiatives;

Objective 5: To determine the possible unintended consequences and impact of government-driven initiatives targeted at the SME sector of the construction industry.

1.5 Research methodology

The research methodology to be employed on this study will include the following, namely:

- Conduct an extensive review of relevant literature and previous studies as well as secondary data sources in the form of official statistics;

- Further, conduct an extensive review of relevant literature and previous studies to identify the various government-driven initiatives, their purpose and intended outcomes with respect to attracting more SME's into the sector, strategies to support their growth and sustainability;
- This approach will be complemented by structured qualitative and quantitative methods such as questionnaire surveys of samples of appropriate stakeholders,

- Interviews will be used to gather relevant data to test the study hypotheses, achieve the research objectives and verify previously gathered information;

- Gathered data will be analysed using appropriate statistical analysis software such as SPSS v25; and

- Findings from the data analysis will be extracted, conclusions drawn and possible recommendations formulated.

1.6 Limitation

The research will be conducted in KwaZulu – Natal (KZN) province, South Africa given that it is the second largest Province by population, (Statistics SA, 2011). They contribute 16.1% towards the national Gross Domestic Product and 4% of the construction sector (Top Business Portfolio, 2016). The study was subject to the following limitations:

- The study was conducted over a period of twelve months from January 2017 to December 2017.
- The study was conducted in South Africa but due to financial constraints the study only focused to Small Medium Enterprise in Kwa-Zulu Natal that are currently active with CIDB with grades between 2 and 5.
- The government entities that formed part of the survey were directly involved in contributing to the development of SME's.

1.7 Assumptions

It is assumed that the SME contractors that will be sampled either are experiencing or have experienced challenges with acquiring resources to stimulate their growth, development and performance. Further, it is assumed that SME's have knowledge and the understanding of the government initiatives targeted at promoting their attractiveness, growth and sustainability. It is further assumed that the data received from the proposed stakeholders and SME contractors will be accurate and complete selected participants will reply fairly and precisely.

1.8 Ethical considerations

To comply with internationally accepted ethical standards, no names of individuals will be recorded on research instruments. In this way anonymity will be assured. No reward will be paid to any of the respondents for participation in the study. As with other studies, quality assurance will be done with respect to the following aspects:

- General conduct and capability of interviewers where interviews and surveys are conducted;

- Precision and completeness of responses, especially where open ended questions are concerned;

- Quality of data capturing done by encoders; and

- Frequency distributions run to check all variables contain only values in the accepted range and variable labels.

1.9 Significance of the study

There is a need to research the construction SME's since they have shown a high failure rate especially in the early stages, poor quality product outputs and not fully participating in the main economy as expected. Considering their impact to the economy of South Africa, SME's still face numbers of challenges such as lack of management skills, inadequate skilled labour, corruption, low production capacity and producing poor quality products. Therefore, improved implementation of Government initiatives for SME's in the construction industry is essential. Furthermore, Government needs to ensure that the initiatives are well targeted, reviewed, assessed, evaluated and accessible at all levels.

The findings of the study will help shape the future of SME's and contribute towards reducing the rate of unemployment and boost the economy since the Small and Medium enterprises (SME's) are expected to be an significant vehicle to address the challenges of job creation, poverty elevation, sustainable economic growth, equitable distribution of income and the overall stimulation of economic development (Fatoki, 2014). It will assist the government in formulating improvement of existing policies and programmes in relation to the construction sector.

1.10 Structure of the study

Chapter One - Introduction:

It provides an overview of the research that entails an introduction to the topic, problem statement, the hypotheses, objectives, research methodology, limitations, assumptions, ethical considerations and the significance of the study.

Chapter Two - Literature review:

This chapter comprises of the literature review on the nature, challenges, attractiveness, growth and sustainability of the SME's in the construction sector focusing on both international and South African backgrounds and the contribution of construction SME's in the South African economy.

Chapter Three - Literature review:

Chapter Three comprises of the literature review focusing on South African government initiatives aimed at promoting the attractiveness, growth and sustainability of SME's in the construction sector and their intended outcomes.

Chapter Four -Research Methodology:

This chapter describes the research methodology used in the study to test the hypotheses and achieve the stated objectives.

Chapter Five - Data analysis and discussion of findings:

This chapter presents the analyses of data based on the respondents' views about the contribution of government initiatives aimed at promoting the attractiveness, growth and sustainability of SME's in the construction sector and it also reviews the intended outcome of government initiatives.

Chapter Six – Conclusions, testing of hypothesis, limitation, recommendations for further research:

This chapter discusses the conclusions, testing of hypotheses, limitations and recommendations for further research to improve the impact of government initiatives on construction SME's.

1.11 Chapter summary

This chapter outlined the framework of the entire research study. The preliminary literature review focused on the impact of government initiatives on construction SME's and background of the construction sector, government initiatives and construction SME's. The identification problem, research objective and methodology for data collection.

CHAPTER 2: THE ROLE OF SMALL MEDIUM ENTERPRISES (SME's)

2.1 Introduction

This chapter discusses both general and construction small and medium enterprises. It is very important to examine their involvement to the economy in reducing unemployment, economic development and inequality. Furthermore, factors are discussed that affect the growth of SMEs in detail to obtain reasons for the high rate of failure and to achieve the secondary objectives of the study. The performance and contribution of the construction sector will be evaluated, since it is the study area of interest.

Small Medium Enterprises (SME's) are perceived as vital role players in the economies of developing countries (Agwu and Emeti, 2015; Olawale and Garwe, 2010). Through them the creation of employment, poverty alleviation, economic growth and a balanced society are anticipated (FinMark Trust, 2015; Lekhaya, 2015; Fatoki, 2014; Cant and Wiid, 2013; Ogbo and Nwachukwu, 2012; Kongolo, 2010 and Fatoki and Garwe, 2010). Zindiye, Chiliya and Masocha (2012) claimed that while a high percentage of SME's dominates around the world in terms of total employment and number of companies, their performance is still questionable. Their poor performance in creating employment in recent years has been a major challenge (Agwu and Emeti, 2015; Katua, 2014). South Africa suffers from a high unemployment rate of approximately 27%, which translates into approximately 5, 2 million of economically active population unemployed (Statistics South Africa, Quarterly Labour Force Survey, 2016 and IRMSA Risk Report, 2015). Statistics South Africa (2016) and IRMSA Risk Report (2015) proves that the high rate of unemployment impacts youth more than adults illustrated in Figure 2.1. According to IRMSA Risk Report (2015) the high jobless rate has led South Africa by the fact that it is now one of Africa's slowest-growing economies.
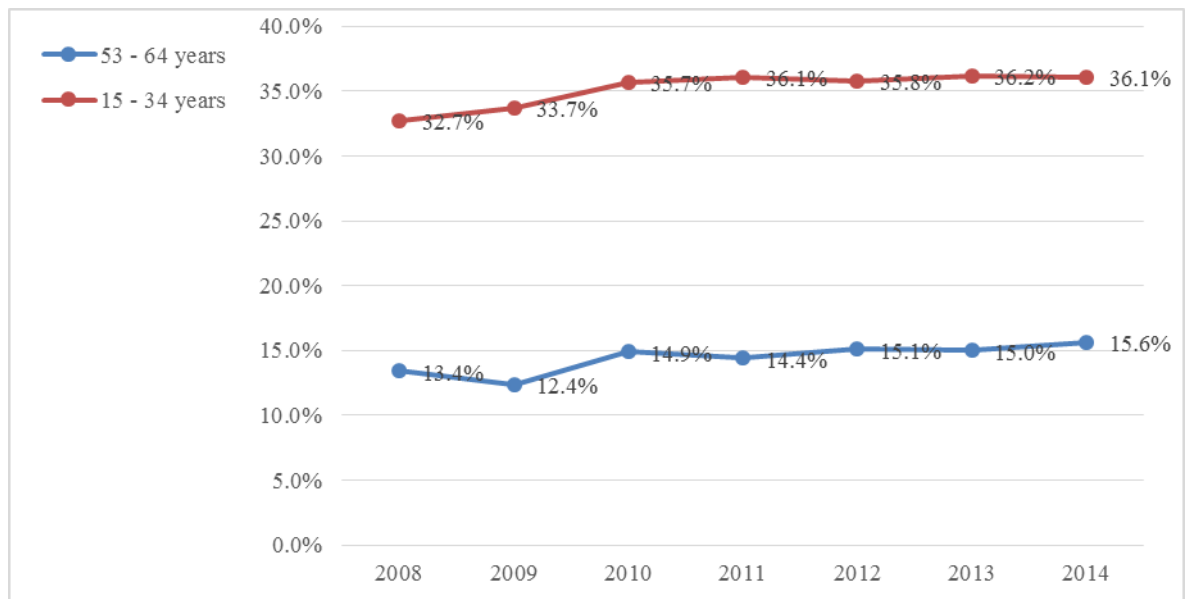
Figure2. 1: Unemployment rate of youth and adults, 2008 and 2014 in SA (Source: Statistics SA, 2014)

According to CIDB (2015) and (Appels (2010) the construction industry plays an important role in employment in South Africa, and contributes significantly to the economy. SME's contribute approximately 32% of Gross Domestic Products (GDP), 59% of employment and 19% of exports (SEDA, 2014). Moreover, SME's make a crucial contribution on GDP and employment in both high and low-income countries (Dalberg, 2011m). The construction SME's are regarded as an important employer of labour in South Africa, employing approximately 1 million employees for both formal and informal sector and contributes approximately 25% when compared with other sectors (CIDB, 2015).

Governments throughout the world have concerns with the challenges facing SME's and have focused on the development of SME's to elevate their economic growth and development (Olawale and Garwe, 2010). Arguably, the success of the South African economy is rooted in the generation of new SME's without which the country will face economic slowdown as the economy is struggling to accomplish the required rate to make the difference to the high unemployment rate (IRMSA Risk Report, 2015).

2.2 What are Small, Medium Enterprises (SME'S?)

Davis Tax Committee (2014); Chittithaworn, Islam, Keawchana and Yusuf (2011) and Abor and Quartey (2010) stated that numerous definitions have been used by different authors to define Small Medium Enterprises (SME's), but there is no accepted collective definition for SME's in South Africa.

Mahembe (2011) claims that SME's definitions are broadly categorised into ''economic'' and ''statistical'' definitions. Aigbavboa and Thwala (2014:773), further discussed in detail the ''economic'' definition. A firm is regarded as small if the following three criteria are met, namely

- It has a relatively small share of their market place;
- it is managed by owners, or part of owners in a personalised way, and not through the medium of a formalised management structure;
- It is independent, in the sense of not forming part of a large enterprise.

Whereas the "statical "definition, is also categorised into three criteria, namely

- quantifying the size of the small firm sector and its contribution to the GDP, employment and exports;
- comparing the extent to which the small firm sector's economic contribution has changed over time; and
- In a, cross country comparison of the small firms' economic contributions.

The National Small Business Act, of 1996, recognises these categories as economic and statical definition by Aigbavboa and Thwala and defines SME's as

'... a separate and distinct business entity, including co-operative enterprises and nongovernmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub sector of the economy mentioned in column I of the Schedule and which can be classified as a micro -, a very small, a small or a medium enterprise by satisfying the criteria mentioned in column 3, 4 and 5 of the schedule'.

According to Davis Tax Committee (2014) and DTI (2008), the key factor to determine whether the enterprise can be classified as micro, very small, small or medium enterprises, the following criteria is followed, namely

- the total full – time equivalent of paid employees,
- the total turnover and
- Total gross asset value.

The National Small Business Act, 1996 as revised by the National Small Business Amendment Act of 2003 and 2004, defined the thresholds per sectors and sub-sectors as detailed in Table 2.1. In the agricultural sector, medium – size has a total full – time equivalent of paid employees less than 100 and the total annual turnover of less than R5 million, a small business has less than 50 employees and the total annual turnover of less than R3 million, very small has less than 10 employees and the total annual turnover of less than R500 000 and micro has less than 5 employees and the total annual turnover of less than R100 000.

Whereby in the case of mining and quarrying, manufacturing, electricity, gas and water, construction, retail and motor trade and repair services, wholesale trade, commercial agents and allied trade, transport, storage and communications, finance and business services and community, social and personal services are defined as a medium – size has a total full – time equivalent of paid employees less than 200, a small business has less than 50 employees, very small has less than 10 employees and micro has less than 5 employees and the total annual turnover ranges from the minimum of R100 000 to the maximum of R23 million.

The gross asset value excluding value of fixed property ranges from R5 million to R23 million for medium – sized businesses, from R1 million to R6 million for small - sized businesses, from R200 000 to R2 million for very small businesses and micro businesses with a gross asset value of R100 000 and less.

Compared to developed-country standards, SA thresholds are low. Many businesses which Americans or Europeans regard as small or medium enterprises would be regarded as large enterprises in South Africa (Ibid). For example, Table 1.1 in the previous chapter shows that USA and EU small enterprise can be regarded as medium in South Africa and medium as large.

Table 2.1: Thresholds for the classification for micro, very small, small and medium enterprises

Sectors or subsectors in accordance with the Standard Industrial Classification (SIC)	Site or Class	Total full-time equivalent of paid employees (Less than)	Total annual turnover (Rm) (Less than)	Total gross asset value (fixed property excluded) (Rm) (Less than
Agriculture	Medium	100	5.00	5.00
	Small	50	3.00	3.00
	Very small	10	0.50	0.50
	Micro	5	0.20	0.10
Mining and Quarrying	Medium	200	39.00	23.00
	Small	50	10.00	6.00
	Very small	20	4.00	2.00
	Micro	5	0.20	0.10
Manufacturing	Medium	200	51.00	19.00
	Small	50	13.00	5.00
	Very small	20	52.00	2.00
	Micro	5	0.20	0.10
Electricity, Gas and Water	Medium	200	51.00	19.00
	Small	50	13.00	5.00
	Very small	20	5.10	1.90
	Micro	5	0.20	0.10
Construction	Medium	200	26.00	26.00
	Small	50	6.00	6.00
	Very small	20	3.00	3.00
	Micro	5	0.20	0.20
Retail and Motor Trade and Repair Services	Medium	200	39.00	6.00
	Small	50	19.00	3.00
	Very small	20	4.00	0.60
	Micro	5	0.20	0.10
Wholesale Trade, Commercial Agents and Allied services	Medium	200	64.00	10.00
	Small	50	32.00	5.00
	Very small	20	6.00	0.60
	Micro	5	0.20	0.10
Catering, Accommodation and Other Trade	Medium	200	13.00	3.00
	Small	50	6.00	1.00
	Very small	20	5.10	1.90
	Micro	5	0.20	0.10
Transport, Storage and Communication	Medium	200	26.00	6.00
	Small	50	13.00	3.00
	Very small	20	3.00	0.60
	Micro	5	0.20	0.10
Finance and Business Services	Medium	200	26.00	5.00
	Small	50	13.00	3.00
	Very small	20	3.00	0.50
	Micro	5	0.20	0.10
Community, Social and Personal Services	Medium	200	13.00	6.00
	Small	50	6.00	3.00
	Very small	20	1.00	0.60
	Micro	5	0.20	0.10

Source: National Small Business Act of 1996, as revised by the National Small Business Act as amended in 2003 and 2004

SME's operate in different industries, including retailing, wholesaling, tourism, mining, agriculture, manufacturing, construction and service that are in both formal and informal sector (Chimucheka, 2013 and DTI, 2008). Accordingly, new firms should be established and registered formally with Companies Intellectual Property Registrations Office (CIPRO) to operate efficiently and have company documents to issue to Clients when they bid (Gasa, 2012 and DTI, 2008).

The construction industry play an important role in job creation in construction sector and other sectors of the economy, for example manufacturing, transportation and real estates (CIDB, 2015). From 2012, the construction industry employment rate is increasing yearly and contributes 9% to GDP when compared with other sectors (Ibid). Table 2.3 below shows the total number of construction SME's registered In South Africa with Construction Industry Development Board (CIDB) in different categories and grades (CIDB2014/2015). These categories are civil engineering works (CE), electrical engineering works - building (EB), electrical engineering works – infrastructure (EP), general building woks (GB), mechanical engineering works (ME) and special works (SW) (Ibid). The grades range from grade 1 to grade 9,in the public sector each grade has a limit on the tender value of which the Contractors may compete on, except for grade 9 that has unlimited tender value (CIDB, 2014/2015 and Appels, 2010). Moreover the Contractors grading is determined by the annual turnover and the value of completed projects (Appels, 2010). The grade 1 contractors are very small and are regarded as micro enterprise, but the registration rate of grade 1 are high in all classes of works when compared with other grades, the high rate of grade 1 registration puts competition in this grade (CIDB, 2014/2015)

Table 2. 2: Total number of registrations per grade

Grade	Tender Value Limit (R)	Class of Works						
		CE	EB	EP	GB	ME	SW	Total
1	200,000	22370	1516	5451	48694	5453	18011	101495
2	500,000	1548	161	166	2064	284	557	4780
3	2,000,000	816	55	100	600	109	196	1876
4	4,000,000	875	108	229	805	168	183	2368
5	6,500,000	689	122	223	597	165	196	1992
6	13,000,000	760	54	175	647	129	106	1871
7	40,000,000	401	36	70	312	51	57	927
8	130,000,000	142	10	36	112	39	39	378
9	>130,000,000	67	2	24	41	27	24	185
Total		27668	2064	6474	53872	6425	19369	115872

Source: CIDB, Annual Report 2014/2015

2.3 Why do Small, Medium Enterprises (SME's) exist

According to Savlovsch and Robu (2011), SME's represent the historical experience of large firms and where their future competition will originate. Moreover, the contribution of SME's is not limited to the small medium enterprise sector but to the overall economy of developing

countries. SEDA (2015); Ogbo and Nwachukwu (2012); Islam et al. (2011); Olawale and Garwe (2010); Abor and Quartey (2010) agree that in various developing countries, SME's are seen to be increasingly playing a vital role in the economy. Motsetse (2015); SEDA (2015); and Kongolo (2010) reckon that the South African Government has prioritised SME's to solve the high unemployment rate by creating jobs, poverty alleviation and economic growth and development. According to Motsetse (2015), the economy of any country is driven by both public and private sectors.

2.3.1 Job Creation

Poverty occurs across the world, but the level of impact varies (Chimucheka, 2013). However, the SME's have shown their significant contribution in to the economic development, poverty alleviation and job creation in developing countries. (Chimucheka, 2013; Kongolo, 2010) and the South African government has been aiming on promoting the development of SME's to address the problem of unemployment, economic development and poverty alleviation (FinMark Trust, 2015; Chimucheka, 2013; Abor and Quartey, 2010 and Kongolo, 2010). The South African economy has shown increase in recent years; however, it remains inadequate to lessen unemployment even when compared with other countries (DTI, 2008). Furthermore, the contribution of SME's is not limited by any geographical areas as well as level of education (Kongolo, 2010). However, IRMSA Risk Report (2015) argues that much of jobless persons have the poor basic education and the employers are concerned about the skill of employees. Furthermore, in most developed countries economies, the jobless rate for people with less than a secondary-school education is much higher than those with university degrees Ibid). But with South Africa it is a different scenario, all levels of education are facing unemployment challenge, Persons with poor basic education cannot find jobs, matriculates are unable find jobs and even several with university degrees cannot find work (Ibid).

Unemployment is regarded as the most significant challenge among South African women, those with low level of skills and especially youth increases the rate of unemployment significantly (SBT Alert, 2013; Kongolo 2010). IRMSA Risk Report (2015) that South African unemployment rate is now regarded as one of the highest in the world and the manufacturing and agriculture sectors showed the biggest job losses. Even more, South Africa have shown concern with other developing countries that this high unemployment rates and high levels of inequality could lead to major social problems and the next generation jobless (Ibid). Moreover, if this is unattended it will result as a major challenge in a near future (SBT Alert, 2013). Regardless of their contribution to the country's economy, SME's are still faced with challenges (Chimucheka, 2013; Abor and Quartey, 2010 and Kongolo, 2010). The challenges facing SME's are not only resulting to business failure but some of the SME's end up with the income below the poverty rate (DTI,

2008). Nevertheless, they remain the source of economic development (Kongolo, 2010). According to Katua (2014), Kongolo (2010) the SME's have managed to survive the recent economic decline even though it has seriously affected the socio – economic conditions in developing countries.

Katua (2014) states that there is a relationship between poverty, unemployment, economy of the country and the performance of SME's. Katua (2014), Robu (2013) and Dalberg (2011) agree that SME's contribute significantly to the economy, Figure 2.2 illustrates the employment contribution by SME's in low income, lower middle income, higher middle income and higher income countries. It shows that SME's contribute significantly in low income countries with approximately 78%, compared to countries with a larger income, where their contribution is lower at 59%. According to Katua (2014), Robu (2013) and DTI (2008) SME's generate the highest rate of employment and contribute the major share in gross domestic product and aproximately19% of exports. The government's National Development Plan 2030 (NDP) has strategically planned to eliminate poverty and reduce inequality by 2030. This will be achieved if the gross fixed capital investment reaches approximately 30 percent of GDP by 2030 or achieving more than 5% real GDP growth on average annually and creating 11 million new jobs. According to OECD (2015) to achieve these objectives requires a dramatic change in the economy but the current pace of economic growth and job creation shows that they are lower than the projections of NDP 2030.
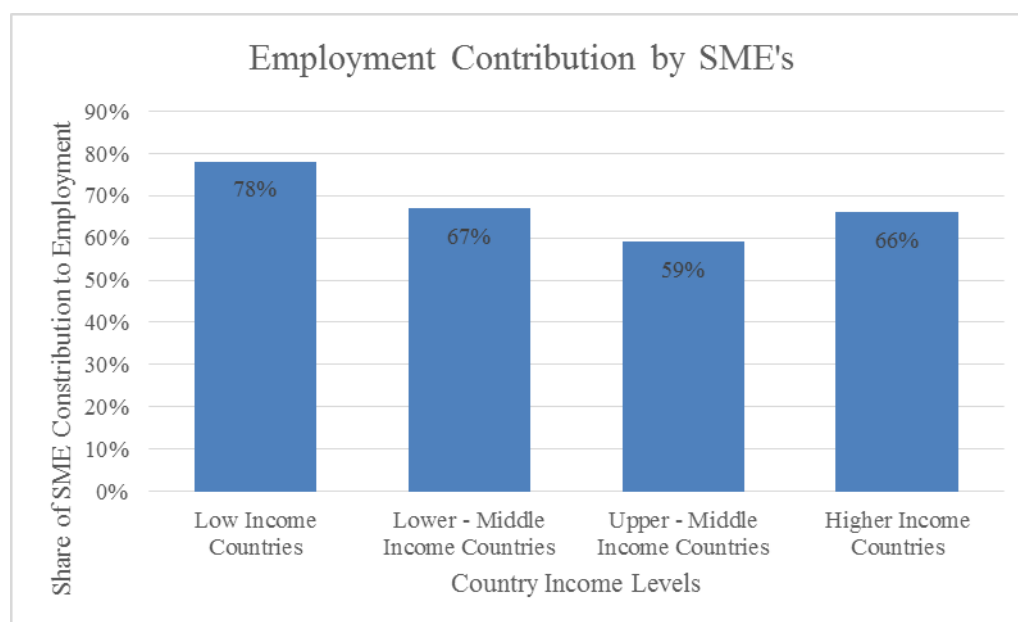
Figure2. 2: Employment contribution (Source: Dalberg, 2011)

Table 2.3 shows the year to year decrease in employment of 29,000 from 515, 000 to 486, 000 between March 2013 and March 2016 and between September 2015 and September 2016 the year to year decrease in employment of 33,000 from 4,585,000 in September 2015 to 4,552,000 in

September 2016.This was due to year to year fluctuation of employment in all the industries. According to SBP Alert (2013), between 2011 and 2012 there was a decline in permanent employment.

Table 2. 3: Employment per industry

Industry	March 2013	March 2014	Sep 2015	Sep 2016
	Thousand			
Mining	515	486	476	460
Manufacturing	1,148	1,146	1,153	1,130
Electricity	62	62	59	61
Construction	432	424	541	545
Trade	1,689	1,699	1,896	1,914
Transport	380	373	460	442
Total	**4,226**	**4,190**	**4,585**	**4,552**

Source: Stats SA Quarterly Employment Statistics, 2014 and 2016

2.3.2 Economic growth and development

It is evident that SME's have the potential to create jobs that will lead to economic growth and development (SBP Alert, 2013). The government needs to recognise the contribution that SME's can make in the country's economy in the start-up stage (Kongolo, 2010). Ogbo and Nwachukwu (2012) highlight that economic growth and development has been a success in various countries due to the impact of SME's. However, SBP Alert (2013) argues that as from 2011 SME's were not showing potential to create jobs and there has been a decline in employment.

According to SBP Alert (2013); Abor and Quartey (2010) and Kongolo (2010) SME's are more labour intensive than larger firms with low capital cost. Therefore, they can survive in both urban and rural areas. SME's also assist the low-income earners to access the economic opportunities (Motsetse, 2015). In particular, those with low level of skill, are more likely to be employed by SME's than those with higher qualifications (SBP Alert, 2013).

2.4 Importance of Small, Medium Enterprises (SME's)

The importance of SME's is recognised in developing countries as well as developed countries (Smit and Watkins, 2012). The SME sector contributes to main economic groups such as employment, economy, inequality, socio – economic, Gross Domestic Product (GDP), innovation and exports (Dubihlela, 2013 and IFC, 2011). Furthermore, they contribute more than 60% of overall employment across the world and approximately 50% of global Gross Value Added (GVA) (Peterhoff, Romeo and Calvey, 2015). In South Africa, SMEs are not only seen as a strong engine of economic growth and productivity, but also, as a means of distributing income between its employees and their affiliates (Ismail, Jeffery and Belle, 2011).

The construction sector is important in an economy because it is through this industry that societies can achieve rural and urban development (Chadhliwa, 2015). Construction industry has a critical role to play in fostering development in the formal and informal sector of the South African economy. CIDB (2015) states that since 2008, the South African construction sector has contributed approximately 9% in to the formal and informal employment as well as the GDP. The industry, however, faces some serious challenges in its endeavour to deliver infrastructure projects effectively the biggest challenge facing the South African construction industry is the problem of skills shortage (Mbeki, 2014)

2.5 Challenges facing construction SME's

Olawale and Garwe (2010); Agwu and Emeti (2014); Thwala and Phaladi (2009); Katua (2014); Kongolo (2010); Ogbo and Mnwachukwu (2012); Chittithaworn (et al 2010); CIDB (2011), confirmed that SME's are faced with several challenges that affect their growth, contribution to the economic development and sustainability. Despite the government focus in supporting the SME's and their contribution on creating employment and promoting growth (Agwu and Emeti, 2014; Cant, 2014 and Maloka, 2013). SME's are constrained by numerous challenges that hinder their development and contribution in to the economic development such as lack of access to finance, poor management skills, insufficient resources, failure to understand the sector, cannot price competitively, crime and corruption and late payments by clients (SEDA, 2015; Agwu and Emeti and 2014; Maloka, 2013).

2.5.1   Access to finance

SME's require finance for start-ups and sustainable growth (Olawale and Garwe, 2010). The poor accessibility of funds and communication affects the growth and development of SME's (Agwu and Emeti, 2014; Olawale and Garwe, 2010). Lack of financial support on SME's is the second most reported contributor of SME failure in South Africa (Olawale and Garwe, 2010). FinMark Trust (2015) finds that approximately 87% of South African registered SME's have never received funding, and 93% of all SME's have never had access to funding. Furthermore, FinMark Trust through their analysis proves the lack of financial support on SME's categorised as micro, very small, small and medium, Figure 2.3 illustrates the accessibility of credit, the rate of firms that did not access credit are micro at 95%, very small with 3% and small with 2%, while medium shows 0% for both accessing and not accessing credit. In terms of those that have accessed credit.

New SME's can also access finance from their own wealth, friends, family and private firms (Olawale and Garwe, 2010). The majority of SME's are unable to access finance as they represent high risk, inadequate assets, suffer from low capitalisation, lack of adequate guarantee and credit information (SEFA, 2015; Agwu and Emeti, 2014 and Maloka, 2013). Moreover, lack of business

information and management skills that leads to poor accessibility of credit and without finance SME's will fail (Fatoki, 2012). Olawale and Smit (2010), noted that SME owners need to take full responsibility for their own learning and personal development especially in financial management skills. According to Dalberg (2011) access to financial support do not only helps the start-ups, growth, success and sustainability of firms and risk reduction, but also promotes revolution and entrepreneurial activity. Furthermore, firms with greater access to finance are more able to grow and perform better when compared to SME's without access to finance.
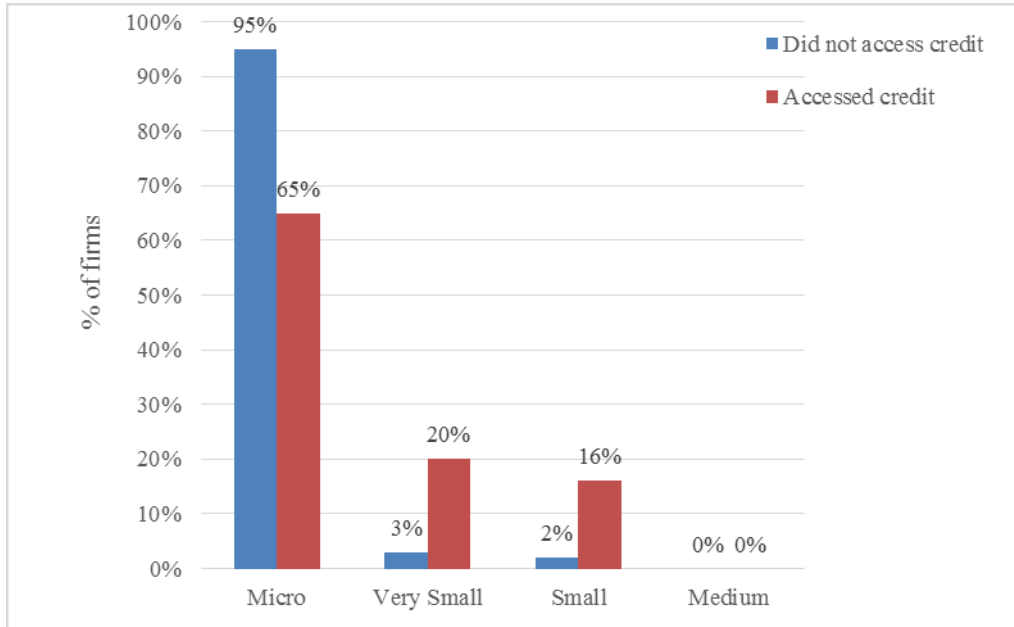
Figure2. 3: Access to credit by SME's (Source: FinMark Trust, 2015)

South Africa has introduced various agencies targeted on supporting SME's financially and non – financially (FinMark Trust, 2015 and DTI, 2008). These include, the Small Enterprise Development Agency (SEDA) that was set to manage the improvement of small businesses in the country, the South African Micro-Finance Apex Fund (SAMAF) and Khula Enterprise Finance Limited were formed to assist the start-ups SME's in South Africa suffering from financial constraints, Umsobomvu Youth Fund (UYF) was formed to assist the implementation of advanced skills development interventions that promote employment and self-employment for youth with ages between 18 and 35 to master competencies related to basic business knowledge, National Empowerment Fund (NEF) was established to stimulate and support new projects and expansion of historically disadvantaged small businesses with finance for a minimum of R250 000, Mafisa was established to contribute on developing very small business, Small Enterprise Finance Agency (SEFA) is mandated to be the principal catalyst for the development of sustainable SMMEs and Cooperatives through the provision of finance (SEFA, 2015 and DTI, 2008). Moreover, according to SBP (2015), Small Enterprise Development Agency (SEDA),

South African Micro-Finance Apex Fund (SAMAF) and Khula Enterprise Finance Limited were allocated approximately R508 million by the South African government.

- Small Enterprise Finance Agency (SEFA) was established on 1 April 2012 in terms of Section 3(d) of the IDC (SEFA, 2015). SEFA was formed to provide finance that ranges from R50 000 to R5 million to SME's in an efficient and sustainable manner as well as credit guarantees (SEFA, 2015 and Parliament liaison office, 2015). Between 2012 and 2015, SEFA has facilitated the creation and maintenance of 60 169 jobs, facilitated and supported access to finance to 68 724 businesses and total loan approvals of R1 billion (Ibid).

- South African Micro-Finance Apex Fund (SAMAF) was established to provide training and finance to SME's with poor background (Underhill Corporate Solutions, 2011 and DTI, 2008)

- Khula Enterprise Finance Limited was established in 1996 to provide finance to small businesses and efficient access to finance (Underhill Corporate Solutions, 2011 and DTI, 2008)

- National Empowerment Fund (NEF) was formed to support and promote companies owned by historical disadvantaged persons (Underhill Corporate Solutions, 2011 and DTI, 2008) Nevertheless, with all the effort from the government SME's continue to be financially challenged (Parliament liaison office, 2015; Finmark Trust, 2015; Agwu and Emeti, 2014 and Mwobobia, 2012

2.5.2   Lack of management skills

Management is frequently defined as the alignment and management of numerous activities in a business to accomplish the goals and objectives of the business (Wiese, 2014). Lack of management skills and inadequate skilled labour are some of the challenges that affect SME's growth in developing countries (Motsetse, 2015; Agwu and Emeti, 2014 and Olawale and Garwe, 2010). Olawale and Garwe (2010) further emphasised that Managerial skills are very crucial to the survival and growth of new SMEs. CIDB Annual Report (2015/16), Agwu and Emeti (2014), CIDB Annual Report (2011/12), Ogbo and Nwachukwu, (2012), DTI (2008) reckons that a proper management skill is vital for SME's performance, sustainability and growth. Managing SME's successfully consumes an excessive time and effort, the owners of the new firms manage their business to reduce cost, this course business failure as they lack management skills (Motsetse, 2015). The management skills can be broken down as follows: time management, human resource management, cost management, quality management, health and safety management, management of site conditions and management of subcontractors including payment (CIDB Annual Report, 2011/12 and Mensah and Benedict, 2010).

Emuze (2011) agrees that complying with this management aspect will lead to successful projects as they are linked to each other, for example quality failure may lead to time and cost complications.

2.5.2.1 Time management

Time management is regarded as an ability to determine the duration each activity and when each activity should be completed to create space in critical activities and not cause delays in delivery (Mensah and Benedict, 2010). SME's need to achieve a proper time management they need to execute the proper strategic planning on their activities (Agwu and Emeti, 2014).

2.5.2.2 Human resource management

According to Emuze (2011) based on the information they obtained from respondents survey the following non-value adding activities related to human resource contribute significantly to poor project performance in South African construction industry: lack of required competencies, inadequate supervision, human error / mistake, ignorance, strikes, low employee morale, idleness on site and Unnecessary work.Department of human settlement (2015) states that the human resource management in the public sector is governed by the following acts to perform significantly, The Public Service Act and Regulations, The Labour Relations Act, The Skills Development Act, The Skills Development Levies Act, The Employment Equity Act.

2.5.2.3 Cash flow management

The Canadian Construction Association (1996), describes cash flow as the money coming in the company and going out the company. According to Motsetse (2011), for a business successful a qualified accountant must be employed to manage the cash flow of the company and all other financial cost. Accordingly, Canadian Construction Association (1996) and Aren and Sibindi (2014), stated that a good cash flow management is crucial for a stable growth and sustainability of every business and failure to manage cash flow can result in affecting the company reputation and bankruptcy.

2.5.2.4 Quality management

Quality is one of the most important parameters of project performance (Emuze, 2011). The government is encouraging firms to adhere to quality assurance and be accredited to ISO 9000 as well as other standards (Zindiye, Chiliya and Masocha, 2012). Meeting these standards will enable SME's to offer quality products to both international and local markets (Ibid). According to CIDB (2011c) the ISO 9000 defines quality as 'the degree to which a set of inherent characteristics fulfils requirements'. In line with the ISO 9000 definition, FIDIC defines quality as "...... that Quality, which meets or exceeds the requirements of the Employer, as specified in the contract documents, whilst complying with law, codes, standards and regulatory policy, which apply to the contract" (Ibid). DoPW IPIP (2014 /15) Further defines Quality Management quality control processes that should be undertaken for the Programme Management Components in terms of obeying the principles of the Project Management in terms of Cost, Quality and Time

parameters; within each project, what should be inspected by the relevant person when required and what is the measure that the quality has been achieved, provide consistent quality standards and instructions throughout all stages of the project construction. This provides the role players with a clear understanding of each responsibilities and what is expected in terms of good quality delivery, recording keeping and reporting; and moreover, provide easy access for an authorised external Stake Holder to randomly evaluate project construction progress with the Quality Management Plan (Ibid).

According to CIDB (2011c) there are several challenges that hinder the successful achievement of quality. Corruption is regarded as the major barrier in achieving construction quality in South Africa (Ibid). Moreover, CIDB (2011c) noted that other factors that are barriers in the achievement of quality are designs including the inadequate details, specifications, and poor design coordination, procurement including emphasis on time and budget, shortened project periods, lack of pre-qualification, competitive tendering and awarding of contracts primarily on price, and construction related factors: including skills shortages and insufficient workforce training, lack of management commitment, poor site management , lack of contractor quality expertise, inadequate resourcing by contractors, level of subcontracting, lack of understanding of quality, lack of worker participation, focus on cost by contractors, focus on time by contractors, lack of insight relative to the role of quality, lack of quality improvement processes, inadequate generic skills training, lack of minimum requirement to contract, reliance on inspections and inadequate production skills

The result of poor quality management is evidenced in the construction of low cost housing whereby they have been poorly constructed and resulting in structural defects, in which during the evaluation it will be costly to renovate or reconstruct (CIDB, 2011c)

2.5.2.5   Health and safety and environmental management

Department of human settlement (2015) states that when complying with requirements of the Occupational, Health and Safety (OHS) Act (Act No. 85 of 1993) it reduces the risk on employees from being harmed and illness at work and creates a safe working place. Furthermore, the compliance with OHS (Act No. 85 of 1993) is to continue a safe working environment for the employees, conducting monthly OHS inspections, identifying and reducing risks (Ibid).

2.5.2.6   Management of subcontractors

According to Cant (2012) and Scheers (2010) based on the information they obtained from respondents survey on the challenges faced by SME's in managerial skills, 37% had problems establishing competitive prices, 31% had problems on recording business transactions, 31% were unable to write a performance appraisal, 29% experienced marketing problems, 26% had difficulty managing conflict in the workplace, 18% had problems with time management, 16%

experienced problems solving problems, 21% could not managed personal stress, 20% experienced problems with book keeping, 10% had problems motivating people; and 4% could not write a business plan as illustrated in Figure 2.4.
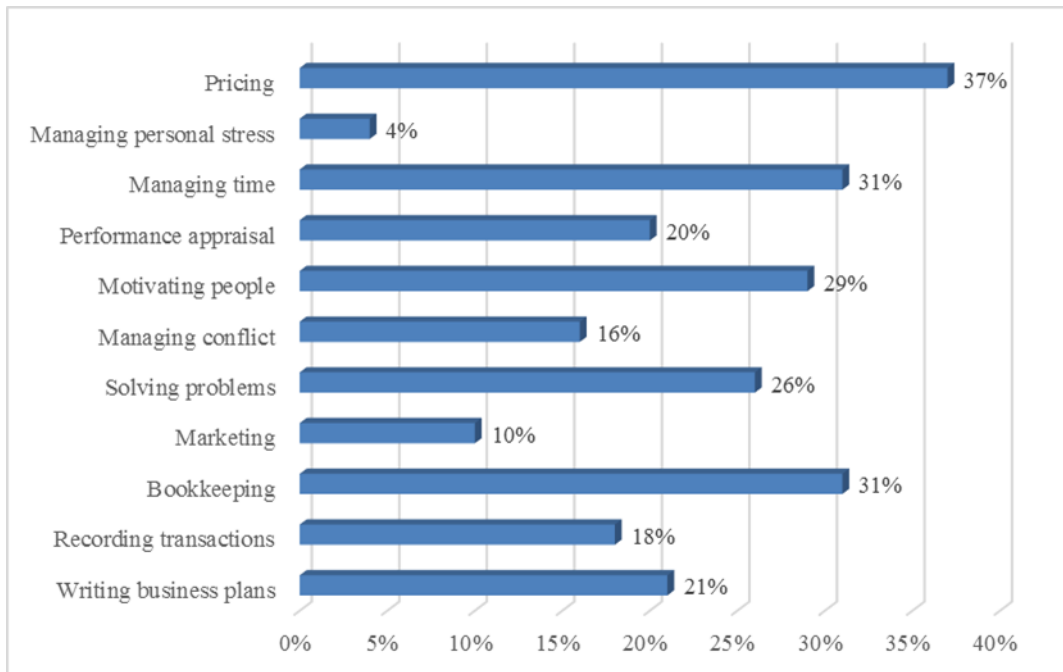
Figure 2. 4: Managerial skill *(Source: Cant, 2012 and Scheers, 2010)*

According to NDP (2030), CIDB Annual Report (2011/12) Infrastructure is vital for the development of faster economic growth and higher employment, and both public and private sectors can play important roles in building infrastructure. CIDB Annual Report (2011/12) is concerned about the shortage of skilled labour as the result contractors struggle to complete projects timeously and successfully, which then impacts on their profit as well as quality of the work done. Cant (2012) pointed out that managerial skills and business knowledge are a significant indication of SME's performance to tasks and activities related to business.

2.5.3   Insufficient resources

Resources is anything that a business owner need and use to pursue a business opportunity, for example resources can be money that is invested in the business, the people who contribute their efforts, knowledge and skills and the physical assets (Chimucheka, 2013). These resources can be divided into four categories, namely human resources, information resources, physical resources and financial resources and are discussed below (Ibid).

2.5.3.1   Human resources

A firm will not exist without productive human resource and it is the owner's responsibility to recruit and manage labour and other resources within the firm, moreover human resource includes

all people and their efforts, skills, knowledge and insights that they contribute to the overall performance of the business venture. (Chimucheka, 2013 and Mahadea and Pillay, 2008). To develop their human resource efforts, entrepreneurs also need to arrange for training and education to employees, there is also a need to motivate employees to encourage high performance (Chimucheka, 2013 and Emuze, 2011).

2.5.3.2 Financial resources

Finance is a primary requirement for SME's financial resources are very vital in any business and to any business owner or operator (Chimucheka, 2013). Lack of suitable financial resources places major constraints on SME development (Ibid). Entrepreneurs need to determine the nature of financial resource needs and investigate proper means to obtain the necessary financial resources (Ibid). Different sources of financial resources exist, but they can simply be classified into two broad categories, which are debt and equity (Ibid). Financial resources need to be carefully managed, because poorly managed cash flow has been acknowledged as one of the key causes of SME contractor's failure (Ibid).

2.5.3.3 Physical resources

They include physical assets such as buildings and equipment. Physical resources also include raw materials that could be used to create the products and services of a business (Ibid).

2.5.3.4 Information resources

Both internal and external information resources are very significant to contractors for they will allow them to develop well knowledgeable plans to fight competition as well as to advance performance of their ventures (Ibid).

2.5.4 Failure to understand the sector

For SME's to be successful they need to understand the market dynamics, test and understand environmental changes, mainly the extent of current and future competition and this will preserve their firm's growth, sustainability and performance (Chimucheka, 2015 and CIDB, 2011b)

2.5.5 Uncompetitive pricing

According to Motsetse (2015) the building rates are increasing annually and the growth of the construction industry depends on the steadiness in material prices. However, regardless of the increasing of material prices, Chadhliwa (2015) stated that contractors are still using low rates when tendering in order to submit a winning tender. Chadhliwa (2015), further stated that that low rates affect the growth of SME contractors.

2.5.6   Crime and Corruption

According to Olawale and Garwe (2010) and DTI (2008) crime and corruption are major factors that prevent business growth in South Africa. GEM (2011) argues that the growing rate of unemployment, service delivery protests and mounting concerns about corruption, crime and governance are the result of the country's economic, social and political challenges that are increasing daily.

This high rate of crime and its effect to business is growing, causing SME's to focus on ways to overcome crime, rather than focusing on growing their businesses and be ahead of their opponents (Olawale and Garwe, 2010). OECD (2015) further stated that high crime is forcing firms to increase their security, and it has been reported that the employment for private sector security has been increased by approximately 400 000 guards that is twice the size of the police force. Over the last decade, the number of business robberies has increased by a factor of 4.5 as well as the rate of corruption at the government level have grown (OECD, 2015).

The construction industry is regarded as one of the most corrupt industry in developed and developing countries, it was categorised as the sector in which bribery of public officials was the most common and it is still growing significantly worldwide (CIDB, 2011c). The construction industry is followed by real estate and property development according to Bribe Payers Index (BPI) (Ibid). The Contractors can do anything to gain higher cidb grades including submitting fake records in support of their registrations, and pay off of cidb employees (Ibid).

CIDB Annual report (2014/2015) is against fraud and corruption and all the cases reported are investigated. Moreover, the anti-fraud and corruption policy has been advanced to monitor on fraud and corruption (Ibid). In agreement Department of Planning, Monitoring and Evaluation (2014/15) and Annual Report Department of Labour (2014/15) are against fraud and corruption and they have formed fraud prevention policy, the purpose of the strategy is to prevent and detect fraud and corruption and to create a culture which is intolerable of fraud and corruption. GEM (2011) argues that corruption has a massive impact on economic development and if it is not controlled or managed it will have a major impact on early-stage entrepreneurial development. According to IRMSA Risk Report (2015) the Corruption Perceptions Index (CPI) that ranks countries based on how corrupt a country's public sector is perceived to be, South Africa is ranked 72nd out of 177 countries surveyed, with a score of 42 out of 100 in the CPI as it is gradually performing worse and this damages the country's reputation.

There are several economic crimes experienced by South Africans and global counterparts, for example Asset misuse, Procurement fraud, Bribery & corruption, Human resources fraud, Financial-statement fraud, Cybercrime, Money-laundering, Tax fraud and Illegal insider trading illustrated in detail in Figure 2.5.
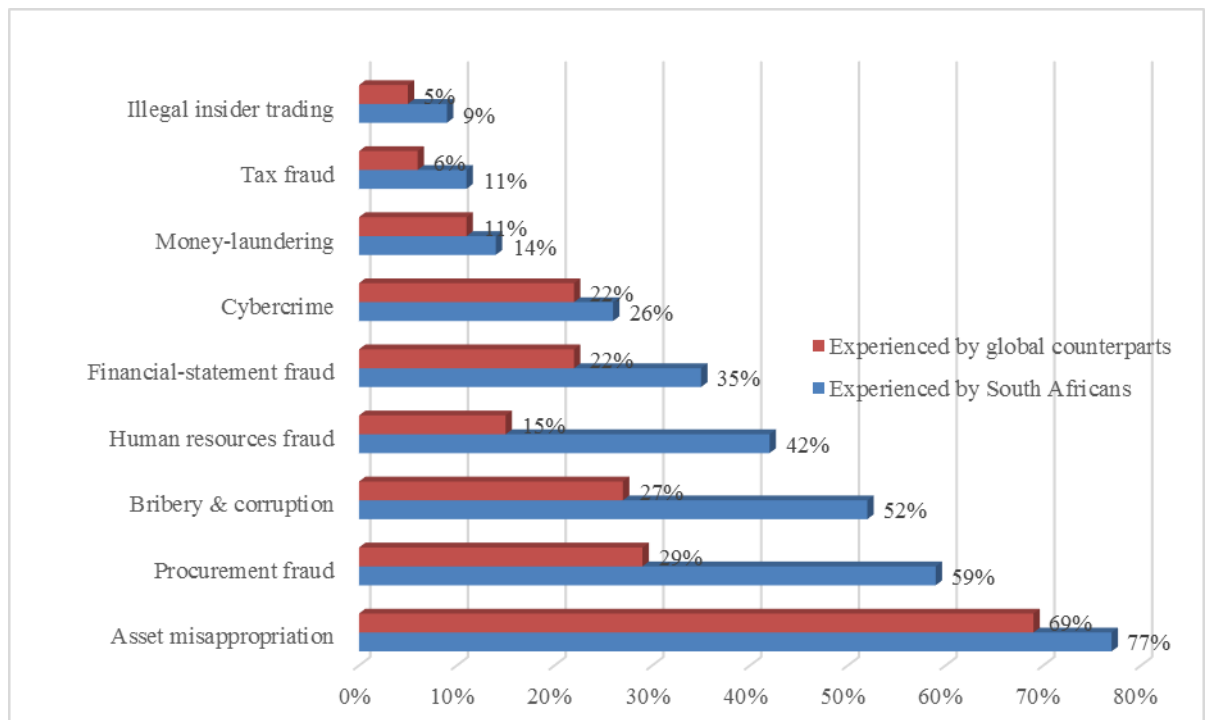
Figure 2. 5: Main types of economic crime (Source: IRMSA Risk Report, 2015)

2.5.7   Late payments by Clients

The delay in receiving monthly and final payments from Clients creates major problems for emerging contractors and economy (Motsetse, 2010). The late payment by Clients, especially from government have led most of the emerging contractors to liquidation even thou they performed significantly, do the work according to the standards and of high quality (Ibid). Therefore, the emerging contractors ends up having cash flow problems, owing the bank and defaulting, especially those that do not have means to sustain the drain of their cash flow (Ntuli and Allopi, 2013 and Motsetse, 2010).

According to Department of Public Works strategic planning (2015 – 2020) late payments to emerging contractors is regarded as one of the key challenges because it does not only affect the contractors but also service delivery is delayed as well as economic growth

2.6 Access to work

Lack of access to work opportunities remains a constraint to business growth for both General Building and Civil Engineering classes of works across all grades in the construction industry and Contractors are struggling to win tenders (CIDB Annual Report, 2015/16). This is caused by several reasons, including declined growth of spending in infrastructure from both public and the private sector (NDP, 2030 and CIDB Annual Report, 2015/16). Chadhliwa (2015) further stated that if the Contractors are unable to obtain work or win tenders from both public and private sector

they will not be able to build their reputation and experience. Most of the Clients do not employ contractors without a proven reputation and experience.

Chimucheka (2015) suggested that for SME's to survive, grow and be sustainable, the owners need to know the changing aspects of competition in their industry and develop skills and competencies that will give them a competitive advantage.

2.7 Chapter summary

An overview of both general and construction small and medium enterprises and their contribution was discussed considering their importance in creating job opportunities and economic growth and development in developed and developing countries. SMEs were defined to determine the meaning in each country by categorising them by an amount of employees that are employed in the small and medium enterprises and their turnover.

Although SMEs are considered as engines of generating sustainable economy and employment, they are still tackled with challenges that are affecting their growth as well high rate of failure due to numerous challenges, procurement, lack of access to finance, poor management skills, insufficient resources, failure to understand the sector, cannot price competitively, crime and corruption and late payments by clients are some of the factors that contribute significantly in the poor development of SME's.

CHAPTER 3: THE ROLE OF GOVERNMENT INITIATIVES AND POLICIES RELATIVE TO SMALL MEDIUM ENTERPRISES (SME'S) IN SOUTH AFRICA

3.1 Introduction

Since 1994, the South African government had focused on Small Medium Enterprise as the key policy focus area (National Directory of Small Business Support Programmes, 2010). Due to the importance of SME's in economic development, job creation and equity (FinMark Trust, 2015; Fatoki, 2014; Cant and Wiid, 2013; Smit and Watkins, 2012; Kongolo, 2010; Fatoki and Garwe, 2010 and National Directory of Small Business Support Programmes, 2010). The Government has established actions on developing SME's by initiating numerous programmes and policies that are national, provincial and local government to support construction SMEs both directly and indirectly in terms of finance, training, business advice, monitoring and counselling (Motsetse, 2015; Ramukumba, 2014; CIDB,2011b; Appels, 2010 and Gasa, 2012).

These support programmes targeted at small businesses are provided by different government departments and institutions as well as the private sector namely Department of Transport (DoT), Department of Public Works (DPW) and Department of Small Business Development (DSBD) (National Directory of Small Business Support Programmes, 2010). Under the departments there are various support agencies for SME's (Ibid). Gasa (2012) reckons that CDPs play a vital role in supporting the development of the construction industry and the construction SME's. however National Directory of Small Business Support Programmes (2010) states that the small businesses are not fully utilising and benefiting as much as they could from available support programmes due to lack of communication and access to support programmes.

3.2 Initiatives and Policies targeted at SME's in general

3.2.1 Department of Small Business Development (DSBD)

Department of Small Business Development (DSBD) was established by the President as the national department in May 2014 under the leadership of Minister Lindiwe Zulu (National Treasury, 2015 and SEDA, 2014b). The mandate of the department is to lead a combined approach to the elevation and improvement of small businesses and cooperatives through an emphasis on the economic and legislative drivers that motivate entrepreneurship to contribute to drastic economic transformation (DSBD, 2016 and National Treasury, 2015). When DSBD was proclaimed in 2014 some of the agencies and responsibilities were reassigned from DTI and

Department of Economic Development to DSBD namely the Small Enterprise Development Agency (SEDA) and Small Enterprise Finance Agency (SEFA) (DSBD, 2016 and SEDA, 2014b).

The department mandate is conducted by a legislative framework that includes the National Small Business Act (1996) as amended, the Cooperatives Act (2005) and the Cooperatives Amendment Act (2013) (Treasury, 2015).

3.2.1.1   Small Enterprise Development Agency

Small Enterprise Development Agency (SEDA) was established in December 2004 as an agency under Department of Trade and Industry to support and sustain small businesses in South Africa (SEDA, 2016; SEDA, 2014/2015 and National Directory of Small Business Support Programmes, 2010). The establishment was achieved by merging three entities: Ntsika Enterprise Promotion Agency, National Manufacturing, Advisory Centre (NAMAC) and the Community Public Private Partnership (CPPP) programme.

After the establishment of DBSD the mandate and responsibilities of SEDA were reassigned from the DTI to the DSBD in 2014 (SEDA, 2014/2015). The mandate of SEDA is to design and implement a standard national delivery network, programmes and policy that will be used by SME's throughout South Africa (SEDA, 2013/2014).

SEDA is a serious contributor in the small enterprise development ecosystem, and its network provides access to the much needed support services to small enterprises and co-operatives (SEDA, 2014/2015). SEDA assists both existing and start-up business even though it focuses more on the establishing of new businesses (Motsetse, 2015). It provides business support to SMMEs through improvement of business plans, development of marketing material, training, mentoring and coaching (Ibid).

3.2.1.2   Small Enterprise Finance Agency

Small Enterprise Finance Agency (SEFA) was established on 1 April 2012 in terms of Section 3(d) of the IDC Act that incorporated the activities of the three previous structures, namely Khula Enterprise Finance Limited, South African Micro-Finance Apex Fund (SAMAF) and the IDC small business activities (SEDA, 2016 and SEFA, 2015). Services provided include a credit guarantee scheme, the provision of equity, and private sector funding for small businesses in certain sectors (Ibid). The mandate of SEFA is to be the foremost catalyst for the development of sustainable SMMEs and Cooperatives through the provision of finance (Ibid). The company grants a loan from a minimum of R50 000 to a maximum of R5 million (Ibid).

SEFA has played an significant role in the enlargement of the economy, increasing the number of SMMEs and Cooperatives funded by 48% and disbursements by 58% from the previous financial year(SEFA;2015). In 2014/15 SEFA funded 68 724 SMMEs and Cooperatives and disbursed R1.3 billion compared to the prior year's performance of 46 400 SMMEs and Cooperatives, and disbursement of R822 million. Of the disbursements in 2014/15, R292 million went to youth-owned businesses, R484 million to women-owned businesses, while R636 million went to rural provinces (Ibid).

3.2.1.3   National Empowerment Fund

The National Empowerment Fund (NEF) was established by the National Empowerment Fund Act (NEF Act) No.105 of 1998(NEF, 2015/2016 and DTI, 2008). The NEF is a driver and thought leader in promoting and facilitating black economic participation. Government created and mandated the NEF through the NEF Act to grow black participation in South Africa's national economy (NEF, 2015/2016).

NEF aims to promote business ventures headed by historically disadvantaged people or to drive broad-based black economic empowerment and to ensure that they inclusive in the economy (DTI, 2008). The agency provides custom-made financial and non-financial support (SEDA, 2016 and DTI, 2008). The NEF provides business funding from R250 000 to R75 million across a range of sectors, for start-ups, expansions and equity acquisition purposes (NEF, 2015/2016 and National Directory of Small Business Support Programmes, 2010). NEF offers different types of funding entrepreneurship finance, procurement finance, new venture finance and strategic projects fund. NEF discharges its mandate through the following funds:

- **iMbewu Fund** - This fund is designed to support black entrepreneurs wanting to start new business as well as support existing black owned enterprises with expansion capital. The fund supports entities by offering debt, quasi-equity and equity finance products with the funding threshold ranging from minimum R250 000 to a maximum R10 million.
- **Rural and Community Development Fund -** Designed to support sustainable change in social and economic relations and support the goals of growth and development in the rural economy, through financing sustainable enterprises. The fund has three products: New Ventures Finance, Business Acquisition and Expansion Capital with the funding threshold ranging from minimum of R1 million to R50 million.
- **Strategic Projects Fund -** The SPF is at the centre of NEF's investment strategy when it comes to securing the participation of black people in early stage projects. Its core function is to provide Venture Capital Finance aimed at developing South Africa's new and industrial capacity within strategic sectors identified by Government as the key drivers of economic growth. The fund

facilitates the development of various strategic projects through 6 stages of the project development phases, namely, Scoping and Concept study, Pre-feasibility study, Bankable feasibility, Financial closure, and Construction phase & technical completion.

- **uMnotho Fund -** This fund is designed to provide access to Acquisition Finance; New ventures Finance, Expansion Finance, Capital Markets, Liquidity and Warehousing as well as Property Finance. These products provide capital to black owned and managed enterprises, black entrepreneurs who are buying equity shares in established white-owned enterprises, new ventures and BEE businesses that are or wish to be listed on the JSE. Funding Ranges from R2 million to R75 million.

- **Women Empowerment Fund -** This fund was established in 2013 and is aimed at fast-tracking the provision of funding to businesses owned by black women. Funding is provided from R250 000 to R75 million across all existing NEF product suite (NEF, 2015/2016).

3.2.2   Department of Transport (DoT)

Department of Transport (DoT) is under the leadership of Minister Joe Maswangayi. The Department mandate is to maximise the contribution of transport to the economic and social development goals of our country by providing fully integrated transport operations and infrastructure. DoT has Vukuzakhe Contractor Development Programme to develop emerging contractors

3.3 Initiatives and Policies targeted at SME's in construction sector

3.3.1   Department of Public Works (DPW)

Department of Public Works is currently under the leadership of Minister Nkosinathi Nhleko, according to the Constitution of the Republic of South Africa, 1996 (Act No 108 of 1996), and the President has allocated a functional mandate to the Department of Public Works (NDPW, online 26/04/2017). The Department's mandate is to be the custodian and manager of all national governments' fixed assets, for which other legislation does not make another department or institution responsible that is confirmed through the annual Appropriation Act, the State Land Disposal Act (Act No 48 of 1961) (Ibid).

DPW has the following active programmes that have the major impact in the development and sustainability in the SME's namely:

- The Expanded Public Works Programme (EPWP)
- Emerging Contractor Development Programme (ECDP)
- Contractor Incubator Programme (CIP)

Table 3. 1: EPWP work opportunities in the infrastructure sector

Year	Number of Work Opportunities	Youth %	Women %	People with Disabilities %
2005	109,712.00	39	35	0.4
2006	108,365.00	38	49	0.2
2007	146,974.00	32	45	1.9
2008	250,104.00	39	40	0.8
2009	397,984.00	46	36	1.1
2010	263,457.00	45	25	0.6
2011	277,100.00	46	47	0.1
2012	374,591.00	47	49	0.1
2013	340,676.00	47	47	0.1
2014	391,555.00	44	47	0.3
2015	409,209.00	49	50	0.2

CIDB, 2015

3.3.1.2 Emerging Contractor Development Programme (ECDP)

The Emerging Contractor Development Programme (ECDP) was developed by National Department of Public Works (NDPW) to develop contractors that actively registered in grades 1 and 2 on the cidb Register of Contractor which are eligible to tender on projects up to the maximum of R1,000,000 (CIP, 2007).

According to NDPW Rearrangement plan and controlling plan for the ECDP states that these emerging contractors will be required to enter a two-year SETA registered leanership and exit the programme after 2-3 years in the leanership, with a Level 3 registration on the CIDB register. The proposed programme consists of the following key elements:

• Leanership: i.e. the Construction Contractor NQF Level 2 (CCO2);

• Mentorship: Mentors will be provided as a support mechanism to the learners, throughout the period of the leanership;

• Payments: Compliance of payments to learners, in-line with the Public Finance Management Act (PFMA), which requires payment within 30 days;

• Training Projects

• Guarantees: The DPW guarantees policy will apply. i.e. waiver of guarantees on project up to R1 000 000

• The CIDB Register of Contractors: The CIDB's Contractor Grading System provides a framework within which the development of emerging enterprises can take place

• Project Management support – this team will liaise with all relevant stakeholders to ensure that the leanership is implemented successfully.

3.3.1.3   Contractor Incubator Programme (CIP)

The Contractor Incubator Programme (CIP) was developed by National Department of Public Works (NDPW) to create an environment that enables the growth and development of small to medium sized construction enterprises to become sustainable construction enterprises. And that are controlled by Historically Disadvantaged Individuals (HDIs) (DPW, 2017/2018 and NDPW, online 01/05/2017). The CIP focus on contractors that are actively registered in grades 3 to 7 on the cidb Register of Contractor which are eligible to tender on projects above R1,5 million and below R30 million range as illustrated in Table 3.2 (DPW, 2017/2018; NDPW, online 01/05/2017 and CIP, 2007).

Table 3. 2: Contract enterprises targeted in the ECDP and the CIP

Financial capability		Track record over the past 2 years		Minimum current financial capability
Type of program	**Maximum value of contract that a contractor is considered capable of performing (upper limit of bid value range)**	**Minimum average annual turnover**	**At least one contract with a value greater than**	**Employable capital (EC) of at least (Net Asset Value x Bank Rating Factor) + financial sponsorship**
1 (ECDP)	R200,000	R0	R0	R0
2 (ECDP)	R500,000	R0	R80,000	R0
3 (CIP)	R1,500,000	R780,000	R260,000	R0
4 (CIP)	R3,000,000	R2,400,000	R800,000	R600,000
5 (CIP)	R5,000,000	R4,800,000	R1,600,000	R1,200,000
6 (CIP)	R10,000,000	R9,000,000	R3,000,000	R2,250,000
7 (CIP)	R30,000,000	R24,000,000	R8,000,000	R6,000,000

Source: NDPW Realignment strategy and management plan for the ECDP

According to CIP (2007) CIP has the following five key components of the operational framework:

- Programme management for the incorporation of individual mechanisms of the incubator programme;
- Integration of the incubator programme with the strategic plan of the DPW for the procurement of construction work which will ensure accessibility to appropriate work for participants of the incubator programme;
- Adherence to the DPW procurement policy when selecting participants and in procuring their services;
- Implementation of development programme through mentorship; and
- Aligning institutional support structures to continuously improve the commercial and managerial capacity of participating contracting enterprises

3.3.2   National Contractor Development Programme (NCDP)

National Contractor Development Programmes (NCDP) in South Africa refers to the procedure of classifying and eliminating the restrictions affecting the development and performance of emerging Contractors (CIDB, 2016; CIDB 2015/2016 and CIDB, 2011b). According to CIDB (2011b) the NCDP's supports the contractor's development differently at their growth and life cycle as they require different support namely:

- targets the emerging contractors with the potential to develop through leanership and mentorship in cidb grades 2 and 3 in terms of tendering, pricing, financial management, marketing and contract administration;

- targets for more knowledgeable contractors in cidb grades 3 to 6 by awarding the direct contracts through competitive bidding, facilitating joint ventures and to provide sustainable work supply; and

- targets the contractors in cidb grades 4 to 7 that shows the potential to develop by improving their performance through introducing best practice systems such as health and safety, quality management and environmental management.

NCDP aims to be the main programme which merges, standardizes, controls and aligns several programmes towards sustaining Contractor Development in South Africa (CIDB, 2016). The NCDP is a public sector managed programme including partnership between the cidb, National and Provincial Public Works and other enthusiastic stakeholders and partners (DPW, 2017/2018 and CIDB, 2016). Contractor development programmes (CDPs) play a pivotal role in supporting the development of the construction industry and the development of emerging contractors. The cidb offers support and management to align CDPs with the National Contractor Development Programme (NCDP) by Providing Client Departments with support, creates an enabling environment, facilitates partnerships a regulates the industry registrations and procurement (CIDB, 2016). Whereby DPW has the Contractor Incubator Programme (CIP) aimed at developing emerging enterprises into sustainable contracting companies through creating an enabling environment (DPW, 2017/2018).

According CIDB (2011b) there are currently over 18 CDP's being monitored by NCDP, with approximately 1,300 contractors with different cidb grading engaged at these programmes, namely Coega SMME Development Programme, Incubator Programme, Integrated Contractor Development Programme (ICDP), MasakheSonke Contractor Development Programme, Mthatha Contractor Development Program, NMMB Contractor Development Program, Department of Police Roads and Transport, Joburg Water Vukuphile Leanership, Vuk'Uphile Leanership, KZN Department of Public Works, Vukuzakhe Contractor Development Programme, Limpopo Contractor Development-LDPW and Stefanutti Stocks Programme, Limpopo IDT Contractor

Development, Vuk'Uphile Contractor Development, Vuk'Uphile Contractor Development Programme, CIP North West, Vuk'Uphile (Tlokwe City Council), Vuk'Uphile (leanership) programme North West - GP10012, DT&PW Roads Branch CDP - WC10003, and Siyenyuka - WC10001(CIDB, 2016; CIDB 2015/2016 and CIDB, 2011b). Table 3.3 illustrates the number of contractors that are assisted by CDP's provincially.

Table 3. 3: Contractor Development Programme

Province	CDP	Number of Contractors
Eastern Cape	Coega SMME Development Programme	96
	Incubator Programme	68
	Integrated Contractor Development Programme (ICDP)	202
	MasakheSonke Contractor Development Programme	34
	Mthatha Contractor Development Program	33
	NMMB Contractor Development Program	24
	Department of Police, Roads and Transport	74
Gauteng Province	Joburg Water Vukuphile Leanership	18
	Vuk'Uphile Leanership	28
KwaZulu Natal	KZN Department of Public Works	86
	Vukuzakhe	268
Limpopo Province	Limpopo Contractor Development-LDPW and Stefanutti Stocks Programme	10
	Limpopo IDT Contractor Development	25
	Vuk'Uphile Contractor Development	4
	Vuk'Uphile Contractor Development Programme	35
North West	CIP North West	11
	Vuk'Uphile (Tlokwe City Council)	9
	Vuk'Uphile (leanership) programme North West - GP10012	13
Western Cape	DT&PW Roads Branch CDP - WC10003	27
	Siyenyuka - WC10001	13

Source: CIDB, 2016

A detailed discussion of the programmes indicated in Table 3.3 in respect to whom they are targeting and whether they have been able to achieve the set objectives is not included in this study. However, the only focus will be on the Vukuzakhe Contractor Development Programme because of its significance to the research.

3.3.2.1 Vukuzakhe Contractor Development Programme

This KwaZulu-Natal Department of Transport programme promotes and supports sustainable business development in the emerging contractor sector (CIDB, 2011b). It focuses on wealth and job creation in communities that have been most underprivileged historically (Ibid). More than

one thousand contracts are awarded annually to emerging contractors with a value of more than R200-million (Ibid).

To take part in the programme, emerging contractors must be listed on the department's database. Admittance onto the data base obliges applicants to undergo a demanding interview with the Department (Ibid). The interview is designed to establish skill levels, ensure that the business is genuine and that it meets the objectives of the programme (Ibid).

The Department also provides contractors with tendering skills to assist them in the building up of their tender rates (Ibid). This assists them in the understanding of what resources and construction methodologies are required to successfully perform their contractual obligations. On site mentorship is continuously provided to assist contractors with ordering materials, negotiations with suppliers and production rates (Ibid). This mentorship is through contract management support or through joint ventures with established contractors. Business skills training is to assist with compliance to all statutory requirements (Ibid). This support programme has improved the credit rating of contractors. The Vukuzakhe programme also offers a range of other support services, including:

- A relaxation of sureties and performance bonds.
- On the job training, both in technical and business management skills.
- Organisational development inputs to form associations.
- Training of Vukuzakhe Associations to provide services and information to members and to enable them to become an effective lobby and advocacy group in the construction sector.
- Access by Vukuzakhe contractors to CETA leanership.

3.3.3 Construction Industry Development Board (CIDB)

Parliament through Act 38 of 2000, has established the CIDB as a constitutional body for improvement and upgrading of the construction sector for effective delivery, to provide leadership to stakeholders as well as to enhance the role of the industry in the country's economy. According to CIDB (2011b), the CIDB and the National and Provincial Departments of Public Works are responsible for implementing the National Contractor Development Programme (NCDP). NCDP supports contractors from previously underprivileged upbringings by creating an empowering environment for contractor development; increasing and strengthening mechanisms to develop contractors, including development programmes for emerging contractors; facilitating the improvement of contractors' performance; and supporting the creation of more skilled artisans, technicians and technologists for the construction industry (Ibid).

The CIDB assists in solving the constraints that add to the growth and development of sustainable contracting capacity, especially individuals from previously underprivileged upbringings. Skills improvement and contractor performance should be developed to lessen the number of projects that are not completed by the contractors and contribute negatively to the economic growth of the country.

3.3.4   Broad-Based Black Economic Empowerment (B-BBEE)

Broad-Based Black Economic Empowerment (B-BBEE) is the strategy used by government to bring about bigger involvement of black people in the economy, and to spread the benefits of the economy extensively (Department of Water Affairs and Forestry, 2007).

B-BBEE is the plan to include most of the poor inhabitants that were excluded in participating in the economy, this will enable them to meet their own livelihood needs while building the economy (Department of Water Affairs and Forestry, 2007). B-BBEE relates to all enterprises that conduct businesses in South Africa, inclusive of all companies, sole proprietors, cooperatives, multi-nationals, enterprises owned by organs of the state or public entities (Ibid). BEE requirements apply equally to white and black but on the size of the enterprise (Ibid).

3.4 The effectiveness of government initiatives in construction sector

According to CIDB (2015) the South African construction SME's play a pivotal role in the economic growth and employment creation. Since 2008, the South African construction sector has contributed approximately 9% in to the formal and informal employment as well as the GDP (Ibid). According to Ranjit, Mwanaumo and Nkado (2011) quoted by Wentzel, Wentzel, Smallwood and Emuze (2014), the South African construction industry is still in a process of improvement. This is based on fact that the construction SME's still needs assistance in terms of training and business advice, monitoring and counselling (Wentzel, Wentzel, Smallwood and Emuze, 2014).

There are several initiatives in South Africa specifically targeted at promoting the attractiveness, growth and sustainability of the construction SME's. However, South African emerging contractors are faced with various challenges. The SA government introduced these initiatives to offer different products intended at supporting the small business sector in terms of training, skill development, access to finance, reduce late payments by clients, access to job opportunities and assist with managing cash flows to sustain their enterprises.

The use of Expanded Public Works Programmes can be of a great help to try and minimize the shortages of artisan skills, create employment for the unemployed, improve skills for the under-skilled and under-qualified persons through training and education and increase economic growth. The Emerging Contractor Development Programme (ECDP, Contractor Incubator Programme (CIP) and National Contractor Development Programme (NCDP) classify and eliminate the constraints affecting the development and performance of emerging Contractors (CIDB, 2011b).

Vukuzakhe Contractor Development Programme is the KwaZulu - Natal initiative that encourages and supports sustainable business improvement in the emerging contractor sector. According to CIDB (2016) only 268 emerging contractors are benefiting from the programme which is approximately 25% of the total number of emerging contractors in KZN suggesting that construction SME's are not aware of government initiatives targeted at their growth, development and sustainability and they do not make frequent use of the support mechanisms provided through these initiatives.

According to CIDB (2011b) reckons that most of the government initiatives are not identifying and attacking the source causes of the challenges facing contractors and the improving their performance. The report further elaborated that Contractor Development Programmes (CDP's) are also faced with challenges that are hindering their success namely,

- Struggle in choosing the suitable participants into a programme, as it usually open to all interested participants;
- Lack of persistence on prior experience in the industry, and on prior technical, managerial and construction related skills;
- Inadequate training and underestimated the amount of training required both for contractors and development agency staff is generally;
- Contractors with slight understanding of the environment and difficulty of construction, and how to deal with arising risks;
- Inadequate access to finance, trade credits and to guarantees;
- Shortage of construction particular skills such as pricing, project management and the programming of site activities;
- Hesitancy to employ skilled employees, generally due to financial constraints;
- Compromising quality over speed and financial considerations;
- Low turnover limits in the industry, reducing the capability of small contractors regardless of intervention;
- Trouble creating a principles of entrepreneurship amongst contractors.
- Changing industry workloads;

- Recognised challenges including inadequate training organisations and the lack of suitable training resources, legal challenges to the selection and provision of services to a select group, poor management and lack of funding for the programmes, and difficulty identifying deserving contractors;

- Lack of observing and appraisal of the programmes and the use of unsuitable metrics to measure success.

Though the government initiatives impact emerging contractors differently as they are in different stages of grading (CIDB, 2011b). SBP Alert (2009), argues that the impacts and accomplishments of the government's programmes have not met their full potential. For the past fifteen years the government has invested in countless programmes aimed at supporting and developing the SME sector in different categories (ibid). Despite this, South Africa is still behind other evolving countries in promoting the growth and sustainability of small businesses (ibid). SBP Alert report reckons that for government initiatives to have an effective impact, the joined-up approach is required.

3.5 Chapter Summary

This chapter provided a considerate and elaborated on the programmes that are provided by government institutions to assist SMEs contractors directly and indirect. Analysed the level of awareness, nature of the enabling environment and extent of equitable access of construction SME's to the given government initiatives, determine whether construction SME's make use of the support mechanisms claimed to be available through these initiatives; established the effectiveness of these government initiatives in terms of inputs, performance, activities, implementation, outputs, outcomes and impacts; and determine the possible unintended consequences and impact of government-driven initiatives targeted at the SME sector of the construction industry.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

Research methodology elaborates the approach of research methodology and research design followed to achieve the objectives of the study and test the study hypotheses. Fellows and Liu (1997), describe research methodology as the ethics and measures of logical thought procedures which are applied to a scientific investigation. Kothari (2004) further defined research as a scientific and systematic search for pertinent information on a specific topic.

Therefore, this research is sought to establish the role of SME's in the South African construction sector in terms of economic growth and employment creation, identify the various initiatives introduced by the South African government targeted at the growth and development of the SME sector of the construction industry, analyse the level of awareness, nature of the enabling environment and extent of equitable access of construction SME's to the given government initiatives, determine whether construction SME's make use of the support mechanisms claimed to be available through these initiatives, establish the effectiveness of these government initiatives in terms of inputs, performance, activities, implementation, outputs, outcomes and impacts, and determine the possible unintended consequences and impact of government-driven initiatives targeted at the SME sector of the construction industry by employing the use of quantitative research approaches.

4.2 Research Design

A research design is a strategy and structure of investigation so regarded as to obtain answers to research questions or problems (Kumar, 2011 and Cooper and Schindler, 2008). According to Bryman and Bell (2011) research design provides an outline for the collection of data. Moreover, Kumar (2011) indicated that research design is a technical plan that is adopted by the researcher to answer questions genuinely, objectively, precisely and economically. Accordingly, Renault (2017) stated that the research design provides the researcher with a clear research framework that guides the methods, decisions and sets the basis for interpretation.

Therefore Renault (2017), indicated that prior to designing the research, the research strategy to be used must be definite. According to Creswell (2014), there are three research methods, qualitative, quantitative and mixed methods.

4.2.1   Qualitative research

Qualitative research is an approach for exploring and understanding the meaning individuals or groups (Creswell, 2014). The qualitative approach seeks to gain insights and to understand

people's perceptions about the world, whether as individuals or groups (Fellows and Liu, 1997). Qualitative research design is one where the data are collected in the form of words and observations, as opposed to numbers (Johnson and Harris, 2002). Mack, Woodsong, Macqueen, Guest & Namey (2005) cited by Renault (2017) indicated that qualitative research is scientific in nature, it entails an investigation that provides a solution to a problem, analytically uses a set of predetermined procedures to answer the question, collects data, and produces results that can be used for future studies. Qualitative research is associated with research questions and phenomena of interest that require exploration of detailed in-depth data, aimed at description, comparison or prescription (Johnson and Harris, 2002).

According to Creswell (2014) qualitative method can be classified as Narrative research, Phenomenology, Grounded theory, Ethnographies and Case study as further illustrated below:

a) **Narrative research**

Narrative research is whereby the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives. This information is then often retold by the researcher into a narrative chronology.

b) **Phenomenology**

Phenomenology is whereby the researcher identifies the essence of human experiences about a phenomenon as described by participants in a study.

c) **Grounded theory**

Grounded theory is whereby the researcher derives a general, abstract theory of a process, action, or interaction grounded in the views of participants in a study.

d) **Ethnography**

Ethnography is whereby the researcher studies an intact cultural group in a natural setting over a prolonged period by collecting primarily observational and interview data.

e) **Case study**

Case study is whereby a researcher explores in depth a program, event, activity, process, or one or more individuals. The case(s) are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period.

Table 4. 1: Advantages and Disadvantages of Qualitative Research

Advantages	Disadvantages
The researcher more detailed and rich data in the form of comprehensive written descriptions or visual evidence such as images and objects.	Not always generalizable due to small sample size and subjective nature of the research
This research does not require a strict design plan before it begins.	This research is very time consuming
The researcher has the freedom to let the study unfold more naturally	The researcher interprets the research according to his or her own biased view, which skews the data gathered.

Source: (Fox & Bayat, 2010)

4.2.2 Quantitative research

The quantitative approach seeks to gather realistic data and to study relationships between facts and how such facts and relationships in agreement with theories and the findings of any research executed previously (Fellows and Liu, 1997). Quantitative research is explaining the phenomena by collecting numerical data that are analysed using mathematically based methods statistics (Muijs, 2004). Moreover, quantitative studies rely on quantitative information, namely numbers and figures (Cooper and Schindler, 2005). Muijs (2004) indicated that quantitative method tests the hypothesis.

According to Creswell (2014) and Kumar (2011), quantitative method can be classified as experimental design and non - experimental design (surveys)

a) Experimental design

Experimental design tests the influence of a behaviour on an outcome, monitoring for all other factors that might influence that outcome. The researcher assesses this by providing a specific treatment to one group and withholding it from another and then determining how both groups scored on an outcome Kumar (2011).

b) Survey research

A survey research provides a quantitative description of attitudes, or opinions of a population by studying a sample of that population. It includes cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection (Creswell, 2014).

Table 4. 2: Advantages and Disadvantages of Quantitative Research

Advantages	Disadvantages
The use of numbers allows better accuracy in reporting results	Uses large sample to make statically accurate results.
Influential methods of mathematical analysis can be used in the form of computer software packages	The background of the study or experiment is ignored
The focus is concise and narrow	This research does not study things in the natural setting like qualitative research

Source: (Fox & Bayat, 2010)

4.2.3 Mixed method

Mixed methods involve combining or integration of qualitative and quantitative research and data in a research study (Creswell, 2014).

According to Creswell (2014), mixed method can be classified as convergent parallel mixed method, Explanatory sequential mixed method, Transformative mixed method, embedded mixed method and multiphase mixed method.

a) **Convergent parallel mixed method**

Convergent parallel mixed method is a mixed methods strategy in which a researcher collects both quantitative and qualitative data, analyses them separately, and then compares the results to see if the findings confirm or disconfirm each other.

b) **Explanatory sequential mixed method**

Explanatory sequential mixed method is a mixed methods strategy that involves a two-phase project in which the researcher gathers quantitative data in the first phase, analyses the results, and then uses the results to plan or build into the second, qualitative phase.

c) **Transformative mixed method**

Transformative mixed method is a procedure of mixed methods design in which the researcher detects one of the qualitative theoretical frameworks such as, for example, indigenous populations, females, racial and ethnic groups, disabled individuals and uses the structure through the mixed methods study, such as to create the research problem, the questions, the data collection and analysis, interpretation, and the call for action. It is used in combination with explanatory, exploratory, and embedded designs.

d) **Embedded mixed method**

Embedded mixed method is a kind of mixed methods design that nests a convergent, explanatory sequential, or exploratory sequential method within a larger design or strategy.

e) Multiphase mixed method

Multiphase mixed method is a method to mixed methods research in which the researchers conduct numerous mixed methods projects, sometimes including mixed methods convergent or sequential approaches, sometimes including only quantitative or qualitative designs in a longitudinal study with a focus on a common objective for the multiple projects.

4.2.4 Differences between qualitative and quantitative research method

Table 4. 3: Qualitative and Quantitative Methods

Criteria	Qualitative Methods	Quantitative Methods
Purpose	To understand and interpret social interactions.	To test formulated hypothesis, assess the cause and effect, and make predictions.
Group studied	Small samples	Use large samples
Variables	Study of the whole, not variables	Specific variables studied
Type of data collected	Words, images or objects	Numbers and statistics
Form of data collected	Qualitative data such as open – ended responses, interviews, participant observations, field notes, and reflections.	Quantitative data based on instrument based question
Type of data analysis	Themes, patterns interpretation	Statistical interpretation
Objectivity and subjectivity	produce rich, subjective, qualitative data	Produce precise, objective, quantitative data
Role of researcher	Researchers and their biases may be known to participants in the study, and participant characteristics may be known to the researcher.	Researchers and their biases are not known to participants in the study, and participant characteristics are deliberately hidden from the researcher (double blind studies)
Results	Particular or specialised findings that is less generalizable	Generalizable findings that can be applied to other populations.
Scientific method	Inductive or bottom up: new hypotheses and theory are formulated from data collected.	Deductive or top down: hypotheses formulated are tested.
View of human behaviour	Dynamic, situational, social, and personal.	Regular and predictable
Most common research objectives	Explore, discover, and construct.	Describe, explain, and predict.
Focus	Examines the breadth and depth of phenomena.	Test specific hypothesis
Nature of observation	Have a natural location	Have an artificial location
Final report	Narrative report with contextual description and direct quotations from research participants without numerical data.	Statistical report with correlations, comparisons of means, and statical significance of findings

Source: (Creswell, 2014; Zikmud, Babin, Carr and Griffin, 2013; Kumar, 2011; Bryman and Bell, 2011).

4.2.5   Selected research method

For this research, the cross-sectional study design was employed. The proposed survey research in a form of questionnaire will be conducted in KwaZulu – Natal, South Africa. According to Kumar (2011), questionnaire is in the form of open and closed questions. In an open-ended question, the likely responses are not given. In the case of a questionnaire, a respondent writes down the answers in his/her words, whereas in the case of an interview schedule the researcher records the answers either word for word or in a summary describing a respondent's answer (Kumar, 2011). In a closed question, the possible answers are set out in the questionnaire or interview schedule and the respondent or the investigator ticks the group that best describe a respondent's answer (Ibid).

4.2.6   Targeted Population

Population refers to class, families living in the city or electorates from which the researcher selects the sample (Kumar, 2011). To obtain the impact of government initiatives in the success of small medium enterprises, the targeted population will include:

- Civil Engineering Contractors;
- General Building Contractors; and
- Public Sector Clients.

There is a total of approximately 45, 000 active and registered contractors in South Africa as illustrated in Table 4.4.

Table 4. 4: National CIDB Registration Breakdown, grades 1 to 9

Grade	Active		Suspended		Deregistered		Expired		Total
	CE	GB	CE	GB	CE	GB	CE	GB	
1	5000	5000	391	428	124	150	5000	5000	**21,093**
2	2058	2794	381	621	210	277	1294	1803	**9,438**
3	1170	810	149	117	46	46	495	440	**3,273**
4	1248	1127	134	154	60	55	635	654	**4,067**
5	723	642	101	68	26	28	417	367	**2,372**
6	960	846	95	63	31	27	365	344	**2,731**
7	590	456	38	28	10	5	115	112	**1,354**
8	214	185	14	8	0	2	35	35	**493**
9	94	55	1	2	0	0	18	12	**182**
Total	**12,057**	**11,915**	**1,304**	**1,489**	**507**	**590**	**8,374**	**8,767**	**45,003**

Source: CIDB (2017: 21/06/2017 online)

In KwaZulu-Natal, there is a total of at least 26, 944 active and registered contractors as illustrated in Table 4.3.

Table 4. 5: Provincial CIDB Registration Breakdown

Grade	Active		Suspended		Deregistered		Expired		Total
	CE	GB	CE	GB	CE	GB	CE	GB	
1	5000	5000	97	109	24	46	5000	5000	**20,276**
2	907	877	135	147	86	52	482	424	**3,110**
3	618	299	61	37	17	16	219	108	**1,375**
4	274	248	32	36	13	10	162	160	**935**
5	175	129	30	23	5	5			**367**
6	201	147	16	11	3	3	78	81	**540**
7	103	84	8	6	0	2	27	23	**253**
8	29	26	1	0	0	0	6	9	**71**
9	12	4	0	0	0	0	0	1	**17**
Total	**7,319**	**6,814**	**380**	**369**	**148**	**134**	**5,974**	**5,806**	**26,944**

Source: CIDB (2017: 21/06/2017 online)

However, for this study, the population of active civil engineering (CE) and general building (GB) SME contractors with grades between 2 to 5 in KwaZulu-Natal were selected from CIDB construction register database. The CIDB population comprises of potential respondents, therefore based on that it was selected as the database of the sample population. Due to the large number of SME contractors in KwaZulu-Natal only 346 questionnaires were distributed to selected SME contractors. The respondents included owners, contracts managers, project managers, site agents and foreman.

The population of public sector clients was selected from provincial and national government in South Africa based on their contribution to the SME's. The respondents included Chief Construction Project Manager, Deputy Director Supply Chain Management (SCM) and Project Managers. The targeted population will cover the total collection of all units of analysis and lead the researcher to conclusions (Weiman and Kruger, 2003) as cited by Bikitsha, (2010).

4.2.7 Sampling

According to Kothari (2004) sampling is the procedure of gaining information about a whole population by examining only a part of it. Renault (2017) further explained sampling as a procedure of selecting a sample comprising of units e.g. people and organisations from the population of interest. There are two types of sampling, namely probability sampling and non-probability sampling (Kothari, 2004 and Cooper & Shindler, 2008). Each of these sampling design is divided into sub-sampling as shown in Table 4.6.

Table 4. 6: Types of Sampling Designs

Probability	Non - probability
Simple random	Convenience
Systematic	Purposive
Cluster	Judgement
Stratified	Quota
Double	Snowball

Source :(Cooper and Schindler, 2008)

a) **Probability sampling**

Probability sampling is also known as 'random sampling' or 'chance sampling' (Kothari, 2008). Under this sampling design, each item of the universe has an identical chance of inclusion in the sample (ibid). Cooper and Schindler (2008) indicated that probability sampling is based on the conception of random selection, an organised technique which guarantees that each population element is given a known non-zero chance of selection. According to Bryman and Bell (2011), the aim of probability sampling is to keep sampling error to a minimum. Table 4.7 illustrates the comparison of probability sampling designs.

Table 4. 7: Comparison of Probability Sampling Designs

Type	Description	Advantages	Disadvantages
Simple random	Each population element has an equal chance of being selected into the sample. The sample is drawn using random number table/generator	Easy to implement with automatic dialling (random digit dialling) and with computerized voice response systems	Requires a listening of population elements. It takes more time to implement. Uses larger sample sizes. Produces larger errors and expensive
Systematic	Selects an element of the population at the beginning with a random start and following the sampling fraction selects every k^{th} element	Simple to design. Easier to use than the simple random. Easy to determine sampling distribution of mean or proportion. Less expensive than simple random	Periodicity within the population may skew the sample and results. If the population list has a monotonic trend, a biased estimate will result based on the start point
Stratified	Divides population into sub-populations or strata and uses simple random on each strata. Results may be weighted and combined	Researcher controls sample size in strata. Increased statical efficiency. Provides data to represent and analyse sub-groups. Enables use of different methods in strata	Increased error will result if sub-groups are selected at different rates. It is expensive, especially if the strata on the population have not been created.
Cluster	Population is divided into internally heterogeneous sub-groups. Some are randomly selected for further study	Provides an unbiased estimate of population parameters if properly done. Economically more efficient than simple random. Lowest cost per sample, especially with geographic clusters. Easy to do without a population list	Frequently lower statical efficiency (more error) due to sub-groups being similar rather than mixed
Double	Process includes collecting data from a sample using a previously defined technique. Based on the information found, a sub-sample is selected for further study.	May reduce costs if first stage results in enough data to stratify or cluster the population.	Increased cost if used generally

Source: (Cooper and Schindler, 2008)

b) Non-probability sampling

In contrast, non - probability sampling is a non - random and subjective (Cooper and Schindler, 2008). Non-probability sampling is that sampling technique which does not give any basis for approximating the probability that each item in the population has of being included in the sample Kothari, (2008). Moreover, Bryman and Bell (2011) indicated that non-probability sampling is the practice of surveying one individual per organisation, often a human resources or senior manager, to find out about the organisation. The convenience sampling was selected for this research given that the researcher encountered different contractors and government officials. Moreover, Bryman and Bell (2011) indicated that convenience sampling is simply available to the researcher by accessibility. Potential respondents were identified by sampling on tender briefing registers. There are five commonly used non - probability designs, which are normally used in both qualitative and quantitative research. These are:

- **Convenience sampling**: They are the slightest trustworthy design but normally the cheapest and easiest to conduct (Cooper and Schindler, 2008). The researchers have the liberty to choose whoever they can find, for an example include informal pool of friends and neighbours, people responding to a newspaper's invitation for readers to state their positions on some public issue, a TV reporter's man in the street intercept interviews and using employees (Ibid).

- **Purposive sampling**: There are two major types of purposive sampling, judgement sampling and quota sampling. Judgement sampling is used commonly in qualitative research where the wish happens to develop hypotheses rather than to simplify to larger populations (Kothari, 2008). Judgement sampling happens when a researcher sample members to follow to some standard (Cooper and Schindler, 2008). The researcher's decision is used for choosing items which he considers as representative of the population (Kothari, 2008).On the other hand, quota sampling is used to advance representativeness (Cooper and Schindler, 2008). When using quota sampling, the researcher has an ease access to the sample population (Kumar, 2011).

- **Snowball sampling**: Snowball sampling is the procedure of choosing a sample by means of networks (Kumar, 2011). Snowball sampling is convenient when the researcher wants to sample subjects that are difficult to identify (Cooper and Schindler, 2008).

4.2.7.1 Selected sampling for construction SME's

The sample drawn from the CIDB database consisted of 3,459 construction SME's throughout KZN. These SME contractors' best represented the entire population of the active civil engineering (CE) and general building (GB) SME contractors with grades between 2 to 5 divided into subgroups. The groups were divided based on their grading and class of works. Then the sample was taken from each subgroup based on the ratio of the subgroup's size to the total population.

Since it was not financially possible to include all 3,459 SME contractors in the sample, a sample size of 201 SME contractors was decided to be adequate. While it was originally intended to make a systematic selection from the database, it was decided to only include those contractors that had retrievable telephone numbers and were regarded as active by the CIDB so that it will be easier to contact contractors during administration and increase the response rate.

Therefore, 2,009 SME contractors without retrievable telephone numbers were removed from the list, leaving 1,450 contractors that could be systematically selected and excluded the 3 SME contractors in KZN that participated in the pilot study. The revised list is comprising of 1,450 SME contractors made up the sampling frame and was broken down in to eight subgroups as shown in Table 4.8. The sample % was calculated as shown in the example below:

Sample% = (Sub group population/Total population) x 100

Sample% = (120/1,450) x 100

Sample% = 8.3% say 8%

Therefore, 20% came from 2CE, 17% came from 2GB, 14% came from 3CE, 8% came from 3GB, 11% came from 4CE, 12% came from 4GB, 10% came from 5CE and 8% came from 5GB. This produced a sample of 58 participants from 2CE, 43 participants from 2GB, 28 participants from 3CE, 10 participants from 3GB, 18 participants from 4CE, 20 participants from 4GB, 14 participants from 5CE and 10 participants from 5GB to obtain a total of 201 participants.

Table 4. 8: Sample Size for SME Contractors

Description	Grading								Total
	Grade 2		Grade 3		Grade 4		Grade 5		
	2CE	2GB	3CE	3GB	4CE	4GB	5CE	5GB	
Active SME Contractors (targeted sample frame)	910	877	617	229	274	248	174	130	**3 459**
Actual sample frame	290	250	200	120	160	170	140	120	**1450**
Sample %	20%	17%	14%	8%	11%	12%	10%	8%	**100%**
Actual sample size	58	43	28	10	18	20	14	10	**201**
Targeted sample size	93	90	61	16	29	25	18	14	**346**
Interval (k)	10	10	10	10	9	10	10	9	

As shown in Table 4.9 the sample size based on the confidence interval was as shown below:

n = sample size

N = population

e² = coefficient

$n = N/(1 + Ne^2)$

$n = 130/\{1 + (130)(0.05)^2\}$

n = 14

The participants were selected using the Systematic random sampling technique. The starting point of 50 was selected from all the groups with a list of potential participants, thereafter a fixed interval of selecting participants was calculated as shown:

Width of the interval (k) = Total population/Sample size

Width of the interval (k) = 130/14

Width of the interval (k) =9.29 say 9

Starting point

Table 4. 9: Systematic Sampling

1	14	27	40	53	66	79	92	105	118		122	1
2	15	28	41	54	67	80	93	106	119			10
3	16	29	42	55	68	81	94	10●	120			19
4	17	30	43	56	69	82	95	108	121			28
5	18	31	44	57	70	83	96	109	122			37
6	19	32	45	58	71	84	97	110	123			46
7	20	33	46	59	72	●5	98	111	124			59
8	21	34	47	60	73	86	99	112	125			68
9	22	35	48	61	74	87	100	113	126			77
10	23	36	49	62	75	88	101	114	127			86
11	24	37	50	63	76	89	102	115	128			95
12	25	38	51	64	77	90	103	116	129			104
13	26	39	52	65	78	91	104	117	130			113

4.2.7.2   Selected sampling for government officials

According to Bryman and Bell (2011) and Kothari (2008), describe convenience sampling as when the population elements are selected for inclusion in the sample based on the ease of access. Moreover, Bryman and Bell (2011), guarantees that researcher will receive all or almost all the questionnaire back, so that there will be a good response rate. Table 4.10 illustrates sampling method used for government officials. The convenience sampling was used to select Government entities.

Table 4. 10: Sample Design for Government Officials

Targeted population	Sample size		Sampling method	Data collection
National and provisional (KZN) government entities	Targeted participants	10	Convenience sampling	Questionnaire

4.3 Data Collection

According to Kumar (2011) and Kothari (2008), there are two methods of data collection to be used for the study, namely, primary and secondary data. The primary data are those which are collected afresh and for the first time (Kothari, 2008). The secondary data, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process (ibid). Data collection can be categorized as per Figure 4.1.
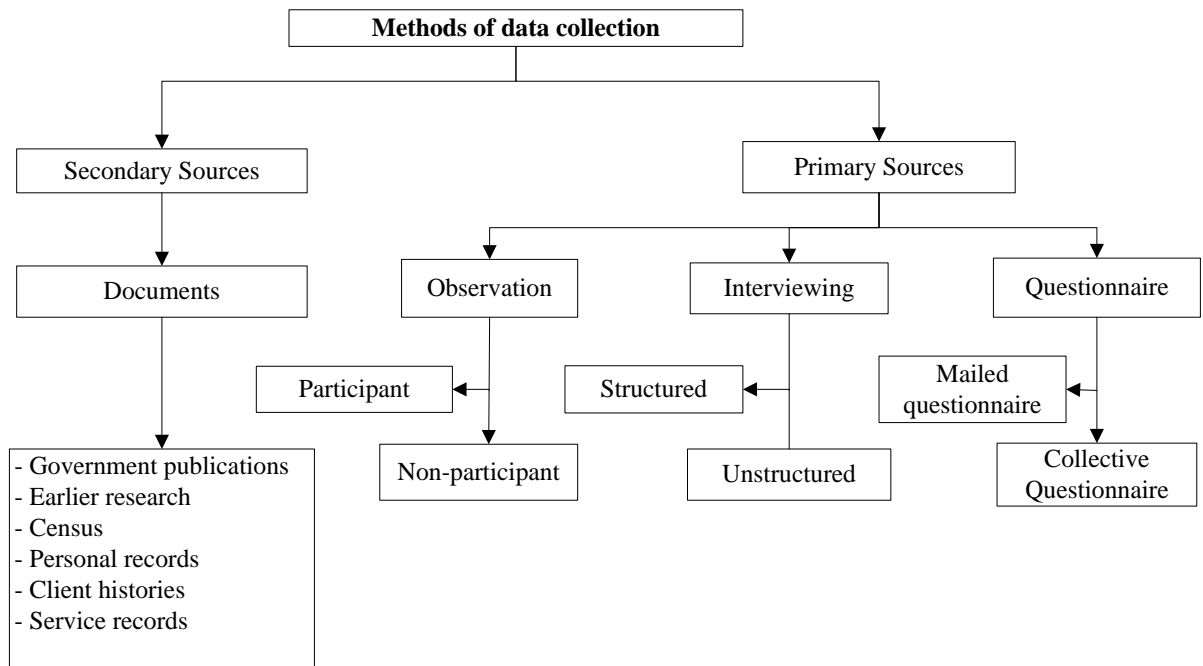
Figure 4. 1: Methods of Data Collection *(Source Kumar, 2011)*

4.3.1   Primary data

According to Kumar (2011), there are numerous procedures that can be used to collect primary data, as shown in Figure 4.1. The choice of technique depends upon the purpose of the study, the resources available and the skills of the researcher (Ibid). For this study primary data was obtained from questionnaires and responses gathered from interviews conducted with SME contractors as well as government officials.

4.3.2   Secondary data

The secondary data method is used by both quantitative and qualitative research (Kumar, 2011). The secondary data used for this study was based on the literature reviewed obtained through a review of existing material such as conference papers, journal publications, dissertations, unpublished theses, books government publications and the Internet relating to small contractor development and the impact of government initiatives. The following are databases where the relevant data was selected.

- Department of public works;
- SEFA website;
- NEF website;
- CIDB website;
- SEDA website;
- DSBD website;

- Department of Transport website;

- DTI website;

- Umgeni Water;

- University of KwaZulu – Natal library; and

- Google.

4.4 Instrument Administration

The structured questionnaire was developed for this research with two sets of questionnaires, for the Government officials and Construction SME's. The questionnaire was discussed with researchers Supervisor and amendments were made based on his comments and went through two main phases. The phases covered the pilot study, and finally the final questionnaire for data collection.

4.4.1   Pilot Study

Bryman and Bell (2011) and Cooper and Schindler (2008) emphasised that it is crucial to conduct pilot study before administering the questionnaire to ensure that the survey questions operate well. A pilot study was conducted in mid-June 2017 by distributing questionnaires to three SME Contractors and two government officials, in Pietermaritzburg. All three questionnaires from SME Contractors were returned whereas only one from government official was returned. The respondents that participated in the pilot study were omitted in the final questionnaire administration.

The aim of the pilot study was to get feedback from respondents and ensure that they understand the instructions, the questions asked, and the techniques used. The respondents were requested to add inputs to improve the instrument in terms of comments, corrections and suggestions.

4.4.2   Final questionnaire structure

The questionnaire was based on the literature review chapter 2 and chapter 3 as well as feedback from testing pilot study. The structure of the final questionnaire administered to SMEs in the construction sector comprised of a cover letter and four sections (See Appendix B) and for government officials comprised of a cover letter and one section (See Appendix C)

a) **Construction SME's**

   Cover page described the purpose of the research, giving guidelines on how to complete the questionnaire. It further stated the confidentiality policy of the study and provided of the researcher (See Appendix A).

   Section A comprised of the basic information about the respondent and the company. The information about the respondent included position held in the company, gender, population group, level of education, field of study and years of work experience. The information about the company included the total number of full-time employees, and the business activities the company specialises in.

   Section B focused on the challenges facing the construction SME's in KwaZulu - Natal. The respondents were requested to rate the impact of the financial related challenges, human resource management related challenges, Health and Safety related challenges and quality relate changes in their businesses.

   Section C focused in the contribution of construction SME's in the South African economic improvement. This section required to get data on owner/managers' understating about the contribution of their businesses in the economic development.

   Section D sought to understand the impact of government intervention in construction SME's and if the Owners/Managers are aware of these government initiatives.

b) **Government officials**

   Cover page entailed similar information as the cover page for construction SME's.

   Section A comprised of the basic information about the respondent and the company. The information about the respondent included position held in the company, gender, population group, level of education and years of work experience. The background of the government entity and government intervention

4.5 Validity and Reliability

According to Kothari (2008); Bernad (2006) and Kumar (2011), validity refers to the level to which a test measures what we wish to measure the accuracy and trustworthiness of instruments, data and findings in research. Furthermore, according to Kumar (2011) there are three types of validity test in a quantitative research that assist to see whether an instrument is valid or not namely: face and content validity, concurrent and predictive validity, and construct validity.

- **Face and content validity** – face validity is establishing a logical connection between each question on the research instrument and objectives of the study. Content validity refers to the

degree that the questions included in an instrument cover the area being researched (Kumar, 2011).

- **Concurrent and predictive validity** – Predictive validity is judged by the degree to which an instrument can estimate an result and Concurrent validity is judged by how well an instrument relates with a second assessment simultaneously done (Kumar, 2011).

- **Construct validity** – construct validity is a method of establishing the validity of an instrument (Kumar, 2011).

Reliability on the other hand has to do with the accuracy and precision when using an instrument to measure something more than once (Kothari, 2008 and Bernad, 2006). The bigger the degree of uniformity and constancy in an instrument measured, the greater its reliability (Kothari, 2011). According to Kothari (2011), there are five factors that might influence the reliability of a research instrument namely: the expression of questions, the physical setting, the respondent's attitude, the interviewer's attitude, and the nature of communication and the regression effect of an instrument.

4.6 Ethical considerations

Ethics are defined as morals of behaviour that guide honourable choices about our behaviour and our associations with others (Cooper and Schindler, 2001). The aim of ethics in this study is to guarantee that no one is harmed by the research activities (ibid). Therefore, proper research ethics were followed in this research namely:

- The researcher ensured that the participants were aware about the nature of the study that was illustrated in the cover letter. Furthermore, the cover letter illustrated that participation to this study was voluntary and they can withdraw from participation at any time without any negative consequences.

- The discretion and privacy of the respondents was the highest priority for this research. The cover letter clearly explained that the records identifying the participants will be securely maintained throughout the study.

4.7 Follow-up Procedures

During data collection the response rate from participants was low, therefore, the follow up procedure was engaged.

- Firstly, follow up emails were sent weekly to the individuals as a reminder to participate in the survey and only few responded.

- Secondly phone calls were made twice a week as a constant reminder, only few responded and some were not interested to participate in the survey.

- Lastly the researcher made phone calls and requested to conduct telephonically survey and that increased the rate of respondents.

According to Fox and Bayat (2010) telephone surveys can clarify misunderstanding that may arise, moreover, telephone surveys are easier, faster and efficient.

4.8 Response rate

The number of completed questionnaires obtained were 96 out of 201 sent out via emails representing an overall response rate of 48% from contractors while three were received from government entities. Given the time and financial constraints the response was acceptable, and no further attempts were made to increase the number of responses. The indication in percentage in terms of contractors that responded is represented in Figure 4.2.

RESPONSE RATE AS PER CIDB GRADE

Grade 5 - 17%
Grade 2 - 40%
Grade 4 - 23%
Grade 3 - 20%

■ Grade 2　■ Grade 3　■ Grade 4　■ Grade 5
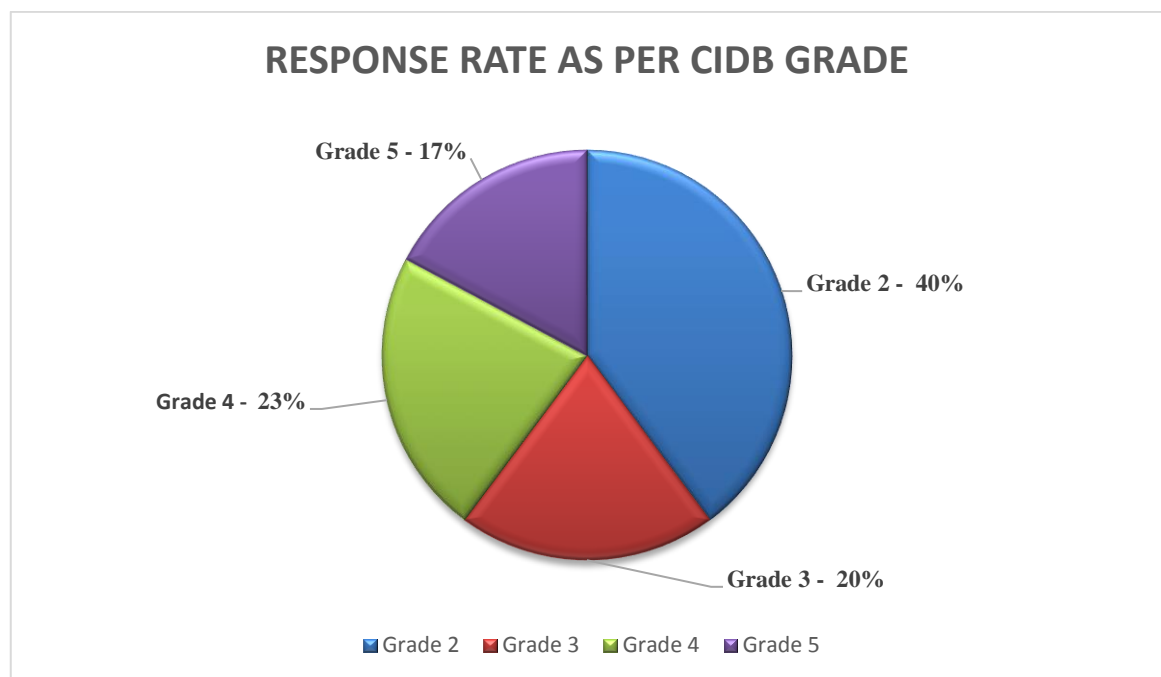
Figure 4. 2: Response rate as CIDB grade

4.9 Chapter Summary

This chapter explained the research methodology used in conducting this study. Both qualitative and quantitative methods were explained in detail therefore, quantitative method was used for this study.

CHAPTER 5: RESULTS AND DISCUSSION

5.1 Introduction

This chapter presents the analysis of data collected using the questionnaire survey. Therefore Descriptive and inferential statistics were both analysed using the Statistical Package for Social Sciences (SPSS) version 25.

5.2 Responses from contractor's survey

5.2.1 Background information of the respondent and enterprise

This section reports on the information about the respondent and the enterprise profile. The information includes; respondent's position in the company, gender, race, education, discipline, CIDB grading, CIDB classification, number of years worked in the current company and number of full time employees employed in the current company including the employer.

From Table 5.1 it is evident that 51.0% of the sample own their own businesses; 54.2% were male; 93.7% were Black; 43.5% had obtained at least various Certificates; 25.9% were construction managers; 22.4% were civil engineers; 60.2% were in CIDB Grades 2 and 3 as either GB or CE; 95.8% had at least 10 years experience and 67.0% employed between 1 and 5 employees.

Table 5. 1: Background information of the respondent and enterprise (n=96)

Description	Frequency	Percent
Respondents position		
Owner	49	51.0
Contracts Manager	9	9.4
Project Manager	19	19.8
Site Manager	14	14.6
Gender		
Male	52	54.2
Female	44	45.8
Race		
Black	89	93.7
Coloured	3	3..2
Indian/Asian	2	2.1
White	1	1.1
Education		
Master's degree	2	2.2
Honours/BTech/BSc	18	19.6
Certificate	40	43.5
Matric	24	26.1
No qualification	8	8.7
Discipline		
Construction Management	22	25.9
Civil Engineering	19	22.4
Finance	3	3.5
Quantity Surveying	4	4.7
Education	11	12.9
Project Management	16	18.8
Other	10	11.8
CIDB Grading		
Grade 2	37	39.8
Grade 3	19	20.4
Grade 4	21	22.6
Grade 5	16	17.2
CIDB Classification		
GB	41	43.6
CE	39	41.5
Both	14	14.9
Number of years in the current company		
1 – 5 years	40	42.6
6 – 10 years	50	53.2
10 – 20 years	4	4.3
Number of full time employees		
1 – 5 employees	59	67.0
6 – 10 employees	19	21.6
10 – 20 employees	10	11.4

5.2.2 Reliability

The questions in the questionnaire that measured the same construct were grouped together to determine internal consistency. The constructs were analysed for reliability testing (Cronbach alpha, corrected item to total and CR values), validity checks (AVE values) as shown in Table 5.2. The coefficient of alpha and composite reliability values were used to establish the level of internal consistency. The Cronbach alpha reliability co-efficient for all scaled constructs was > 0.7 and corrected item to total correlation > 0.5 which means all constructs meet the minimum criteria of acceptability as recommended by Byrne (2006) cited by Mhlophe and Chinomona (2015). All the constructs had a CR value that was > than the recommended 0.7, with quality management related challenges < 0.7. All but one Average Variance Extracted (AVE) were > than the recommended 0.5 with one construct with 0.341.

The analysis produced various groups of factors with some of the items cross loading, therefore, when factor loadings were less than 0.5 or cross loading they were suppressed. The factor loadings per measurement item are displayed in Table 5.7.

Table 5. 2: Measurement Instrument Analysis

Research Constructs	Research Items Used			Cronbach's Test		CR Value	AVE Value	Factor Loadings
				Corrected item – total	αValue			
FRC	FRC4			0.617				0.775
	FRC5			0.655				0.744
	FRC6			0.710				0.924
	FRC7			0.782	0.924	0.948	0.754	0.931
	FRC8			0.760				0.898
	FRC9			0.757				0.919
HRM	HRM4			0.773				0.630
	HRM6			0.833				0.760
	HRM7			0.801	0.920	0.863	0.515	0.733
	HRM9			0.787				0.763
	HRM10			0.609				0.606
	HRM11			0.591				0.793
HSAF	HSAF1			0.676				0.873
	HSAF2			0.550				0.799
	HSAF3			0.633				0.835
	HSAF4			0.714	0.886	0.884	0.565	0.782
	HSAF6			0.728				0.570
	HSAF7			0.737				0.597
QMRC	QMRC2			0.776				0.669
	QMRC3			0.869				0.556
	QMRC4			0.835	0.925	0.672	0.341	0.596
	QMRC8			0.903				0.503

5.2.3   Interpretation of measurement scales

The scales of this study were developed such that scale intervals are uniform. The four-item scale used was adapted from Fellows and Liu (1997) and minor changes were done to fit the context of this study. The instrument was measured on a 4-point Likert scale where 1 = No impact, 2= Low impact, 3 = Moderate impact and 4 = Major impact. The group interval coefficient value was calculated as (4 - 1) / 4 = 0.75 and Table 5.3 illustrates further the intervals that were taken as reference values in evaluating and interpreting the responses obtained from the 4-point scale.

Table 5. 3: Interpretation range 4 - point scale

Range	4-point Likert Scale
3.27 - 4	Major impact
2.51 – 3.26	Moderate impact
1.76 – 2.50	Low impact
1 – 1.75	No impact

5.2.4   Findings on the challenges facing construction small medium enterprise (SMEs)

Contractors were presented with statements about various challenges that could impact their business and asked to indicate their impact on their businesses using a 4-point Likert scale where 1 = No impact, 2= Low impact, 3 = Moderate impact and 4 = Major impact. The challenges included the financial aspect, human resource management, health and safety and quality management. Their responses ranked by the Mann-Whitney Test that compares the distributions of ranks in two groups are shown in Table 5.4 and Table 5.5.

Table 5. 4: Mann - Whitney Test (Ranks)

Grades		N	Mean Rank	Sum of Ranks
FRC	Grades 2-3	52	49.73	2586.00
	Grades 4-5	37	38.35	1419.00
	Total	89		
HRM	Grades 2-3	50	46.61	2330.50
	Grades 4-5	36	39.18	1410.50
	Total	86		
HSAF	Grades 2-3	52	46.04	2394.00
	Grades 4-5	36	42.28	1522.00
	Total	88		
QMRC	Grades 2-3	52	49.79	2589.00
	Grades 4-5	35	35.40	1239.00
	Total	87		

Table 5.4 indicates that groups with highest mean rank can be considered as having the higher challenges in FRC, HRM, HSAF and QMRC. Table 5.5 shows the significance values of the test that yields a p – value of 0.039 for FRC, and 0.009 for QMRC that are lower than 0.05 and 0.162 for HRM, 0.492 for HSAF that are greater than 0.05. Even though the mean rank shown in Table 5.4 for grades 2-3 seem to be higher than grades 4-5 for HRM and HSAF constructs, the data does not provide statistically significant evidence of a difference between grades 2-3 and grades 4-5 since the p-value is higher than 0.05. However, the mean rank of grades 2-3 are higher than grades 4-5 and the p-value lower than 0.05, therefore the data provided statically significant evidence of a difference.

Grades 2-3 SME contractors face more challenges in finance and quality management when compared to grades 4-5. Whereas grades 2-3 and grades 4-5 SMEs contractors are facing similar challenges in terms of human resources and health and safety.

Table 5. 5: Test Statistics

	FRC	HRM	HSAF	QMRC
Mann-Whitney U	716.000	744.500	856.000	609.000
Wilcoxon W	1419.000	1410.500	1522.000	1239.000
Z	-2.062	-1.399	-0.686	-2.627
Asymp. Sig. (2-tailed)	0.039	0.162	0.492	0.009

a. Grouping Variable: Grades

Table 5.6 indicates the challenges faced by construction SMEs. According to the responses financial related challenges affects the construction SMEs mostly with a mean =2.732 and had a moderate impact, followed by quality management issues with a mean = 2.303. However all other means were in the low impact range. Therefore, according to the results found for construction SME's to be sustainable they must be paid on time by Clients, have cash flow, have competitive pricing, understand tender procedures, and crime and corruption reduced..

Table 5. 6: Challenges faced by respondents

	Types of challenges	Sample		
		Mean	Std. Dev.	Rank
FRC	**Financial related challenges**	**2.732**	**0.5552**	
FRC1	Crime and corruption	3.318	0.7272	1
FRC2	Late payments by Client	3.237	0.6659	2
FRC2	Cash flow	3.054	0.7895	3
FRC3	Access to finance	2.989	0.9028	4
FRC4	Uncompetitive pricing	2.598	0.8902	5
FRC5	Poor understanding of contractual obligations	2.467	08702	6
FRC6	Poor understanding of contractual documentation	2.462	0.9274	7
FRC7	Time management related challenges	2.424	0.9046	8
FRC8	Difficulty in understanding and completing tender documents	2.413	0.9739	9
FRC9	Complex and complicated forms of contract	2.370	0.8735	10
HRM	**Human resource management related challenges**	**2.187**	**0.6919**	
HRM1	Lack of training	2.587	1.0071	1
HRM2	Low productivity	2.433	0.9487	2
HRM3	Inadequate supervision	2.440	1.0023	3
HRM4	Strikes	2.418	1.2208	4
HRM5	Lack of required competencies	2.366	0.8570	5
HRM6	Low employee morale	2.163	0.8157	6
HRM7	Idleness on site	2.055	0.7358	7
HRM8	Unnecessary work	2.022	0.8117	8
HRM9	Human error/mistake	2.011	0.7485	9
HRM10	Ignorance	1.989	0.8187	10
HRM11	Absenteeism	1.753	0.8017	11
HSAF	**Health and Safety related challenges**	**2.136**	**0.5799**	
HSAF1	Lack of financial provision for Health and Safety	2.418	0.8572	1
HSAF2	Compliance with Operational Health and Safety Act	2.289	0.7967	2
HSAF3	Lack of Health and Safety training and awareness	2.264	0.7722	3
HSAF4	Poor understanding of Health and Safety Management System	2.233	0.7503	4
HSAF5	Labour injuries	2.132	0.9569	5
HSAF6	Health and Safety file	2.066	0.8273	6
HSAF7	Health and Safety plan	2.055	0.7654	7
HSAF8	Medicals	2.011	0.8141	8
HSAF9	Provision of personal protective clothing (PPE)	1.833	0.7968	9
QMRM	**Quality Management related challenges**	**2.303**	**0.8689**	
QMRM1	Lack of skilled labour	2.596	1.0630	1
QMRM2	Lack of contractor quality expertise	2.438	1.2056	2
QMRM3	Insufficient workforce training	2.367	1.0434	3
QMRM4	Poor management skills	2.348	1.0011	4
QMRM5	Poor quality material	2.315	1.1341	5
QMRM6	Reworking	2.189	1.0155	6
QMRM7	Poor design co-ordination	2.156	0.9230	7
QMRM8	Accreditation with ISO9000	2.000	0.9204	8

5.2.4.1   Factor analysis of challenges faced by construction SMEs

The instrument used principal component analysis and Equamax with Kaiser Normalization rotation and eigenvalues greater than 1. The Kaiser- Meyer-Oklin (KMO) measure of sampling adequacy was 0.689 shown in Table 5.7. According to Williams, Onsman and Brown (2010), the KMO index ranges from 0 to 1, with 0.689 considered suitable for factor analysis. The Bartlett's test of Sphericity was statically significant at $p = 0.000$ (<0.05).

Table 5. 7: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.689
Bartlett's Test of Sphericity	Approx. Chi-Square	77.466
	df	6
	Sig.	.000

5.2.4.2   Research correlation of challenges faced by construction SMEs

The discriminant validity of all constructs was assessed with correlation analysis with the correlations shown in Table 5.8. The relationship between the financial, human resource management, health and safety and quality management were investigated using Spearman correlation coefficients.

Table 5. 8: Correlations between constructs

Research Constructs	FRC	HRM	HSAF	QMRC
Financial related challenges (**FRC**)	1.000			
Human resource management related challenges (**HRM**)	0.384**	1.000		
Health and Safety related challenges (**HSAF**)	0.223*	0.563**	1.000	
Quality Management related challenges (**QMRC**)	0.078	0.414**	0.428**	1

The results further showed that all inter-construct correlations ranged from 0.078 to 0.563 which represents a positive correlation and they are all < 0.80 indicating a good discriminant validity because there are no constructs that are strongly correlated. Therefore each construct represents a different concept. FRC is significantly correlated with HSAF and HRM since construction SMEs require finance to monitor and implement health and safety and human resource is required to monitor expenditure. Moreover, HRM is significantly correlated with HSAF and QMRC as it is

evident that human resource management is required to monitor and drive health and safety and quality management.

5.2.4.3 Research Normality Test Analysis of challenges faced by construction SMEs

After assessing the instrument to show that it is reliable and valid, relationships among the constructs were tested. The normality test was performed to assess whether the bivariate relationship needed to be assessed with parametric or non-parametric tests. Table 5.9 represents the results of the Shapiro-Wilk normality test and indicates that scales for constructs were (p=0.005) for FRC and (p=0.00) for HRM, HSAF and QMRC implying that the data are significantly different from a normal distribution, since (p<0.05) does not follow a normal distribution. Since all constructs are non-normally distributed, non-parametric tests were performed.

Table 5. 9: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FRC	0.166	78	0.000	0.952	78	0.005
HRM	0.195	78	0.000	0.921	78	0.000
HSAF	0.195	78	0.000	0.921	78	0.000
QMRC	0.155	78	0.000	0.928	78	0.000

a. Lilliefors Significance Correction

5.2.5 Findings on the respondent's finance

Contractors were asked various questions concerning their financial status.

5.2.5.1 Duration for payment of invoices

The respondents were asked to indicate the time it takes before their invoices get paid. Table 5.10 indicates that 68.5% respondents received their payments within 30 days.

Table 5. 10: Duration for payment of invoices

	Frequency	Percent
1 - 30 days	63	68.5
31 - 60 days	24	26.1
61 - 180 days	1	1.1

5.2.5.2 Payments follow ups

The respondents were asked whether they made any follow ups to secure their payments. From Table 5.11 it is evident that 84.9% responded positively. They were further asked if they made any follow ups, what steps they took and where they responded negatively the reasons for them following up.

Just less than three-quarters of respondents (74%) reported that they communicated directly with the clients until they got paid, 11.5% communicated only with the consultants while 1% do not do any follow ups because they got paid with 30 days as per National Treasury regulations.

Table 5. 11: Payments follow ups

	Frequency	Percent
Yes	79	84.9
No	14	15.1

5.2.5.3   Payments waiting period challenges

The respondents were asked if the waiting period before payment was received affected their cash flow. Table 5.12 demonstrates that 60.9% reported that they were affected. They were further asked how they were affected. Just less than half of the respondents (48%) responded that they had challenges paying relevant stakeholders, 1.04% become financially drained when they were not paid timeously and regardless of the challenges they had due to late payments 2.08% had no comments.

Table 5. 12: Payments waiting period challenges

	Frequency	Percent
Yes	56	60.9
No	36	39.1

5.2.5.4   Uncompetitive pricing or low rates

The respondents were asked if they had been affected by uncompetitive pricing or low rates. According to Table 5.13, 63.4% reported that they were not affected by uncompetitive pricing or low rates. However, 26% of the respondents that were affected by low rates stated that they ended up being bankrupt and did not complete the work, while 2.1% were unable to compete with contractors that had low rates since clients mostly preferred low tendered amounts.

Table 5. 13: Uncompetitive pricing

	Frequency	Percent
Yes	34	36.6
No	59	63.4

5.2.6　Contribution of construction small medium enterprise (SMEs) to economic development

a)　　Contractors were asked based on their own experience, what impact construction SME's had on South African economic development in terms of the 4-point scale, 1 = No impact, 2= Low impact, 3 = Moderate impact, 4 = Major impact. Their responses ranked by the Mann-Whitney Test that compares the distributions of ranks in two groups are shown in Table 5.14 and Table 5.15.

Table 5. 14: Ranks for SME's contribution

	Grades	N	Mean Rank	Sum of Ranks
CONTRI	Grades 2-3	54	43.56	2352.00
	Grades 4-5	37	49.57	1834.00
	Total	91		

Table 5.14 indicates that groups with highest mean rank can be considered as slightly having the higher contribution to the South African economic development. Table 5.15 shows the significance value of the test that yields a p – value of 0.283 for CONTRI that is > than 0.05. Even though the mean rank shown in Table 5.14 for grades 4-5 seems to be higher than grades 2-3, the data does not provide statistically significant evidence of a difference between grades 2-3 and grades 4-5 since the p-value is > than 0.05

According to the responses Grades 2-3 and 4-5 SME contractors were contributing equally to the South African economic development.

Table 5. 15: Test Statistics for SME's contribution

Test statistics	CONTRI
Mann-Whitney U	867.000
Wilcoxon W	2352.000
Z	-1.073
Asymp. Sig. (2-tailed)	.283

a. Grouping Variable: Grades

b)　Contractors were asked based on their experience, how construction SME's could help reduce unemployment. More than one quarter (26.04%) of them responded that construction SMEs were unable to help reduce unemployment, whereby 50% SMEs could only help by providing more permanent work. Moreover, 4.2% indicated they could contribute by being innovative and 13.5% by providing training for the community.

5.2.7 Findings on the construction small medium enterprise (SMEs) support agencies

Contractors were asked to indicate whether their companies participated in any of the listed Government initiatives or programmes. Table 5.16 indicates that the respondents were not utilising these support agencies with the high rates of negative responses, namely 47.2 % SEDA, 56.8% SEFA, 67.8% NEFA, 43.8% VUKUZAKHE, 56.2% EPWP, 57.5% ECDP, 61.4% CIP, 57.5% NCDP and 53.5% UMGENI WATER CPG

Table 5. 16: Support agencies

Initiatives	Response	Frequency	Percent
SEDA	Yes	25	28.1
	No	42	47.2
	Unsure	22	24.7
SEFA	Yes	11	12.5
	No	50	56.8
	Unsure	27	30.7
NEFA	No	59	67.8
	Unsure	28	32.2
VUKUZAKHE	Yes	24	27.0
	No	39	43.8
	Unsure	26	29.2
EPWP	Yes	14	15.7
	No	50	56.2
	Unsure	25	28.1
ECDP	Yes	9	10.3
	No	50	57.5
	Unsure	28	32.2
CIP	Yes	3	3.4
	No	54	61.4
	Unsure	31	35.2
NCDP	Yes	8	9.2
	No	50	57.5
	Unsure	29	33.3
UMGENI WATER CPG	Yes	13	15.1
	No	46	53.5
	Unsure	27	31.4

5.2.8   Findings on the impact of Government initiatives

a) Contractors were asked whether the programmes improved the growth and development of their businesses. Table 5.17 shows that 55.6% reported that the programmes improved the growth and development of their company.

Table 5. 17: Impact of Government initiatives

	Frequency	Percent
Yes	50	55.6
No	40	44.4

b) Contractors were asked whether the government was doing enough to support construction SMEs. From Table 5.18 it is evident that just more than half of the respondents reported that the government was not doing enough to support them. They were further asked what more could be done by Government, with 35.4% indicated that more programmes had to be introduced that were intended for construction SME's with more job opportunities and 4.2% were concerned with the high rate of corruption.

Table 5. 18: Performance of Government initiatives

	Frequency	Percent
Yes	45	49.5
No	46	50.5

c) Contractors were asked to indicate the impact of government initiatives on their businesses using a 4-point Likert scale used where 1 = No impact, 2= Low impact, 3 = Moderate impact and 4 = Major impact. The contribution included developing a business plan, marketing, training, mentoring, coaching, providing financial support, sustaining SME businesses, providing ongoing work and improving CIDB grading their responses ranked by the T – test for equality of Means and Levene's Test for Equality of Variances are shown in Table 5.19 and Table 5.20.

Table 5. 19: Ranks for impact of initiatives

	Grades	N	Mean Rank	Sum of Ranks
INITIA	Grades 2-3	52	45.15	2348.00
	Grades 4-5	34	40.97	1393.00
	Total	86		

Table 5.19 indicates that grades 2-3 can be considered as receiving the highest impact from Government initiatives since it has the highest mean rank. Table 5.20 shows the significance value of the test that yields a p – value of 0.445 for INITIA that is greater than 0.05. Even though the mean rank shown in Table 5.19 for grades 2-3 seem to be higher than grades 2-3, the data does not provide statistically significant evidence of a difference between grades 2-3 and grades 4-5 since the p-value is greater than 0.05

According to the responses Grades 2-3 and 4-5 SME contractors were equally impacted by Government initiatives.

Table 5. 20: Test Statistics

	INITIA
Mann-Whitney U	798.000
Wilcoxon W	1393.000
Z	-.764
Asymp. Sig. (2-tailed)	.445

a. Grouping Variable: Grades

5.3 Responses from government entities

5.3.1 Background information of the respondent and enterprise

This section reports on the information about the respondent and the enterprise profile. The information includes; respondent's gender, race, education, department, position in the department and number of years worked in the current.

From Table 5.21 it is evident that 80% were male; 100% were Black; 60% had obtained Master's degree; 40% of respondents were from department of public works, 80% were construction managers and other; 22.4% were civil engineers; 80% had less than 6 years experience and 67.0% employed between 1 and 5 employees.

Table 5. 21: Background information of the respondent and enterprise (n=5)

Description	Frequency	Percent
Gender		
Male	4	80.0
Female	1	20.0
Race		
Black	5	100.0
Education		
Master's degree	3	60.0
Honours/BTech/BSc	2	40.0
Department		
SEFA	1	20
DOT	1	20
DPW	2	40
SEDA	1	20
Current Position		
Construction Manager	2	40.0
Project Manager	1	20.0
Other	2	40.0
Number of years in the current department		
0.5	1	20.0
3.0	2	40.0
5.0	1	20.0
10	1	20.0

5.3.2 Provision of Government initiatives

Government officials were asked, their purpose of providing government initiatives for the construction SMEs. The results are as follows:

- According to DPW, initiatives were introduced to improve economic development and sustainability of HDI. Moreover, to reduce unemployment especially the youth;

- According to SEFA, initiatives were introduced to enable entrepreneurs to start-up projects and to enable entrepreneurs to fulfil their commitment or obligations in terms of contracts awarded;

- According to DoT, the Government initiatives were introduced to transform construction industry by providing work opportunities to SMEs under Vukuzakhe Programme Development;

- According to SEDA, the purpose of providing initiatives is to support, develop and promote SMEs in terms of enhancing the capability of SMEs so they improve competitiveness for a positive contribution to business growth, job creation and equality. Moreover, to develop programmes that are aimed at assisting or developing SMEs in conjunction with other stakeholders.

5.3.3 Nomination of SME Contractors to participate in Government initiatives

Government officials were asked, how they nominate SME Contractors to participate in these initiatives. The responses are as follows:

- According to Department of Public Works (DPW), through advertisement and Eyesizwe programme;
- Small Enterprise Finance Agency (SEFA), nominate by assessing the viability of the business and entrepreneur, assess the affordability, compliance matters and markets around the area.
- According to Department of Transport (DoT), contracts from CIDB grade 1 to 3 are advertised openly to public to participate on Vukuzakhe Development programme and adjudicated based on CID requirements. The contactors that complies with all the requirements are awarded the contract;
- Small Enterprise Development Agency (SEDA), assist all SMEs that require assistance with no conditions. However, there are special programmes that require age, turnover and number of employees in the business when nominating participants.

5.3.4 Programmes for Construction SMEs development

Government officials were asked if the programmes they offered were aligned with the development of construction SMEs. Table 5.22 shows that 100% of the respondents responded positively.

Table 5. 22: Aligned programmes for construction SME's

	Frequency	Percent
Yes	5	100..0

5.3.5 Sectors offered assistance

Government officials were asked which sectors they were assisting. DPW assist construction industry, SEFA assist with service, construction, mining, manufacturing and retail, while DoT assist civil engineering sector and SEDA assist all sectors.

5.3.6 Rate of participation

Government officials were asked how many construction SMEs participate in their development programmes. DPW had 1,900 participants, SEFA had 41% of their portfolio, DoT have up to 30,000 suppliers and SEDA have 1,440 SMEs yearly.

5.3.7 Assistance offered to construction SMEs

Government officials were asked, what kind of assistance they offer to construction SMEs that included training, funding and mentoring. Table 5.23 shows that 80% were offering training and mentoring assistance.

Table 5. 23: Types of assistance offered

	Frequency	Percent
Training & Mentoring	4	80.0
Funding	1	20.0

5.3.8 Mentorship of construction SMEs

Government officials were asked if they mentor construction SMEs after assisting them to ensure for their development and sustainability. Table 5.24 shows that 80% responded positively.

Table 5. 24: Mentorship of construction SME's

	Frequency	Percent
Yes	4	80.0
No	1	20.0

5.3.9 Impact of Government initiatives

Government officials were asked, on their own opinion if government is doing enough to support construction SMEs. Table 5.25 shows that 80% responded positively.

Table 5. 25: Contribution of Government initiatives

	Frequency	Percent
Yes	4	80.0
No	1	20.0

5.4 Chapter summary

The purpose of the analysis presented in this chapter was to investigate the respondents' perception of client involvement during the three construction project phases. Descriptive and inferential statistical analyses of the respondents' responses were then conducted. Moreover, the reliability measures was done using Cronbach's alpha test.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

6.1 Introduction

This chapter provides the summary of the key findings relative to the study objectives and hypothesis, conclusions of the study, testing of hypothesis and recommendations for future studies based on the data analysed on the previous chapter.

6.2 Problem statement, hypotheses and objectives

6.2.1 Problem statement

The problem statement underpinning this research was:

Acknowledging the pivotal role that SME's contribute in the economy of any country, the South African government has introduced several initiatives specifically targeted at stimulating the attractiveness, development and sustainability of the SME sector, the effectiveness of which have not been fully evaluated regarding SME's in the construction sector to determine whether they have achieved the intended outcomes of those initiatives.

6.2.2 The hypotheses of the study

The hypotheses to be tested in this research were:

Hypothesis 1 – SME's currently play a pivotal role in South African construction through employment creation, poverty alleviation, economic growth and a balanced society.;

Hypothesis 2: - The South African Government has introduced initiatives targeted at promoting the attractiveness, growth and sustainability of SME's in construction;

Hypothesis 3: - Construction SME's are aware of government initiatives targeted at their growth, development and sustainability;

Hypothesis 4: - Construction SME's make frequent use of the support mechanisms provided through these initiatives;

Hypothesis 5: – Government-driven initiatives have resulted in the growth and development of all construction SME's that have participated in them.

6.2.3   Objectives

The study research objectives were:

- To establish the role of SME's in the South African construction sector in terms of economic development and employment creation;

- To identify the various initiatives introduced by the South African government targeted at the growth and improvement of the SME sector of the construction industry;

- To analyse the level of awareness, nature of the enabling environment and extent of equitable access of construction SME's to the given government initiatives;

- To determine whether construction SME's make use of the support mechanisms claimed to be available through these initiatives;

- To determine the possible unintended consequences and impact of government-driven initiatives targeted at the SME sector of the construction industry.

6.3 Hypotheses testing

The following hypotheses were tested, namely

- **H1** - **SME's currently play a pivotal role in South African construction through employment creation, poverty alleviation, economic growth and a balanced society.**
  The study found that 58.7% of participants reported that construction SMEs played a pivotal role in the economic improvement. Moreover, 50% further responded that construction SME's could help reduce unemployment by providing more permanent work.

  Therefore, the hypothesis that the SME's currently play a pivotal role in South African construction through employment creation, poverty alleviation, economic growth and a balanced society cannot be rejected.

- **H2** - **The South African Government has introduced initiatives targeted at promoting the attractiveness, growth and sustainability of SME's in construction**.
  The study found that government had introduced several initiatives targeted at construction SMEs to promote their attractiveness, growth and sustainability. However, many contractors reported that these initiatives had little or no impact on their businesses.

  Therefore, the hypothesis that the South African Government has introduced initiatives targeted at promoting the attractiveness, growth and sustainability of SME's in construction cannot be rejected.

- **H3** - **Construction SME's are aware of government initiatives targeted at their growth, development and sustainability.**

The study found that just over half of the respondents were aware of government initiatives even though some construction SME's had not participated in them.

Therefore, the hypothesis that construction SME's are aware of government initiatives targeted at their growth, development and sustainability cannot be rejected.

- **H4** - **Construction SME's make frequent use of the support mechanisms provided through these initiatives.**

The study found that most respondents had not made frequent or any use of the support mechanisms provided through these initiatives.

Therefore, the hypothesis that the Construction SME's make frequent use of the support mechanisms provided through these initiatives can be rejected.

- **H5** - **Government-driven initiatives have resulted in the growth and development of all construction SME's that have participated in them.**

The study found that just more than half (55.6%) of participating contractors positively responded that the programmes improved the growth and development of their companies. It therefore seems that the initiatives on the part of government have missed their target with limited impact on the targeted beneficiaries.

Therefore, the hypothesis that the Government-driven initiatives have resulted in the growth and development of all construction SME's that have participated in them can be rejected.

6.4 Conclusion

From the findings of the study,it can be concluded that construction SMEs play the pivotal role in terms of economic development and employment creation;and they can still provide more permanent work. It can furthur be concluded that government has introduced several initiatives that have a little impact in the development of the construction SMEs and they are not easily accessible and advertised, therefore they are not utilised efficiently.

6.5 Recommendations

Based on the findings from the research conducted within the KwaZulu Natal province regarding the impact of government driven initiatives for the success of construction small medium enterprises,the following recommendations are therefore suggested to address challenges faced by SME contractors in the construction industry:

- It is therefore evident that government has introduced programmes that addresses challenges faced by SME contractors within the construction industry. The researcher recommends that while government has programmes in place to promote their attractiveness, growth and sustainability, appropriate monitoring and follow ups must be introduced to monitor the programmes initiated by government and if all SMEs are benefiting from them.
- Government should create more work opportunities that will benefit construction SMEs.
- The construction SMEs should find ways to access the programmes introduced by government, since the study shows that they do not make frequent use of these programmes.

6.6 Recommendations for future research

Based on the findings of this research, further research is needed in the following areas:

- To investigate further on why construction SMEs were failing regardless of the initiatives introduced by Government;
- To conduct the same research with a sample across South Africa to see whether the results will be evident nationally;
- To identify the impact of Government driven initiatives for the success of Small Medium Enterprises (SMEs) by comparing the impact in different provinces in South Africa.
- To investigate whether construction SMEs are doing enough to be sustainable.

6.7 Chapter summary

This chapter interpreted and discussed the findings of the study in relation to research hypotheses that were formulated in the introduction chapter of the study. The study investigated the impact that Government- driven initiatives have for the success of Small Medium Enterprises (SMEs) in KwaZulu–Natal, South Africa. Some of the findings supported what was reviewed in the literature, however some were different when compared against the reviewed literature.

References

Abor, J., & Quartey, p. (2010). Issues in SME Development in Ghana and South Africa. International Research Journal of Finance and Economics, 218-228.

Agumba, J., & Haupt, T. (2009). Construction Health and Safety Culture in South African Small and Medium Enterprises. Proceedings 4th Built Enviromental Conference Construction Health and Safety in South Africa, 461-472.

Agwu, M., & Emeti, C. (2014). Issues, Challenges and Prospects of Small and Medium Scale Enterprises (SMEs) in Port-Harcourt City, Nigeria. European Journal of Sustainable Development, 101-114.

Aigbavboa, C., & Thwala, W. (2014). Challenges Facing Black Owned Small Medium Construction Companies: a Case Study of Nelspruit - Mbombela Municipality, South Africa. Journal of Economics and Behavioral Studies, 771-778.

Appels, G. (2010). Strategic Management Guidelines for Construction SMEs in the Eastern Cape. Port Elizabeth: NMMU Bussiness School.

Aren, A. O., & Sibindi, A. B. (2014). Cash Flow Management Practises: an Emperical Study of Small Businesses Operating in the South African Retail Sector. Risk Governance & Control: Financial Market & Institutions/Volume 4, 87-100.

Beck, T., & Demirguc-Kunt, A. (2006). Small and Medium-Sized Enterprises:Access to Finance as Growth Contraint. Journal of Banking and Finance, 2931-2943.

Bernard, R. H. (2006). Research Methods in Anthropology : Qualitative and Quantitative Approaches. Lanham: AltaMira Press.

Canadian Construction Association. (1996). A Guide to Improving Cash Flow in the Construction Industry. Ottawa: Canadian Construction Association.

Cant, M. (2012). Challenges Faced By SME's In South Africa: Are Marketing Skills Needed? International Business & Economics Research Journal, 1107-1116.

Cant, M. C., & Wiid, J. A. (2013). Establishing The Challenges Affecting South African SMEs. International Business & Economics Research Journal , 707-716.

Chadhliwa, T. Q. (2015). Challenges Facing Small and Medium Enterprise Contractors in Delivering Grade R Classrooms for the Western Cape Department of Transport and Public Works. Stellenbosch : Stellenbosch University.

Chimucheka, T. (2013). Overview and Performance of the SMMEs Sector in South Africa. Mediterranean Journal of Social Sciences, 783-795.

Chimucheka, T., & Mandipaka, F. (2015). Challenges Faced By Small, Medium And Micro Enterprises in the Nkonkobe Municipality. International Business & Economics Research Journal , 309-316.

Chimucheka, T., & Mandipaka, F. (2015). Challenges Faced by Small,Medium and Micro Enterprises in the Nkonkobe Municipality. International Business & Economics Research Journal, 309-316.

Chittithaworn, C., Islam, M. A., Keawchana, T., & Yusuf, D. (2010). Factors Affecting Business Success of Small & Medium Enterprises (SMEs) in Thailand. Asian Social Science, 180-190.

CIDB. (2011). Annual Report 2010/2011: 10 years A Milestone Achievement in the Construction Industry of South Africa . CIDB.

CIDB. (2011b). Construction Quality in South Africa: A Client Perspective. CIDB.

CIDB. (2012). Annual Report 2011/2012. CIDB.

CIDB. (2015). CIDB Annual Report 2014/2015. CIDB.

CIDB. (2016). CIDB Annual Report 2015/2016. CIDB.

City of Durban. (2017). Engineering News. Engineering Today (pp. 80-106). Durban: City of Durban.

Cooper, D., & Schindler, P. (2001). Business research methods. Irwin/McGraw-Hill.

Cooper, D., & Schindler, P. (2006). Business Research Methods. McGraw-Hill Irwin.

Cooper, D., & Schindler, P. (2008). Business research methods (10th ed.). New York: McGraw-Hill/Irwin.

Creswell, J. W. (2014). Research Design Qualitative, Quantitative and Mixed Methods Approaches . Los Angeles: SAGE Publications, Inc.

Dalberg. (2011). Report on Support to SMEs in Developing Countries Through Financial Intermediaries. Geneva.

Department of Human Settlements. (2015). Department of Human Settlements Annual Report 2014/2015 . Pretoria: Department of Human Settlements.

Department of Labour. (2015). Department of Labour Annual Report 2014/2015. Pretoria: Department of Labour.

Department Of Planning, Monitoring and Evaluation . (2015). Department Of Planning, Monitoring and Evaluation Annual Report2014/2015. Pretoria: Department Of Planning, Monitoring and Evaluation .

Department of Public Works. (2007). Contractor Incubator rogramme: Management Plan. Department of Public Works.

Department of Public Works. (2015). Department of Public Works: 2015-2020 Strategic Plan. Department of Public Works.

Department of Public Works. (2017). Annual Peformance Plan 2017/2018. Department of Public Works.

Department of Small Business Development. (2016). Department of Small Business Development: Annual Report 2015/2015. Pretoria: Department of Small Business Development.

Department of Trade and Industry. (1995). National Strategy for the Development and Promotion Of Small Business in South Africa White Paper of the Department of Trade and Industry . Cape Town.

Department of Water Affairs and Forestry . (2008). Department of Water Affairs and Forestry Annual Report 2007/2008. Department of Water Affairs and Forestry .

DTI. (2008). Annual Review of Small Businesses in South Africa. DTI.

Dubihlela, J. (2013). Determinants of Market Orientation Adoption among Small and Medium Enterprises (SMES) in South Africa. Mediterranean Journal of Social Sciences, 55-65.

Emuze, F. (2011). Performance Improvement in South African Construction. Port Elizabeth: Nelson Mandela Metropolitan University.

Fatoki, O. (2012). An Investigation into the Financial Management Practicesof New Micro-enterprises in South Africa. J Soc Sci, 179-188.

Fatoki, O. (2014). The Causes of the Failure of New Small and Medium Enterprises in South Africa. Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy, 922-927.

Fatoki, O., & Patswawairi, T. (2012). The Motivations and Obstacles to Immigrant Entrepreneurship. Kamla-Raj, 133-142.

Fellows, R., & Liu, A. (1997). Reseach Methods for Construction. Bristol: Aarontype Ltd.

FinMark Trust. (2015). Financial Access and SME Size in South Africa. FinMark Trust.

Fox, W., & Bayat, M. (2010). A Gude to Managing Research. Landsdowne: Juta & Co Ltd.

FriedrikeSmallbone, W., & Welter. (2012). The Role of Government in SME Development in Transition Economics. International Small Business Journal, 63-77.

Gasa, Z. (2011). Measuring the Competitiveness of Small, Medium and Micro Enterprise Contractors Through the Use of The Register of Contractors . Port Elizabeth: Nelson Mandela Metropolitan University.

Gaynor, A. (2010). Strategic Management Guidelines for Construction SMEs in the Eastern Cape. Port Elizabeth: NMMU Business School.

GEM. (2011). Global Entrepreneurship Monitor. GEM.

GEM. (2011). South Africa: The crossroads – a goldmine or a time bomb.

GEM. (2014). Global Entrepreneurship Monitor: 2014 Global Report. GEM .

IFC. (2011). Scaling-Up SME Access to Financial Servicesin the Developing World. Washington, DC: Global Partnership of Financial Inclusion.

Islam, M., khan, M., Obaidullah, A., & Alam, S. (2011). Effect of Entreprenuer and Firm Characteristicson the Bussiness Success of Small and Medium Enterprises (SMEs) in Bangladesh. International Journal of Bussiness and Management, 289-299.

Ismail, R., Jeffery, R., & Van Belle, J. (2011). Using ICT as a Value Adding Tool in South African SMEs. Journal of African Research in Business & Technology, 1-12.

Johnson, P., & Harris, D. (2002). Qualitative and quantitative issues in research design. London: Sage Publications.

Katua, N. T. (2014). The Role of SMEs in Employment Creation and Economic Growth in Selected Countries. International Journal of Education and Research, 461-472.

Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development. African Journal of Business Management , 2288-2295.

Kothari, C. (2004). Research Methodology Methods and Techniques Second Revised Edition. Daryaganj: New Age International (P) Ltd.

Kumar, R. (2011). Research Methodology a Step-by-Step Guide for Beginners. London: SAGE Publications Ltd .

Lekhaya, L. (2015). Public Outlook on Small and Medium Enterprises as a Strategic Tool for Economic Growth and Job Creation in South Africa. Journal of Governance and Regulation, 412-418.

Mahadea, D., & Pillay, M. (2008). Environmental Conditions for SMME Development in a South African Province. SAJEMS NS 11, 431-448.

Mahembe, E. (2011). Access to Credit and Support in South AfricaLiterature review on small and medium enterprises.

Maloka, M. (2013). The Contribution of Small, Medium and Micro Enterprises towardsLocal Economic Development in Mankweng Township,Limpopo Province. University of Limpopo.

Maseko, N., Manyani, O., Chiriseri, L., Tsekea, S., Mugogo, P., & Chazuza, T. M. (2010). An analysis of the impact of targeted government support on SMEs growth and development in Zimbabwe: a survey of Mashonaland Central Province. Journal of Research in International Business Management, 051-059.

Mbeki, S. (2014). Causes, Effects and Impact of Shortages of Skilled Artisans on Contractor Productivity. Bellville: Cape Peninsula University of Technology.

Mensah, S. N., & Benedict, E. (2010). Entrepreneurship training and poverty alleviation: Empowering the poor in the Eastern Free State of South Africa. African Journal of Economic and Management Studies, 138-163.

Mensah, S., & Benedict, E. (2010). Entrepreneurship training and poverty alleviation: Empowering the poor in the Eastern Free State of South Africa. African Journal of Economic and Management Studies, 138 - 163.

Motsetse, M. J. (2015). The Role of Government in Developing Sustainable SMEs in the Construction Sector in the Free State Province. Bloemfontein: University of the Free State.

Muijs, D. (2004). Doing Quantitative Research in Education with SPSS. London: SAGE Publications Ltd.

Mwobobia, F. M. (2012). The Challenges Facing Small-Scale Women Entrepreneurs:A Case of Kenya . International Journal of Business Administration , 112-121.

National Development Plan. (2011). National Development Plan: Vision for 2030. The Presidency.

National Empowerment Fund. (2016). National Empowerment Fund:Intergrated Report 2015/2016. Pretoria: National Empowerment Fund.

National Treasury. (2015). The Estimates of National Expenditur. Pretoria: National Treasury.

NCDP. (2011). Baseline Study of Provincial Contractor Development Programmes: Review of the Contractor Development Programmes: Towards an NCDP Monitoring and Evaluation Systerm. CIDB.

Ntuli, B., & Allopi, D. (2008). Factors Associated With Insolvences Amongst Civil Engineering Construction Firms in KwaZulu-Natal, South Africa. Proceedings of the 28th Southern African Transport Conference, 364-372.

Ntuli, B., & Allopi, D. (2013). Capacity Challenges Facing Civil Engineering Contractors in Kwazulu - Natal, South Africa. International Journal of Engineering and Innovative Technology (IJEIT), 90-97.

OECD. (2015). OECD Economic Surveys:South Africa.

Ogbo, A., & Nwachukwu, A. (2012). The Role of Entrepreneurship in Economic Development: The Nigerian Perspective. European Journal of Business and Management, 95-106.

Olawale, F., & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. African Journal of Business Management, 729-738.

Olawale, F., & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach . African Journal of Business Management Vol. 4(5), 729-738.

Olawale, F., & Van Aardt Smit, A. (2010). Business environmental influences on the availability of debt to new SMEs in South Africa. African Journal of Business Management , 1778-1789.

Parliamentary Liaison Office. (2014). Small Business in South Africa: What the Department of Small Business Development Can Do to Stimulate Growth. Southern African Catholic Bishops' Conference (pp. 5-12). Cape Town: CPLO.

Parliamentary Liaison Office. (2015). The 2015 Budget. Southern African Catholic Bishop's Conference (pp. 1-4). Cape Town: CPLO Office Administrator.

Peprah, J. A., Akosah, N. B., & Mensah, A. O. (2016). Small and Medium Sized Enterprises (SMES) Accessibility to Public Procurement: SMES Entity Perspective in Ghana. European Journal of Business and Social Sciences, Vol. 4, 25-40.

Peprah, J. A., Mensah, A. O., & Akosah, N. B. (2016). Small and Medium Sized Enterprises (SMES) Accessibility to Public Procument: SMES Entity Perspective in Ghana. European Journal of Business and Social Sciences, Vol. 4, 25-40.

Peter, J. (2015). Number of Engineers in South Africa. Journal of Enginnering South Africa, 1(5), 15-99.

Peterhoff, D., Romeo, J., & Calvey, P. (2014). Towards Better Capital Markets Solutions for SME Financing. Marsh and Mclennan Companies.

Ramukumba, T. (2014). Overcoming SMEs Challenges Through Critical Success Factors: a Case of SMEs in the Western Cape Province, South Africa. Economic and Business Review, 19-38.

Renault, B. Y. (2017). Evaluating the Influence of Risk Management Practices on Project Success of Small and Medium Construction Enterprises in the South African Construction Industry. Johannesburg: University of Johannesburg.

Robu, M. (2013). The Dynamic and Importance of SMEs in Economy. The USV Annals of Economics and Public Administration, 84-89.

Salvovsch, L., & Robu, N. (2011). The Role of SMEs in Modern Economy. International Journal of Business and Management, 278-299.

SBP Alert . (2015). SME Growth Index Headline Results. Johannesburg.

SBP Alert. (2009). Small business development in South Africa. Johannesburg.

SBP Alert. (2013). Developing a New Path for SMEs in South Africa; Reassessing for Growth. Johannesburg.

SBP Alert. (2014). Examining the Challenges Facing Small Businesses in South Africa. Johannesburg.

Schoeman, N., & Blignaut, J. (1999). Small, Medium and Micro-sized enterprises (SMMEs) and the housing construction industry: a possible solution to South Africa's socio-economic problems. Pretoria: Faculty of Economic and Management Sciences, University of Pretoria.

SEDA. (2014). 10 Years of Small Enterprise Development: Annual Report 2013/2014. Pretoria.

SEDA. (2015). Annual Review 2014/2015: Seda Technology Programme. SEDA.

SEDA. (2016). Annual Report 2015/2016. SEDA.

SEFA. (2015, February 20). http://www.sefa.org.za/Content/Docs/2015%20sefa%20Annual%20Report.pdf. Retrieved from https://www.google.co.za/search?q=sefa+2015&rlz=1C1NHXL_enZA731ZA731&oq=sefa+2&aqs=chrome.4.69i57j0l5.26126j0j8&sourceid=chrome&ie=UTF-8

Smit, Y., & Watkins, J. A. (2012). A literature review of small and medium enterprises (SME) risk management practices in South Africa . African Journal of Business Management Vol. 6(21), 6324-6330.

Thwala, W. D., & Phaladi, M. J. (2009). An exploratory study of problems facing small contractors in the North West province of South Africa . African Journal of Business Management Vol.3, 533-539.

Thwala, W. D., & Phaladi, M. J. (2009). An Exploratory Study of Problems Facing Small Contractors in the North West Province of South Africa . African Journal of Business Management Vol.3 (10), 533-539.

UCS. (2011). Literature Review on Small and Medium Enterprises' Access to Credit and Support in South Africa. Pretoria: National Credit Regulator .

Underhill Corporate Solutions (UCS). (2011). Literature Review on Small and Medium Enterprises Access to Credit and Support in South Africa. Pretoria: National Credit Regulator (NCR) .

Underhill Corporate Solutions. (2011). Literature Review on Small and Medium Enterprises' Access to Credit and Support in South Africa. Pretoria: National Credit Regulator.

University of South Africa & FinMark Trust. (2015). Financial Access and SME Size in South Africa. FinMark Trust.

Vilakazi, L. M. (2016). The Challenges Faced by Black Entrepreneurs in the Forestry-Contracting Sector of South Africa in the Zululand Regio: the Exploration of Rolesand Support that Can be Played by the Government, Private Sector and Financial Institutions . Stellenbosch: Stellenbosch University .

Wentzel, L., Wentzel, T., Smallwood, J., & Emuze, F. (2014). The Construction SMEs Development Debate in South Africa: Contributions From FET Colleges. 1461-1470.

Wentzel, L., Wentzel, T., Smallwood, J., & Emuze, F. (2014). The Construction SMEs Development Debate in South Africa: Contributions From FET Colleges. Raiden, A B and Aboagye-Nimo, E (Eds), 1461-1470.

Wiese, J. (2014). Factors determining the sustainability of selected small and medium-sized enterprises. Potchefstroom: North-West University.

Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. Journal of Emergency Primary Health Care (JEPHC), Vol. 8, 1 -13.

Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2013). Business Research Methods. United States: Cengage Learning.

Zindiye, S., Chiliya, N., & Masocha, R. (2012). The impact of Government and other Institutions' supporton the Performance of Small and Medium Enterprises inthe Manufacturing Sector in Harare, Zimbabwe . Int.J.Buss.Mgt.Eco.Res., 655-667.

APPENDICES

APPENDIX A: INFORMED CONSENT LETTER

AN IMPACT OF GOVERNMENT DRIVEN INITIATIVES FOR THE SUCCESS OF CONSTRUCTION SMALL MEDIUM ENTERPRISES (SME'S) IN KWAZULU-NATAL, SOUTH AFRICA

Date: 10 September 2017

To Whom It May Concern:

My name is **Silindile Precious Nhlumayo,** Student no. 217076432 and an MSc student, in the School of Engineering, Construction Studies Program at the University of KwaZulu Natal. You are invited to voluntarily participate in a research project entitled: "an impact of Government driven initiatives for the success of construction small medium enterprises (SME's) in Kwazulu-Natal, South Africa'.

The aim of this research is to investigate the role played by construction SMEs towards improving the economy of the country. Moreover, the study seeks to establish whether the government initiatives have an impact on the effective performance of construction SMEs and whether they have achieved their intended outcomes in KwaZulu-Natal, South Africa. Through your participation I hope to understand the pivotal role that SME's play in the economy of any country, and given that the South African government has introduced several initiatives specifically targeted at promoting the attractiveness, growth and sustainability of the SME sector, the effectiveness of which have not been fully evaluated regarding SME's in the construction sector to determine whether they have achieved the intended outcomes of those initiatives. The results of this survey are intended to contribute to the completion of my master's degree.

The study is expected to involve 201 civil engineering and general building contractors as well as 10 government officials. It will involve structured interviews and a questionnaire survey. Your participation in the study will be a maximum of 15 minutes to complete the survey instrument.

No perceived risk is involved in the research. I reassure you that only the summary of your response will be used in the report and your name will not be linked with the responses. Your confidentiality and anonymity of records identifying you as a participant will be securely

maintained throughout the study. Your participation for this study is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this research project. Should you wish to receive a summary of the key findings of the study it will be provided to you if you include your contact details?

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number **HSS/0860/017M**).

If you have any questions or concerns about participating in this study, please contact me or the UKZN Humanities and Social Sciences Research Ethics Administration at the numbers or emails listed on the declaration consent.

I would highly appreciate your participation, as it would help me complete this research project

Sincerely

Researcher: Silindile Nhlumayo

Supervisor: Prof Theo Haupt

CONSENT

I _____ (Full Name) have been informed about the study entitled an impact of Government driven initiatives for the success of construction small medium enterprises (SME's) in Kwazulu-Natal, South Africa, by Silindile Nhlumayo.

I understand the purpose and procedures of the study. I have been given an opportunity to answer questions about the study and have had answers to my satisfaction. I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at 073 741 8870 or 033 346 0673 or silindilenhlumayo@gmail.com.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact HSSREC below.

_____   _____

Contacts   Role/Capacity

_____   _____

Signature of Participant   Date

RESEARCHER   **SUPERVISOR**
Full Name: Silindile P Nhlumayo   **Full Name of Supervisor**: Prof. Theo Haupt

School: School of Engineering, Construction Studies   **School**: School of Engineering, Construction
College: AES   **College**: AES
Campus: Howard College   **Campus**: Howard College
Proposed Qualification: MSc. Construction   **Contact Details**: 031 260 2712
Contact: 073 741 8870   **Email**: haupt@ukzn.co.za
Email: silindilenhlumayo@gmail.com

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus
Govan Bheki Building
Private Bag X 54001
Durban, 4000
KwaZulu – Natal, South Africa
Tel: 031 260 4557 – Fax: 031 260 4609
Email: HSSREC@ukzn.ac.za

APPENDIX B: CONTRACTORS QUESTIONNAIRES

APPENDIX B

QUESTIONNNAIRE SURVEY FOR CONSTRUCTION SME's

SECTION A: BACKGROUND INFORMATION OF THE RESPONDENT AND ENTERPRISE

Kindly answer all questions, by indicating with (x or √) in the most relevant box or fill blank space when answering the questions.

Please indicate the position you hold in the company			
Owner		Project Manager	
Contracts Manager		Site Agent	
If other, please specify …………………………………………………………………………………………			

Please indicate your Gender			
Male		Female	

Please indicate your ethnicity *(For research and statistical purposes only)*			
Black		Indian/Asian	
Coloured		White	
If other, please specify …………………………………………………………………………………………			

Please indicate your highest qualification			
Doctoral degree		Certificate	
Master's degree		Matric	
Honours/BTech/BSc		No qualification	

Please indicate your field of study			
Construction Management		Law	
Civil Engineering		Education	
Finance		Project Management	
Quantity Surveying		Architecture	
If other, please specify ………………………………………………………………………………………………… ……			

Please indicate the Construction Industry Development Board grading (CIDB) if you have one							
Grade 1		Grade 3		Grade 5		Grade 7	
Grade 2		Grade 4		Grade 6		Grade 8	
No grading							

Please indicate the nature of your business?			
GB		Both	
CE		If other, specify……………………………	

How many years have you worked for this company?

……………………………………………………………………………….…………………………………**year(s)**

Kindly specify the total number of full time employees currently employed by your company including the owner

………………………………..……………………………………………………………

SECTION B1: CHALLENGES FACING CONSTRUCTION SMALL MEDIUM ENTERPRISE (SME's)

10. **What impact do the following challenges have on your business using the scale of**

1 = No impact, 2= Low impact, 3 = Moderate impact, 4 = Major impact

No.	Types of challenges	1	2	3	4
	Financial related challenges	1	2	3	4
a	Access to finance				
b	Late payments by Client				
c	Cash flow				
d	Uncompetitive pricing				
e	Time management related challenges				
f	Difficulty in understanding and completing tender documents				
g	Complex and complicated forms of contract				
h	Poor understanding of contractual obligations				
i	Poor understanding of contractual documentation e.g. (guarantees, retentions, insurances and initial programme of works)				
j	Crime and corruption				
	Human resource management related challenges	1	2	3	4
a	Lack of required competencies				
b	Lack of training				
c	Inadequate supervision				

		1	2	3	4
d	Low employee morale				
e	Low productivity				
f	Idleness on site				
g	Ignorance				
h	Strikes				
i	Human error/mistake				
j	Unnecessary work				
k	Absenteeism				
	Health and Safety related challenges	**1**	**2**	**3**	**4**
a	Lack of Health and Safety training and awareness				
b	Lack of financial provision for Health and Safety				
c	Poor understanding of Health and Safety Management System				
d	Compliance with Operational Health and Safety Act				
e	Labour injuries				
f	Health and Safety file				
g	Health and Safety plan				
h	Medicals				
i	Provision of personal protective clothing (PPE)				
	Quality Management related challenges	**1**	**2**	**3**	**4**
a	Accreditation with ISO9000				
b	Poor management skills				
c	Lack of skilled labour				
d	Poor quality material				
e	Reworking				
f	Poor design co-ordination				
g	Insufficient workforce training				
h	Lack of contractor quality expertise				

SECTION B2: FINANCE

How long does it take for invoices to get paid?

……

Do you do any follow ups on your payment

Yes		No	

If YES, what steps do you take?

……

………

If NO, why not?

....

....

Does the waiting period before payment is received affect your cash flow?

Yes	No	
If YES, how?		

Have you been affected by uncompetitive pricing or low rates?		
Yes	No	
If YES, how?		

SECTION C: CONTRIBUTION OF CONSTRUCTION SMALL MEDIUM ENTERPRISE (SME's) IN THE SOUTH AFRICAN ECONOMIC DEVELOPMENT

1. **Based on your own experience, what impact do you think construction SME's have on South African economic development in terms of the following aspects, using the following 4-point scale,**
   1 = No impact, 2= Low impact, 3 = Moderate impact, 4 = Major impact

No.	Contribution	1	2	3	4
a	Employment or job creation				
b	Equity redress (for example, correcting gender, race, age, etc. imbalances)				
c	Socio-economic development (for example, community upliftment)				
d	Innovation (for example, new ideas, methods and materials)				
e	Poverty reduction				
f	Income generation				

2. **Based on your experience, how can construction SME's help reduce unemployment?**

   …………………………………………………………………………………………………...

SECTION D: CONSTRUCTION SMALL MEDIUM ENTERPRISE (SME's) SUPPORT AGENCIES

3. **Indicate whether your company participates in or has participated in any of the following programmes with x or √ in the appropriate block?**

Government initiatives/programmes	Yes	No	Unsure
SEDA			
SEFA			
NEFA			
VUKUZAKHE			

EPWP			
ECDP			
CIP			
NCDP			
UMGENI WATER CPG			
If other, please specify ……			

If YES, what were the benefits of those programmes and did you face any challenges?

....

....

If NO, why are you not participating?

……

……

……

4. Did the programmes improve the growth and development of the company?

Yes		No	
If YES, in which ways? ……… ……… ………………			

5. Do you think the government is doing enough to support construction SME's?

Yes		No	
If NO, what more do you think can be done ……… ……… ………………			

6. To what extent has government initiatives/programmes impacted construction SME's relative to the following aspects using the following scale:

1 = No impact, 2= Low impact, 3 = Moderate impact, 4 = Major impact

No.	Contribution	1	2	3	4
a	Developing a business plan				
b	Marketing				
c	Training				
d	Mentoring				
e	Coaching				
f	Providing financial support				
g	Sustaining SME businesses				
h	Providing ongoing work				
i	Improving CIDB grading				

Thank you for your time and assistance in completing this questionnaire

APPENDIX C: GOVERNMENT OFFICIALS QUESTIONNAIRE

APPENDIX C

QUESTIONNNAIRE SURVEY FOR GOVERNMENT OFFICIALS

SECTION A: BACKGROUND INFORMATION OF THE RESPONDENT AND ENTERPRISE

Kindly answer all questions, by indicating with (x or √) in the most relevant box or fill blank space when answering the questions.

Please indicate your Gender			
Male		Female	

Please indicate your ethnicity			
Black		Indian/Asian *(For research and statistical purposes only)*	
Coloured		White	
If other, please specify ………………………………………………………………………………………………… ……			

Please indicate your highest qualification			
Doctoral degree		Certificate	
Master's degree		Matric	
Honours/BTech/BSc		No qualification	

Please indicate the department			
NEF		CIDB	
SEFA		DPW	
DOT		NDPW	
DSBD		Treasury (Provincial)	
Local Authority e.g. municipality			

Please indicate the position you hold in the company			
CEO		Construction Manager	
CFO		Project Manager	
Quantity Surveyor		Architecture	
Manager			
If other, please specify			

```
┌─────────────────────────────────────────────────────────────────────────┐
│ ……………………………………………………………………………………………………………………             │
│                                                                           │
│ ……                                                                        │
│                                                                           │
└─────────────────────────────────────────────────────────────────────────┘
```

┌───┐
│ **How long have you been in this position**……………………………………… **year(s)** │
└───┘

7. **What is the purpose of providing government initiatives for the construction SME's**

………

………

8. **How do you nominate the SME Contractors to participate in these initiatives?**

………

………

Are your programmes aligned with the development of construction SME's?			
Yes		No	

If NO, why?

………

………

If YES, how?

………

………

10. **Which sectors are you assisting?**

....

....

┌───┐
│ **How many construction SME's participate in your development programmes?** │
│   │
└───┘

....

....

....

What kind of assistance do you offer to construction SME's?	
Training	
Funding	
Mentoring	
If other, specify

………………………………………………………………………………………………

………………………………………………………………………………………

……………… | |

Do you mentor the construction SME's after assisting them to ensure they develop and sustainable?			
Yes		No	

If NO, why not?

……

………………………………………………………………………………………………

If YES, how?

……

………………………………………………………………………………………………

Do you think government is doing enough to support construction SME's			
Yes		No	

If NO, what do you suggest being done

……

………………………………………………………………………………………………

Thank you for your time and assistance in completing this questionnaire

APPENDIX D: GATEKEEPERS PERMISSION

17 August 2017

Head of Department
KZN Department of Transport
Private Bag X9043
Pietermaritzburg
3200

Attention: Mr. S Gumbi

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is **Silindile Precious Nhlumayo,** Student no. 217076432 studying toward MSc in Construction Studies Programme at the University of KwaZulu Natal. For the study approval process by Humanities & Social Sciences Research Ethics Administration, student required to obtain gatekeeper permission from organizations where they conduct research within organization.

Therefore, I request the permission to conduct research at your organization for a study entitled 'An impact of Government driven initiatives for the success of construction small medium enterprises (SME's) in Kwazulu-Natal, South Africa'.

The aim of this research is to investigate the role played by construction SMEs towards improving the economy of the country. Moreover, the study seeks to establish whether the government initiatives have an impact on the effective performance of construction SMEs and whether they have achieved their intended outcomes in KwaZulu-Natal, South Africa. The project consists of a short four-page survey, made up of about 13 questions that can be typically be answered by participants within 10-15 minutes.

If you are willing to be involved, would you please sign and stamp the form below that acknowledges that you have read the Participant Information Sheet, you understand the nature of the study being conducted and the likely benefits of participation in this study, and you give permission for the research to be conducted at the organization.
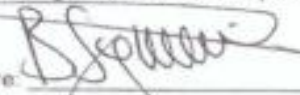
Yours sincerely

Mrs. Silindile P. Nhlumayo _____

_____

_____

I SIBUSISO GUMBI _____ [name]. HEAD OF DEPARTMENT [Title] of _____
TRANSPORT _____ [Organization] having been fully informed of the nature of the research to be conducted and give my permission for the study to be conducted. I reserve the right to withdraw this permission at any time.

Signature: _____ Date: 18 / 08 / 2017

Stamp:
DEPARTMENT OF TRANSPORT
CHIEF DIRECTORATE
OPERATIONS

2017 -09- 1 0

PRIVATE BAG 9043
PIETERMARITZBURG, 3201

101

03 August 2017

Regional Manager
KZN SEFA
Embassy Building
199 Anton Lembede Street
Durban
4001

Attention: Mr.T Mkhwanazi

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is **Silindile Precious Nhlumayo**, Student no. 217076432 studying toward MSc in Construction Studies Programme at the University of KwaZulu Natal. For the study approval process by Humanities & Social Sciences Research Ethics Administration, student required to obtain gatekeeper permission from organizations where they conduct research within organization.

Therefore, I request the permission to conduct research at your organization for a study entitled 'An impact of Government driven initiatives for the success of construction small medium enterprises (SME's) in Kwazulu-Natal, South Africa'.

The aim of this research is to investigate the role played by construction SMEs towards improving the economy of the country. Moreover, the study seeks to establish whether the government initiatives have an impact on the effective performance of construction SMEs and whether they have achieved their intended outcomes in KwaZulu-Natal, South Africa. The project consists of a short four-page survey, made up of about 13 questions that can be typically be answered by participants within 10-15 minutes.

If you are willing to be involved, would you please sign and stamp the form below that acknowledges that you have read the Participant Information Sheet, you understand the nature of the study being conducted and the likely benefits of participation in this study, and you give permission for the research to be conducted at the organization.
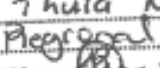
Yours sincerely

Mrs. Silindile P. Nhlumayo _____

I _Thula Mkhwanazi_ [name], _Regional Manager_ [Title] of _Sefa_ [Organization] having been fully informed of the nature of the research to be conducted and give my permission for the study to be conducted. I reserve the right to withdraw this permission at any time.

Signature: _____ Date: _08 / 08 / 2017_

Stamp: _____

SEFA
CERTIFIED AS CORRECT FOR
PAYMENT PURPOSES
(In accordance with Section 45 in Terms of the
Provisions of the PFMA Act and Treasury Regulations
NAME: _Thula Mkhwanazi_
RANK: _Regional Manager_
SIGNATURE: _____
DATE: _08 - 08 - 2017_

15 August 2017

Branch Manager
KZN SEDA
283 Langalibalele Street
Tourism Hub Building
Pietermaritzburg
3201

Attention: Mr. M Zondo

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is **Silindile Precious Nhlumayo**, Student no. 217076432 studying toward MSc in Construction Studies Programme at the University of KwaZulu Natal. For the study approval process by Humanities & Social Sciences Research Ethics Administration, student required to obtain gatekeeper permission from organizations where they conduct research within organization.
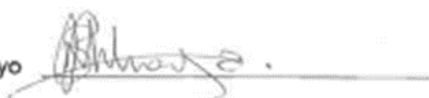
Therefore, I request the permission to conduct research at your organization for a study entitled 'An impact of Government driven initiatives for the success of construction small medium enterprises (SME's) in Kwazulu-Natal, South Africa'.

The aim of this research is to investigate the role played by construction SMEs towards improving the economy of the country. Moreover, the study seeks to establish whether the government initiatives have an impact on the effective performance of construction SMEs and whether they have achieved their intended outcomes in KwaZulu-Natal, South Africa. The project consists of a short four-page survey, made up of about 13 questions that can be typically be answered by participants within 10-15 minutes.

If you are willing to be involved, would you please sign and stamp the form below that acknowledges that you have read the Participant Information Sheet, you understand the nature of the study being conducted and the likely benefits of participation in this study, and you give permission for the research to be conducted at the organization.

Yours sincerely

Mrs. Silindile P. Nhlumayo

_____

_____

I MICHAEL ZONDO [name], BRANCH MANAGER [Title] of SEDA _____ [Organization] having been fully informed of the nature of the research to be conducted and give my permission for the study to be conducted. I reserve the right to withdraw this permission at any time.

Signature: _____   Date: 18 August 2017

Stamp: _____

APPENDIX E: ETHICAL CLEARANCE

UNIVERSITY OF ™
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

07 September 2017

Mrs Silindile Precious Nhlumayo (217076432)
School of Engineering
Howard College Campus

Dear Mrs Nhlumayo,

Protocol reference number: HSS/0860/017M
Project title: The impact of Govenrment-driven intiatives for the success of construction Small Medium Enterprises (SME's) in KwaZulu-Natal, South Africa

Approval Notification – Expedited Application
In response to your application received on 23 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

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 discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

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

Yours faithfully

....
Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Professor Theo C Haupt
Cc Academic Leader Research: Dr Randhir Rawatlal
Cc School Administrator: Ms Nombuso Dlamini

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609   Email: ximbac@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

1910 - 2010
100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses   ■ Edgewood   ■ Howard College   ■ Medical School   ■ Pietermaritzburg   ■ Westville

105