

UNIVERSITY OF KWAZULU-NATAL

**CRITICAL SUCCESS FACTORS FOR SMALL AND MEDIUM
SIZED CONSTRUCTION CONTRACTORS IN
PIETERMARITZBURG**

By

Thokozani Nhlanhla Mchunu

200272663

**A dissertation submitted in partial fulfillment of the requirements for
the degree of**

Master of Business Administration

**Graduate School of Business & Leadership
College of Law and Management Studies**

Supervisor: Dr Abdulla Kader

2015



**COLLEGE OF LAW AND MANAGEMENT
STUDIES**

SUPERVISORS PERMISSION TO SUBMIT THESIS/ DISSERTATION FOR EXAMINATION

| | | | |
|--|--|--------------------------|-----------|
| NAME: THOKOZANI NHLANHLA MCHUNU | | No: 200272663 | |
| TITLE: CRITICAL SUCCESS FACTORS FOR SMALL AND MEDIAUM SIZED CONTRACTORS IN PIETERMARITZBURG | | | |
| QUALIFICATION: MBA | | SCHOOL: GSB&L | |
| | | YES | NO |
| TO THE BEST OF MY KNOWLEDGE, THE THESIS/DISSERTATION IS PRIMARILY THE STUDENT'S OWN WORK AND THE STUDENT HAS ACKNOWLEDGED ALL REFERENCE SOURCES | | | |
| THE ENGLISH LANGUAGE IS OF A SUITABLE STANDARD FOR EXAMINATION WITHOUT GOING FOR PROFESSIONAL EDITING. | | | |
| TURNITIN REPORT | | 11% | |
| COMMENT IF % IS OVER 10%: | | | |
| I AGREE TO THE SUBMISSION OF THIS THESIS/DISSERTATION FOR EXAMINATION | | | |
| SUPERVISORS NAME: DR ABDUL KADER | | | |
| SUPERVISORS SIGNATURE: | | | |
| DATE: | | | |
| CO- SUPERVISORS NAME: | | N/A | |
| CO- SUPERVISORS SIGNATURE: | | N/A | |
| DATE: | | N/A | |

Declaration

I, Thokozani Nhlanhla Mchunu declare that:

- i. This research reported in this dissertation, except where otherwise indicated, is my original work.
- ii. This dissertation has not been submitted for any degree or examination at 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:

- their words have been re-written but the general information attributed to them has been referenced;
 - where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- v. Where I have reproduced a publication or which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.
 - vi. 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 section.

Signed: _____

Acknowledgements

I wish to express my sincere appreciation and gratitude to the following individuals, without whose assistance, this study would not have been possible:

- My supervisor, Dr Abdulla Kader, for his guidance, advice, support and patience which helped me complete this dissertation.
- Dr Muhammad Hoque, for his help and guidance with statically analysis, patience and understanding which helped me complete this dissertation.
- My respondents, for the information provided to successfully complete this dissertation.
- My wife, Musa Mchunu, who has been patient and understanding throughout the MBA course and the completion of this dissertation.
- My Pastor Dean RSV Sithole for his guidance and motivation, for that I thank him.
- Everyone who contributed to the success of this dissertation.

Abstract

In the construction industry it has been observed that some of the contractors have changed their business activities while others have continued to suffer, and many have experienced business failure. This high rate of failure is common within the small and the medium sized contractors and is due mainly to constraints brought about by the critical success factors. The aim of this study was to use the critical success factors approach to identify vital but manageable factors that contribute to the overall success of small and medium sized contractors and identify creative solutions to deal with these factors. Solutions for policy makers to mitigate these factors or challenges were also identified in this study. In this study, factors were classified into two categories, internal and external critical success factors. A probability sample of 110 small and medium sized contractors was drawn from a data base of the Msunduzi Municipality with a population of 158 contractors. A response rate of 51% was achieved using self-administered questionnaires tailored for directors and managers of the companies. A Statistical Package for Social Science was used to complete the data analysis process. The data analysis revealed that 84% of the samples were male and 58% of the samples were between the age of 30 and 44 years. 43% were African followed by Indians at 29%. Most of the participants were directors of the company followed by project managers. 41% of the participants had matric as their highest qualification. The statistical analysis revealed that most contractors had problems marketing themselves and were lacking financial and human resources skills. Project management was found to be the most important skill for contractors followed by financial skills, pricing of tenders then technical skills. Late payment, fraud, competition, access to finance were the top ranked external critical success factors that affect the success of small and medium sized contractors. On the other hand, effective management, financial management, pricing of contracts, lack of skill and resources were the most ranked internal factors. It was recommended that contractors address these internal factors and continue to review and identify other internal factors that may contribute to their failure. An intervention from government, the public and private sectors and policy makers is required to address external factors with the contribution of these contractors.

Table of Contents

| Description | Page |
|--|-------------|
| Title Page | |
| Declaration | iii |
| Acknowledgements | iv |
| Abstract | v |
| Table of Contents | vi |
| List of Figures | x |
| List of Tables | xi |
| | |
| CHAPTER 1 | |
| Introduction | |
| 1.1 Introduction | 1 |
| 1.2 Motivation for the study | 2 |
| 1.3 Focus of the study | 2 |
| 1.4 Problem statement | 3 |
| 1.5 Objectives | 3 |
| 1.6 Summary | 3 |
| | |
| CHAPTER 2 | |
| Literature Review | |
| 2.1 Introduction | 4 |
| 2.2 Small and medium sized contractors in South Africa | 4 |
| 2.3 Status of small and medium sized contractors in South Africa | 5 |
| 2.4 Critical success factors | 6 |
| 2.4.1 External critical success factors (challenges) | 8 |
| 2.4.1.1 Competition | 9 |
| 2.4.1.2 Fraud | 10 |
| 2.4.1.3 Access to finance | 10 |
| 2.4.1.4 Procurement policies | 11 |

| | | |
|---------|--|----|
| 2.4.1.5 | Availability of skilled labour | 12 |
| 2.4.1.6 | Late payment | 12 |
| 2.4.1.7 | Innovation and technology | 12 |
| 2.4.1.8 | Laws and regulations | 13 |
| 2.4.2 | Internal critical success factors | 14 |
| 2.4.2.1 | Effective management | 14 |
| 2.4.2.2 | Lack of financial management and cash Flow | 16 |
| 2.4.2.3 | Lack of skills | 17 |
| 2.4.2.4 | Lack of resources | 18 |
| 2.4.2.5 | Pricing of contracts | 19 |
| 2.4.2.6 | Inability to market | 22 |
| 2.4.2.7 | Fronting by established contractors | 23 |
| 2.5 | Summary | 24 |

CHAPTER 3

Research Methodology

| | | |
|-------|--|----|
| 3.1 | Introduction | 25 |
| 3.2 | Aim of the study | 25 |
| 3.2.1 | Objectives | 26 |
| 3.3 | Participants and location of the study | 26 |
| 3.3.1 | Sampling | 26 |
| 3.4 | Research approach | 27 |
| 3.4.1 | Qualitative and quantitative methods | 27 |
| 3.4.2 | Quantitative method | 28 |
| 3.5 | Data collection | 29 |
| 3.6 | Development of instrument | 29 |
| 3.7 | Validity and reliability | 30 |
| 3.8 | Limitations of the study | 30 |
| 3.8.1 | Contacting respondents | 30 |
| 3.8.2 | Administering of questionnaires | 31 |
| 3.8.3 | Limited Time and resources | 31 |

| | | |
|-------|------------------------|----|
| 3.8.4 | Non-responses measures | 31 |
| 3.9 | Analysis of data | 31 |
| 3.10 | Summary | 32 |

CHAPTER 4

Presentation of Results

| | | |
|-------|--|----|
| 4.1 | Introduction | 33 |
| 4.2 | Participant socio-demographic analysis | 33 |
| 4.2.1 | Age distribution | 33 |
| 4.2.2 | Gender distribution | 34 |
| 4.2.3 | Race distribution | 34 |
| 4.2.4 | Participant position at work | 35 |
| 4.2.5 | Participant level of education | 35 |
| 4.3 | Company profile | 36 |
| 4.3.1 | Number of employees | 36 |
| 4.3.2 | Annual turnover of the company | 36 |
| 4.3.3 | Number of years in operation | 37 |
| 4.3.4 | Number of projects completed | 38 |
| 4.4 | Critical skills | 38 |
| 4.4.1 | Critical skills lacking in the company | 38 |
| 4.4.2 | Ranking of critical skills | 39 |
| 4.5 | Critical success factors | 40 |
| 4.5.1 | Ranking of external critical success factors | 40 |
| 4.5.2 | Ranking of internal critical success factors | 40 |
| 4.6 | Summary | 41 |

CHAPTER 5

Discussion of Results

| | | |
|-----|--|----|
| 5.1 | Introduction | 43 |
| 5.2 | Participants socio-demographic factors | 43 |
| 5.3 | Objective 1 – Examine the factors that influence the success SCM's | 43 |

| | | |
|---------|---|----|
| 5.4 | Objective 2 - Determine critical success factors facing SMC's | 44 |
| 5.4.1 | Internal critical success factors and critical skills | 44 |
| 5.4.1.1 | Marketing | 44 |
| 5.4.1.2 | Financial management | 47 |
| 5.4.1.3 | Resources management | 50 |
| 5.4.1.4 | Effective management | 50 |
| 5.4.1.5 | Project management | 51 |
| 5.4.2 | External critical success factors | 51 |
| 5.4.2.1 | Late payment | 52 |
| 5.4.2.2 | Fraud | 52 |
| 5.4.2.3 | Competition | 52 |
| 5.4.2.4 | Access to finance | 53 |
| 5.5 | Summary | 53 |

CHAPTER 6

Conclusion and Recommendations

| | | |
|-------|---|----|
| 6.1 | Introduction | 54 |
| 6.2 | Outcomes, recommendations and Implications of the study | 55 |
| 6.3 | Recommendations | 55 |
| 6.3.1 | Internal critical success factors | 55 |
| 6.3.2 | External critical success factors | 58 |
| 6.4 | Recommendations for future studies | 59 |
| 6.5 | Summary | 60 |

References **61**

| | |
|---|----|
| Annexure 1: Introductory letter | 65 |
| Annexure 2: Informed Consent Letter | 66 |
| Annexure 3: Ethical Clearance Certificate | 69 |
| Annexure 4: Questionnaire | 70 |
| Annexure 6: Turnitin Report (first page) | 75 |

LIST OF FIGURES

| Number | Description | Page |
|---------------|---|-------------|
| 2.1 | Classification of Critical Success Factors | 7 |
| 2.2 | Cost Based Pricing Model or Strategy | 19 |
| 2.3 | Market Based Pricing Model or Strategy | 20 |
| 4.1 | Age Distribution of Participants | 31 |
| 4.2 | Gender Distribution of Participants | 32 |
| 4.3 | Frequency Distribution of race of participants | 32 |
| 4.4 | Distribution of Position at Work of the Participants | 33 |
| 4.5 | Participants Level of Education | 33 |
| 4.6 | Distribution of Number of Employees in the Company | 34 |
| 4.7 | Annual Turnover of the Companies | 34 |
| 4.8 | Number of Years in Operation | 35 |
| 4.9 | Number of Projects Successfully Complete by the Company | 35 |
| 4.10 | Critical Skills Lacking in the Companies | 36 |

LIST OF TABLES

| Number | Description | Page |
|---------------|---|-------------|
| 2.1 | Definition of SMME's provided by NSB Act 102 of 1996 | 5 |
| 4.1 | Ranking of Critical Skills Reported by the Participants | 37 |
| 4.2 | Ranking of External Critical Success Factors | 38 |
| 4.3 | Ranking of Internal Critical Success Factors | 38 |

CHAPTER 1

INTRODUCTION

1.1 Introduction

The contribution of small, medium and micro enterprises (SMMEs) in addressing social, economic and environmental development has been realised by governments across the world and South Africa is no exception. According to Fredrich (2010), for every developing country, a larger number of SMME's exists in construction industry and are known as Small and Medium sized Contractors (SMC's). They are probably the only group of contractors that would seize the opportunity of undertaking the relatively unattractive construction contracts in rural communities and such projects, would include schools, community halls, water and sanitation, health care centres and minor road networks. They also tend to be concentrated in relatively labour-intensive activities, employing the labour force in the communities (Miles, 1991; Kakibu, 1993). SMC's play a vital role in the provision of infrastructure facilities required for improved standard of living and alleviating the severe unemployment that threatens the survival of the poor.

Contracts development programmes such as Broad Base Black Economic Empowerment, were introduced by South African government as an effort to support SMC's. Such programmes were aimed at ensuring that previously disadvantaged black contractors have access to the construction industry by awarding certain levels of construction projects to them in order to enable them to develop competent skills, build viable construction companies, create jobs, and redistribution of wealth (Thwala, 2009). Unfortunately, even with the introduction of such programmes, the state of SMC's continues to be unsustainable (Thwala, 2009). Their effective participation in the industry, which could have facilitated their continuous supply of such services, has been affected by several critical success factors (Fredrich, 2010).

Therefore, the topic for this dissertation is aimed at looking at the critical success factors (CSF's) for small and medium sized contractors (SMC's). The aim of this chapter is to provide overview of the topic, motivation behind the study, focus of the study, problem statement, research question, and objectives to be achieved from the study.

1.2 Motivation for the study

Statistics South Africa reported that, from 1995 to 2005, about 5907 construction companies were formally liquidated. According to the Construction Industry Development Board (CIDB) (2010), more than 90% of the emerging black contractors don't last more than 5 years. According to Phaladi (2009), this high failure rate of emerging contractors is due mainly to constraints brought about by the above mentioned critical success factors.

Introduction of contracts development programmes by government is not sufficient to support emerging, small and medium contractors. Critical success factors also need to be identified to ensure sustainability of SMC's and satisfactory performance, and also to prevent their disappearance and or liquidation. Identification of CSF's will not only improve performance of SMC's, it will also improve service delivery to the community, help government with the issue of unemployment and improve the economy of the country. This will also help government to develop appropriate intervention and collaboration strategies with SMC's that are required to address these factors and thereby ensuring sustainable development of SMC's.

1.3 Focus of the study

In this study, the critical success factors approach was used to identify vital but manageable factors that contribute to overall success of small and medium sized contractors. The research was also used to identify creative solutions to deal with these factors. Solutions for policy makers to mitigate these factors or challenges were also identified in this study.

1.4 Problem statement

The state of Small and Medium sized Contractors in South Africa continues to be unsustainable and unsatisfactory even with the introduction of contracts developments programmes. The reasons for this failure will be outlined by looking at the critical success factors and challenges contributing to the success of small and medium sized contractors and what needs to be done in order to deal with these factors and also to mitigate such challenges.

1.5 Objectives

The objectives of this study were to;

- Examine the factors that influence the success of small and medium sized contractors.
- Determine critical success factors facing small and medium sized contractors and.
- Suggest creative solutions for policy makers to mitigate these challenges.

1.6 Summary

A brief overview or background of the study was introduced in this chapter where motivation for the study, focus of the study, problem statement, objectives, and limitations of the study were highlighted.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The study of critical success factors (CSF) that has influenced the success of small and medium-sized contractors (SMC's) in South Africa has been well documented (Thwala, 2009 and Abor, 2010). These include, lack of effective management, lack of financial management; lack of entrepreneurial skills; lack of proper training; lack of resources; lack of technical skills, lack of contractual and managerial skills; late payment for work done which is common with government contracts; inability to get credit from suppliers; fronting for established contractors; and the inability of contractors to market themselves among the industry role players just to mention a few. This literature review will first introduce the reader to the background theory of what constitute SMC's in South Africa. The current relationship between Government and SMC's and contribution made by government in developing SMC's will be outlined. The literature review will also outline challenges and CSF's faced by SMC's.

2.2 Small and Medium Sized Contractors (SMC's) in South Africa

There has been a major concern in the literature regarding the issue of what constitutes a small or medium enterprise. Most researchers such as Dlungwana (2003), distinguish contractors from each other by capital asset, annual turnover and capability while, others distinguish SMMEs in terms of their legal status and method of production (Abor, 2010), and others on the number of employees (Herzog, 1982). However, the definition of the National Small Business Act 102 of 1996 is the most widely used framework in South Africa and it outlines four business categories under SMME's. The categories outlined use the number of employees (the most common mode of definition) per enterprise size category combined with the annual turnover categories and, the gross assets excluding fixed property. The definitions for the various enterprise categories in the construction industry are summarised in table 2.1 below.

Table 2.1: Definition of SMMEs in construction industry Provided by the National Small Business Act 102 of 1996

| Sector or subsectors in accordance with the Standard Industrial Classification | Size or class | Total full-time equivalent of paid employees Less than | Total annual turnover Less than | Total gross asset value (fixed property excluded) Less than |
|--|---------------|---|------------------------------------|--|
| Construction | Medium | 200 | R20.00 m | R 4.00 m |
| | Small | 50 | R 5.00 m | R 1.00 m |
| | Very Small | 20 | R 2.00 m | R 0.40 m |
| | Micro | 5 | R0.15 m | R 0.10 m |

National Small Business Act No 102 of 1996, (1996:15)

- **Micro enterprise:** The turnover is less than the VAT registration limit (that is, R150 000 per year). These enterprises usually lack formality in terms of registration. They employ no more than 5 people.
- **Very small enterprise:** These are enterprises employing fewer than 20 employees. These enterprises operate in the formal market and have access to technology.
- **Small enterprise:** The upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices.
- **Medium enterprise:** The maximum number of employees is 100, or 200 for the construction industry. These enterprises are often characterised by the decentralisation of power to an additional management layer.

2.3 Status of Small and Medium sized Contractors in South Africa

Excellent policies to support the success of small and medium sized contractors such as contract development programmes and emerging contractor development programmes exists in South Africa and South Africa has been applauded for development of such policies (Phaladi, 2009).

However, it is blamed for its inability to implement and monitor the policies (Fredric, 2010), and because of that, the status of small and medium size contractors continue to be unsustainable and even with the existence of such supportive programmes (Phaladi, 2009). Other reasons why the status of SMC continue to be unsustainable is because, in South Africa, the contractors enter the market at the lower end and in the general building contracting category and also because of the introduction of emerging contractor policies intended for black economic empowerment (BEE) that are being used as job creation opportunities, which contributes to the overcrowding of the emerging market making the industry extremely competitive and unsustainable (Abor, 1997).

2.4 Critical success factors

As mentioned above, the study of critical success factors that has an influence in the success of small and medium sized contractors (SMC's) has been well documented (Phaladi, 2009; Katwalo, *et al* 2006). Definition of critical success factors varies from author to author, and also depends on which discipline are used (Lu *et al*, 2008). Critical success factors are also grouped into different categories by different authors. Lu *et al* (2008), group critical success factors for contractor's competitiveness into 8 different clusters which includes, project management, organisational structure, organisational recourses, competitive strategy, relationship, bidding, and marketing and technology factors.

Most authors' such as Jeon (2009), group success factors into 3 groups, technology success factors, managerial success factors, strategic success factors while on the other hand some also include procurement and other external factors. In this study, critical success factors will be group into two categories external and internal CSF's. The external CSF are also viewed or defined as external challenges faced by SMC's.

Katwalo (2006) refers to critical success factors as key variable, result areas, and key success factors.

According to Aaker (2005:140) in Katwalo (2006), a key success factor refers to “any competitive asset or competence that is needed to win in the market place whether it is a strategic competitive advantage, actually representing a sustainable point of advantage or merely a point of parity with the company’s competitors”. Aaker (2005:140) continues by arguing that “the firm that gains position in the short run and become contenders for winning in the long run will address these success factors”. Aaker (2005) also argues that, it is important to differentiate between emerging key success and actual key success factors. Therefore, it is important to reduce vast number of factors to some manageable few but vital ones (Lu *et al*, 2008). The reason for that is that, the environment changes and so are the success factors (Aaker, 2005). The most important critical success factors now may be the least important factor in the future. Therefore, to yield a maximum outcome of overall success, it is important to identify critical success factors and allocate sufficient resources to them (Lu *et al*, 2008). According to Katwalo (2006:140), “it is possible for a firm to establish a strong position during the early stage of its operations, but then lose ground later when the key success factors changes”.

On the other hand, Rockart (1979:55) defines critical success factors as the “limited number of areas in which results, if they are satisfactory, will ensure successful performance for the organisation”. Rockart (1979:55) continues by saying “they are a few key areas where things must go right for the business to flourish”. Boynton and Zmund (1984) suggested that managerial success can be dictated by identifying those critical factors. In this study, critical success factors approach will be used to identify vital but manageable factors that contribute to overall success of the small and medium sized contractors. As mentioned above it is crucial to identify factors that apply to construction industry because economic, political, social and cultural factors will vary with location and industry (Lu *et al*, 2008). The aim of this section is to provide the reader with the literature review of these factors and what effect do they have on the success of small to medium contractors.

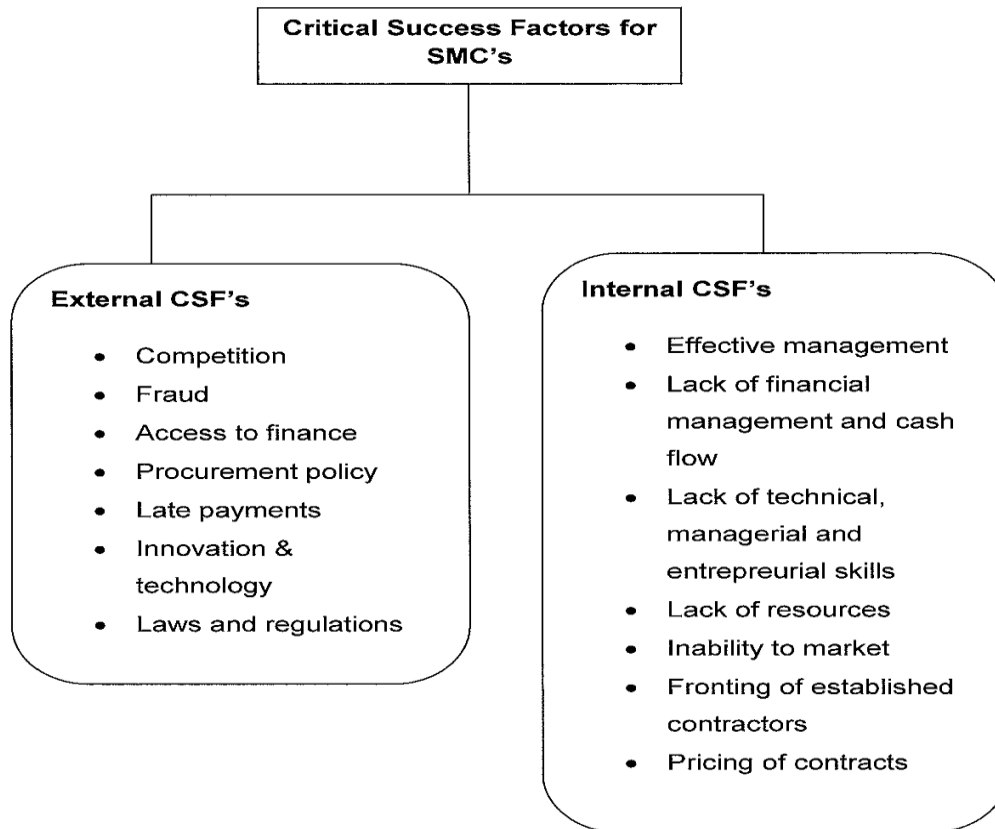


Figure 2.1: Classification of Critical success factors

2.4.1 External critical success factors (Challenges)

External CSF's can be defined as CSF's or challenges that are outside of the control of the company, and not entirely dependent or influenced by the internal operations of the company. However, their success is dependent and influenced by external forces or environment. Some of these CSF's challenges include competition, fraud, access to finance, procurement policies, inability to get contracts, availability of skilled labour, and late payment to contractors (see figure 2.1).

Challenges faced by small and medium contractors are not necessary the same. These challenges can be distinguished between those that affect small-scale contractors and those that affect medium-sized contractors (Phaladi, 2009). One of the biggest challenges faced by small and medium contractors is the increase in competition due to the long-term real decline in demand.

To deal with such decline, many contractors have responded by reducing their labour (Phaladi, 2009). The ability for small local contractors, in particular to build its capacity has been further reduced due to peak workloads that characterised construction projects and furthermore subject to volatilities due to the geographic distribution of construction (Phaladi, 2009). According Phaladi (2009), the market forces described above for the small contractors are the same as that of emerging contractors. In addition to that, the introduction of emerging contractor development policies that were intended for black economic empowerment and small government contracts to create opportunities has resulted in an overcrowding of this market, and increased financial failures of emerging contractors (Phaladi, 2009). In this sub-section a brief description of external CSF's and their influence on the success of SMC's will be outlined.

2.4.1.1 Competition

As highlighted above, the introduction of emerging contractor development policies for black economic empowerment has resulted in a drastic increase in number of SMC's to compete in the market, hence, reducing the number of available projects per contractor (Osama, 1997).

This has caused the environment to be more competitive, making it hard for contractors to secure potentially profitable contracts. Xueyong (2009) argues that out of desperation to get the contract, most contractors manage to get tenders at a lower price, and even lower than the consultant's estimate. Some lower the price even without knowing the scope of works and drawings (Xueyong, 2009). When that happens it is most likely that the contractor will fail and even if the contractor manages to complete the work the quality of work will be compromised. This situation will not only affect the reputation of the contractor but, the interests of all the stakeholders involved in the project are affected (Xueyong, 2009).

2.4.1.2 Fraud

The increase in competition also leads to fraud. Xueyong (2009:25) argues that “some contractors even venture to engage in fraudulent, coercive, corrupt, collusive or prohibited practice in order to secure works during tender process” and these actions are prohibited in every tender and they go against the procurement principle of fair competitive bidding, and are serious criminal offence. According to Osama (1997), fraud doesn’t result in business failure only, but leads to other problems. Some of them are the “increase in material prices when purchasing and selling bidding information to competitors when contracting” (Osama, 1997:12). Quality of works can be compromise as a result of purchasing of cheaper or low standard material.

2.4.1.3 Access to finance

Access to finance is one of the critical challenges that SMME’s often face (Eyiah and Cook, 2002). For the firm to grow and continue its existence it requires injection of capital (Rwelamila *et al*, 2004). Lack of access to financial resources places significant limitation on the development of SMME’s (Abor, 2010). According to Eyiah (2001:357), “it prevents contractors from satisfying the financial requirements necessary to secure projects, and procuring of other resources such as managerial and technical expertise”. The limitation in terms of financial capacity and strength will result in insufficient cash flow for contractors which will then affect the progress (Xueyong, 2009). Xueyong (2009:25) add by saying “due to limited capital, it is hard for them to go for large and more lucrative works to secure a sustainable growth”. Therefore, a sound financial status is a pre-requisite for any contractor to be competent and competitive in the market and also to be able to deliver awarded contracts on time (Xueyong, 2009).

According to Cook and Nixson (2000), the ability for SMME’s to develop and meet a range of operational and an investment needs is always constrained by the limited availability of financial resources. According to Parker *et al* (1995:), the study from the World Bank found that about 90% of SMME’s surveyed stated access to finance was major constraint to new investment. It was also found that the access to financial resources available to SMME’s are limited compared to larger companies (Levy, 1993).

This is because “formal financial institutions have structure their products to serve the needs of large corporate” (Abor, 2010:224). This makes it hard for SMME’s to compete in the corporate market and consequently limits their development.

The effort to promote access to finance to SMME’s has been made by the South African government by developing promotional programmes (Phaladi, 2009). However, this has not been effective due to lack of awareness and very low usage of such programmes (Phaladi, 2009). Moreover, Phaladi (2009:5) reported that, “in addition to insufficient access to finance, high interest rates also pose a constraint to micro enterprise growth”.

According to Herzog (1982), financial difficulties are not the only ones or even the most difficult challenges that SMME faced. “Liquidity crises are not the only problem but a symptom of the real problem in the form of mismanagement, neglected product development, poor marketing effort etc” (Herzog, 1982:15). Herzog (1982) also add by saying other instruments such as primary information, education and counselling services are important to supplement financial service systems.

2.4.1.4 Procurement policies

Procurement policies regarding the award of contracts in government departments have its own challenges. A two stage process is used by local municipalities to evaluate tenders. The first stage looks at the functionality of the tenderer while; the second stage looks at the price and BBBEE status of the contractors. In the second stage, depending on the point system used, could be either a 90/10 or 80/20 where 90 or 80 points is issued to the lowest price respectively; the contractor with the lowest price gets high preference. This type of procurement system together with the high level of competition in the construction industry has created problems for contractors in the tendering process, because to get the project most contractors tend to lower their prices, even lower than the reasonable estimate submitted by consultants or different business units. If that happens the quality of work is compromised, the cash flow is affect, and the profit made for sustainable development is reduced significantly and eventually the contractors becomes insolvent and cease to exist.

2.4.1.5 Availability of skilled labour

According to Mahadea (2008), for the firm to exist it must have a productive human input and a product that speaks to customers' needs. According to Xueyong (2009:25), "construction industry is not only labour intensive". For it to do well, "it requires qualified skilled labour, foreman, engineer, accounting and financial staff and administrative and managerial personnel" (Xueyong, 2009:25). However, South Africa is characterised by lack of qualified human resources as a result shortage of managerial and technical staff has been a challenge for SMC's. The retention of skilled labour has also proven to be a problem because skilled labour moves from job to job with an aim of getting incentives that could range from high salary to better benefits (Mahadea, 2008). This has made the process of recruiting skilled labour more difficult, time consuming and expensive (Mahadea, 2008). However, most construction companies are established without having sufficient technical skills (Xueyong, 2009). It is clear from the nature of construction industry that for it to function properly it requires competent people. Where, Xueyong, (2009:26) refers to competence as "knowledge, skills and abilities, personality attribute and resilience required in order for an individual to be successful at a particular job".

2.4.1.6 Late payment

One of the biggest challenges faced by contractors is the late payment from the clients. Difficult conditions faced by construction companies together with late interim and final payments, can also impose huge constraints on the success of SMC's. Because of the delays in payments, which are common with government contracts, many SMC's have suffered financial ruin and bankruptcy. The unlucky contractor, failing to repay loans in a timely fashion had his business put into liquidation

2.4.1.7 Innovation and technology

According to Mahadea (2008), regardless of its size, all firms need to innovate and adopt new ideas and practice to satisfy today's competitive and changing business needs of the market in a global environment.

According to Lu *et al* (2008:980), technology CSF involves “technological innovation ability, and sustainable development and research and development”. Exploitation of technology, research and development, and innovation can be a source of competitive advantage because they assist the firm to strategically differentiate itself in the construction industry (Lu *et al*, 2008).

The importance of innovation and technology as a form of organisation competitive advantage has been well documented in the previous studies (Slaugther, 1998; Hampson 1997). However, the uncertainty on the outcome associated with contractor’s investing on innovation and technology, and research and development as a result of barriers and risk associated with it, has often made managers refrain from investing in new technology (Lu *et al*, 2008). Even though contractors acknowledge the importance of technology as the tool of enhancing their competitive advantage, some view information technologies as extremely expensive and as a result they still prefer the conventional way of doing business (Mahadea, 2008; Lu *et al*, 2008). According to Mahadea (2008), this is common amongst old businesses. When that happens, the firm is likely to miss out on opportunities and ultimately limit its growth in today’s changing environment (Mahadea, 2008).

2.4.1.8 Laws and regulations

One of the serious challenges to development of SMME’s in African countries is that they have to endure too many laws and regulations (Mahadea, 2008). Mahadea (2008) argued that regulators reform is needed in developing countries to increase the annual GDP. However, according to Abor (2010), the improvement that has been made as a result of structural reform is not sufficient, the prospect for enterprise development remains to be addressed at the firms level. “International evidence suggests that the regulatory environment can be a major hurdle to the survival and growth of small and new businesses” (Mahadea, 2008:436).

Some of the laws and regulations that have an effect in the success of SMME's include difficulties in securing property rights, ineffective court and hi cost settling legal claims, weak institutions and infrastructure, high start-up cost which include licensing and registration requirements (Mahadea, 2008; Abor, 2010). All these laws and regulations can adversely affect SMME operations and can impose excessive and unnecessary burden on them (Abor, 2010).

2.4.2 Internal critical success factors

Internal CSF's can be described as factors that influence internal success or operation of the organisation. These are the factors in which the company has control over them and they need to be identified and dealt with properly for the organisation to succeed. The effect of these CSF's is not the same for each and every company. Therefore, it is important for management of the company to identify the contributing factor or factors that are lacking or factors that requires attention for the company to be successful. Some of these factors include effective management, lack of financial management and cash flow, lack of resources, lack of skills, inability to market, pricing of contracts and, fronting of established companies.

2.4.2.1 Effective management

A major cause of business failure for small and medium sized contractors is due to lack of effective management during their early stages (Friedrich, 2010). As a measure of reducing operational costs owners tend to manage their businesses themselves by operating them from home and are mostly not considered in official statistics (Abor, 2010). This then results in poor record keeping which is also a cause for start-up business failure. In most cases, this is not only due to the low priority attached by new and fresh entrepreneurs, but also a lack of the basic business management skills. Most business people, therefore, end up losing track of their daily transactions and cannot account for their expenses and their profits at the end of the month (Phaladi, 2009). One of the biggest challenges for some owners is to separate their business and family/domestic situations at the early stage of their business start-ups.

To settle domestic issues business funds are put to personal use and this has a negative impact on profitability and sustainability (Phaladi, 2009). Some owners/managers employ family members simply because of kinship relations. In some cases, these have turned out to be undisciplined and ineffectual, a factor that has led to eventual and sometimes rapid failure of businesses.

Management plays an important role in the success of any organisation. According to Rwelamila *et al* (2004), good management means understanding of all factors result in business success which includes good strategy, marketing, pricing and financial control. They add by saying, financial mismanagement such as bookkeeping and poor record keeping and management incompetence has been identify among factors that lead to the construction company's failure (Rwelamila *et al*, 2004). A high degree of qualified working team members with good managerial experience should be employed if the organisation wants to be competitive. Owners should also have some managerial experience so that they know how to deal with their employees and how to motivate them. This involves education, training and improvement of management skills and experience of managers, as well as quality of labour. "An entrepreneur or manager who is well educated, trained experienced and skilled in various functional areas of management and marketing can perform better than another who is less talented" (Mahadea, 2008:434).

According to Mahadea, (2008), for a business to function in today's competitive and changing business environment, it is not enough just to have technical understanding of how to start and run a business. "The skills needed for initiating a business are different from those needed in managing it to a successful market growth stage" (Mahadea, 2008:434). They argue that entrepreneurial skills are also needed to run the organisation (Mahadea, 2008). Where, entrepreneurial is characterised by the ability to take risk, have self-confidence or tenacity to push for innovative ideas (Mahadea, 2008). However, they argue that lack of entrepreneurial skill is a serious issue in South Africa and that many SMME entrepreneurs are afraid to take risk beyond the security of comfort zone.

Taking of decisive action is also difficult for them and they are worried of losing control over their business (Mahadea, 2008). Self-confidence and persistence to push for innovative ideas is also lacking for many entrepreneurs. According to Mahadea (2008) avoidance of financial risk is also common in South African entrepreneurs and this can result in missing out on opportunities, even when the changing external environment is conducive to business growth.

2.4.2.2 Lack of financial management and cash flow

Small and medium contractors are normally restrained in terms of financial capacity and strength. Xueyong (2009) argues that the smoothness of progress while undertaking construction work can be greatly obstructed by insufficient cash flow. This is because most of the contractor expenses are paid in cash usually at the beginning of any contract (Osama, 1997). Contractors are required to pay for many things such as to provide salaries, machinery, labour, material, and indirect costs before the first payment is made by the client. Therefore, the challenge faced by SMC's is the mobilization of such cost (Osama, 1997). In the construction industry contractors are forced to use their own money at the beginning or borrow capital to address the shortfall in capital due to effected arrears in the payment of the work done (Rwelamila *et al*, 2004). It is crucial for the contractor to make sure that sufficient cash flow is available to run the business especially at the beginning of the contract. Difficulties with cash flow will probably result in a contractor going out of business in a short time. In this sense, Osama (1997:12) argues that "effective financial management and sufficient and strong financial capacity is a key to achieve smooth delivery and execution of contract".

One of the reasons why financial and cash flow management is critical for construction companies is because, most construction contracts are subject to escalations due to escalating materials prices, coupled with high interest rates (Rwelamila *et al*, 2004). This has forced management of construction companies to focus on the control and flow of money (Rwelamila *et al*, 2004). Rwelamila *et al* (2004) argues that, great expertise are required to be applied when dealing with escalating contracts and other terms of payment in the contractual conditions.

According to them the possible loss of profit can be prevented by the promptness in the submission and payment of bills required to ensure that the cash flow situation is controlled and improved.

According to Rwelamila et al (2004) the issue of cash and profit loss or gain is also affected by the amount that is retained by the client after completion of work. The retention amount is held back as security against poor quality of work performed by the contractor. If in any case this money is not released this will have a negative impact on cash flow and profit made.

In essence, while bidding for works, SMC's shall be fully aware of its financial capacity and they should work out a realistic cash flow during tender process by assessing its financial status. This should "including but not be limited to cash in hand, access to credit from concerned banks, etc. to make sure the work once awarded to them shall be delivered in compliance with the requirements of the contract" (Xueyong, 2009:25). Failure to perform these duties will result in a financial loss and integrity damage.

2.4.2.3 Lack of skill

It is clear that in most small and medium contractors, skilled and qualified personnel at both technical and managerial levels are not sufficient enough. According to Xueyong (2009) construction industry is not only labour intensive. Qualified skilled labour, foreman, engineers, accounting and financial staff and administrative and managerial personnel are required to insure the success of the company. This is because tendering process and contract management is very professional and technical and requires high level of expertise (Xueyong, 2009). As a result, SMC's are faced with the challenge of shortage of technical and managerial staff.

Some construction companies are not willing to keep qualified staff on a permanent basis due to cost implications. They rely on hiring such personnel only when they have been awarded that contract or when there is a problem on site and of which sometime they are not available due to commitments to their permanent jobs (Xueyong, 2009). This has a major effect on the performance of the contract and the growth of the company.

Recruitment of the right employee is very important and it forms part of human resources skills that are also required to ensure success of the company. Hiring of incompetent personnel can result in an increase in staff turnover and consequently loss of productivity. The skills needed to manage and run a business are not enough in today's changing environment.

Entrepreneurial and marketing skills are also required in order to take decisive action, be innovative and take risk when needed, and also to ensure growth of the company. Marketing skills will help the company to improve its market share but, it will help to understand and to keep up with changes that are happening in the industry and environment as a whole. Some of these changes involves economic changes such inflation and the interest rate.

The more experience a contractor has, the more established the firm is and the more jobs the firm gets. Through experience, the contractor knows when to and when not to bid. Experience teaches the firm how to forecast prices and how to make accurate estimates. If two contractors are bidding for the same job and they are similar in everything but experience, the one with the most experience will probably be awarded the contract.

2.4.2.4 Lack of resources

Most small to medium contractors don't have required resources to carry out types of works that are required in the construction industry. Such resources include skilled labour, plant and equipment and financial resources. So even if the contractors get awarded the contract the challenge will be to start the works because of lack of such resources. As explained above it is clear that the availability of skilled human resources including technical and managerial skill forms an important part for the success the organisations in any industry. However, the availability of technical skilled labour is more important in the construction industry compared to other industries. Therefore, training of human recourse is crucial to improve skills and competence of such resources.

However, in the construction industry, having skilled and competent human resources is not enough; the availability of plant and equipment is very important taking into consideration the nature of works involved in this industry. One of the challenges as outlined above faced by SMC's is availability of such recourse. Most SMC's rely on hiring of plant and equipment. Some of the time these resources are not available which result in a delay of the project and consequence lost funds due to penalties imposed by the client. SMC's spend large amounts of project funds outsourcing these equipment. Some of them end up outsourcing part or the whole of the project to a well-established company in order to complete the project and they end up losing profit to be generated on the project.

Availability of financial resources is also important in the construction industry. As highlighted above most construction works required cash up front in order to start the project. This cash is used to cover purchase of materials, hiring of plant and equipment if necessary etc. So availability of cash before the start of the project is important.

2.4.2.5 Pricing of contracts

Pricing of contracts is one of the most important problems facing construction industry specially SMC's and one of the most important aspect of marketing in construction. According to Tebin (2009), this is evident through wide variation in prices offered by contractors on tenders. The variation in price is due to intensive competition in construction industry (Lu et al, 2008), insufficient information provide especially in the bill of quantity (Tebin, 2009), and lack of experience (Laryea, 2011). Also this is because in construction contracting involves competitive bidding process and bidding process is mostly affected by pricing.

According to Mochtar (2001), price competition is the number one problem encountered by most marketing executives and construction is no exception. They continue by saying mistakes made when pricing are also common in the construction industry (Mochtar, 2001).

Some of those mistake are that pricing is too oriented, the price is not revised to capitalize on market conditions or to fend off competition pressure once an offer has been made, the price is not set as an intrinsic element of a market position strategy, and the price is not adjusted enough for different clients, project types amount of work at hand, equipment ownership etc (Mochar, 2001).

Contacts pricing in construction uses the cost based pricing strategy where, pricing involves estimating the project cost first, then applying a mark-up for profit; see figure 2.2 Cost based model (Mochtar, 2001). However, according to Best (1997) cost based pricing has its own problems or consequences. One of the consequences is overpricing which may reduce contractor competitive advantage in a bidding process. The opposite of overpricing is under-pricing which may result in a greater loss of profitability. Rwelamila *et al* (2004:33) define under-pricing “as a practice where profit is minimised in anticipation of increased profit from subsequent business”. According to him the cash liquidity of the company is adversely affected by such practice (Rwelamila *et al*, 2004). Under pricing is normally used as the marketing tool to acquire work for contracting and is a result of competitive tendering (Rwelamila *et al*, 2004). When under-pricing occurs the inaccuracy in costing is experienced and the estimating of the project is subjected to uncertainty (Rwelamila *et at*, 2004). As a result, the ability to execute pricing as a marketing tool without compromising the financial status of the company is crucial and requires skills proportionate with the experience of management in the company (Rwelamila *et al*, 2004).

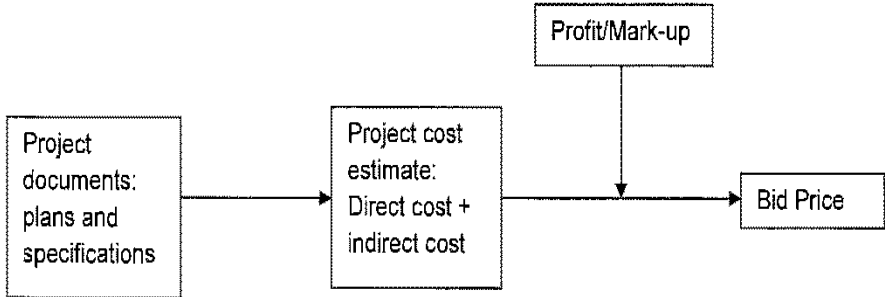


Figure 2.2: Cost based pricing model or strategy (Mochtar and Arditi, 2001)

However, according to Mochtar (2001), the skills and experience of management is enough to compete in bidding process. The pricing strategy needs to be revised in order to be competitive and at the same time achieving a desired level of profit. Mochtar (2001), argues that market based pricing strategy needs to be used where, pricing start with the analysis of the market such as customer, suppliers, competitors, and product positioning in order for business to know what cost reduction will be needed and desirable. Figure 2.3, represent market based pricing strategy or model to be used. Mochtar (2001) argue that if the cost target cannot be met at the market based price then an alternative positioning strategy should be developed.

However, according to Mochtar (2001) there are situations or conditions where cost based pricing is appropriate and can be used. This includes situations where the cost of suppliers is the same for competitors and in a situation where low price is a pre-qualification in competitive bidding market (Mochtar, 2001).

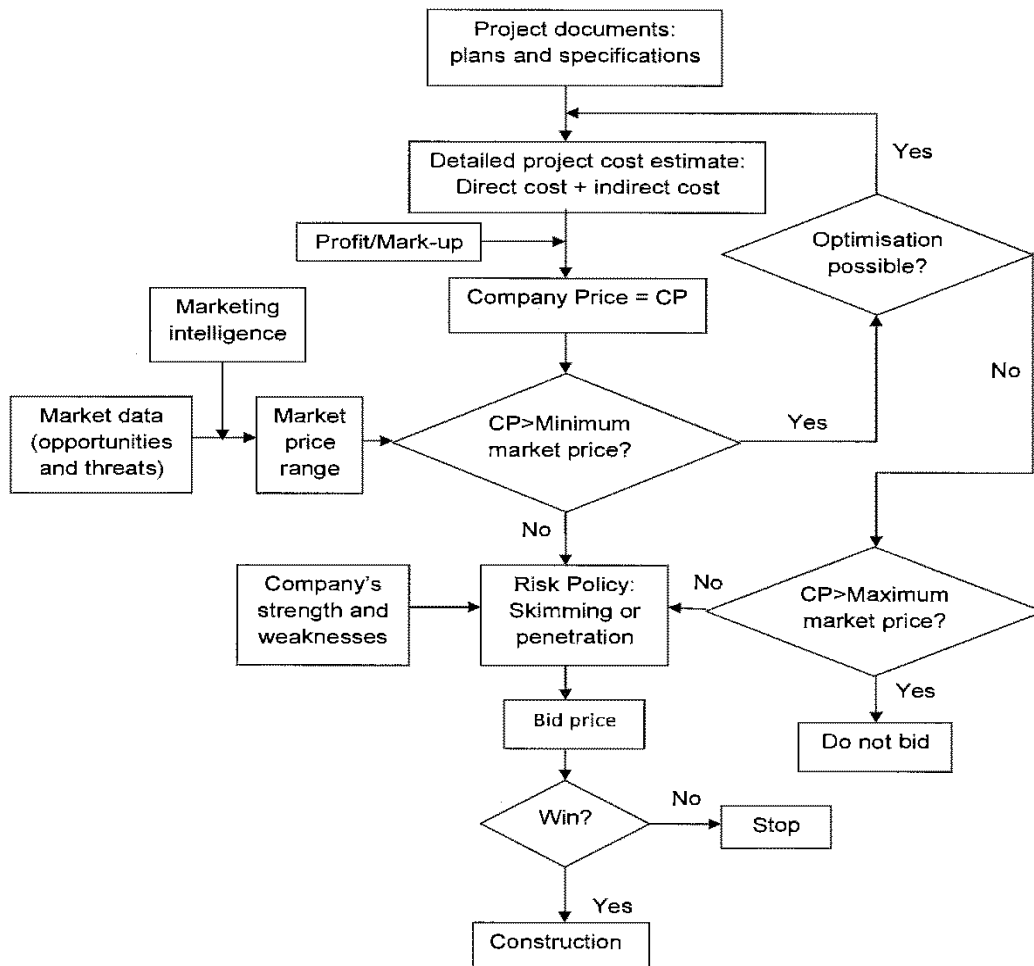


Figure 2.3: Market based pricing model strategy (Mochtar and Arditi, 2001)

2.4.2.6 Inability to market

The construction industry is viewed as one of the most extreme competitiveness markets in the world and South Africa is no exception. Compared to other areas of the economy it has high risk and generally low profit margins (Mochtar, 2001). Therefore, contractors who want to achieve market differentiation and gain competitive advantage need to improve its marketing strategy (Arditi, et al, 2008). This is because “marketing is considered to be an investment for competitive edge and an empowerment for competitive advantage” (Arditi, et al, 2008:255).

As suggested by Lu et al (2008) when trying to achieve a competitive advantage for the construction company, marketing also provides a key role in the strategic management. However, according to Arditi et al (2008), it is difficult to apply traditional marketing strategy in construction industry due to peculiarities of the industry. This is because “marketing in construction has different implications from that of other industries as construction clients are not uniform organizations” (Lu et al, 2008:980).

Marketing in the construction industry involves competitive bidding and pricing which are the most important aspects of marketing in construction (Mochtar, 2001). As explained above pricing strategy only takes place during the competitive bidding process. However, other factors such as availability of market information are regarded as vital for enhancing a contractor’s competitiveness (Langford, 2001). As a result, it is important that the contractor also develops other marketing strategies to support the pricing strategy used by them. According to Mochtar (2001:), this can be achieved through development of computerised intelligence activities such as using resources on the internet and developing management information systems and decision support systems. The use of such marketing intelligences can help the contractor to access and analyse information about the availability of clients, about competitors and market conditions. Therefore, marketing intelligence capabilities were found by Mochtar (2001) to be a significant variable associated with pricing strategy and contractors that have extensive marketing intelligence capacities, tend to prefer a market based pricing strategy.

2.4.2.7 Fronting by established contractors or joint ventures

International trends have shown that joint ventures are the order of the day to maximise effectiveness of each other’s resources. However, the concept is not well appreciated in the country. Most small and medium contractors are operating on limited resources. Challenged financial strength, managerial, and technical skills, they are encouraged to form mind-set to seek creative cooperation, collaboration and partnership with well-developed contractors.

The benefit of successful partnership is significant for all parties involved. Therefore it should be on a win-win basis and established on mutual trust, integrity, and responsibility.

2.5 Summary

In summary, the challenges faced by the emerging contractors include: the coordination and management of the many parts of the different programme; maintaining focus on sustainability against pressures to rollout too rapidly; reaching target market with information about the opportunity; sourcing mentors with the requisite skills and experience; the large numbers of contractors targeted requires large numbers of trainers and mentors which are not readily available, and are costly; the available resources to effectively and efficiently monitor, evaluate and facilitate programmes are limited; An integrated development approach requires considerable support from senior management of public sector clients and considerable inputs from officials. Programmes lack sustainability; while public sector clients have done a lot for contractor development, particularly in the area of policy, there are still many issues that must be addressed at an operational level, such as late payment cycles. Procurement policies should encourage longer contract periods and move away from frequent tendering which is both expensive and disruptive; more qualifications need to be developed that are targeted at the specific needs of small and emerging contractors. There is a lack of access to affordable finance; emerging contractors lack demonstrable credit and track records.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

Research can be described as the entire process by which an attempt is made to solve problems and to provide the necessary information that guides managers to make informed decisions to successfully deal with the problems (Sekaran, 2010).

Business research “can be described as a systematic and organized effort to investigate a specific problem encountered in the work setting that needs a solution” (Sekaran, 2010:2). According to Bryman (2007), business research does not exist in isolation. It is influenced by management and business as well as the need for the research that arises from a pressing organisation problem or opportunity.

In this chapter the nature and the aim of the study, research methodology employed together with participants, location of the study, sampling and the method of collecting data will be described. The chapter will also outline how validity and reliability of the research instrument were achieved throughout the research process.

3.2. Aim of the study

The status of small and medium sized contractors continues to remain unsustainable and their performance unsatisfactory even with the introduction of some contractor’s development programmes such as such as Black Economic Empowerment (BEE) programme. According to Fredrich (2010), this is due to several critical success factors. Therefore, the aim of this study is to investigate critical success factors influencing the success of small to medium sized contractors.

3.2.1 Objectives

- To examine the factors that influence the success of small and medium sized contractors.
- To determine critical success factors facing small and medium sized contractors and.
- Suggest creative solutions for policy makers to mitigate these challenges.

3.3 Participants and location of the study

Since the empirical study will be conducted using the self-administered questionnaire developed for small and medium sized contractors to assess the status of their enterprises and also to examine and determine the critical success factors that influence the success of their businesses, the most appropriate participants to obtain such information are owners, directors or managers of these companies.

Due to limited time and availability of human resources the study was only conducted in Pietermaritzburg and the sample of 110 randomly selected from the population of 158 of small and medium sized contractors was used from the data-base of the Msunduzi Municipality.

3.3.1 Sampling

Sekaran (2010:262) defines sampling as, “the process of selecting the right individuals, objects, or events as representative for the entire population”. According to them, the reasons for sampling, rather than using the entire population are obvious. First, this is because sometimes the research population have many elements to be investigated which make it practically impossible to collect data, or test, or examine the entire population. Second, even if it is possible to use the entire population, the research will be limited in terms of time, cost, and other human resources (Sekaran, 2010). Last, the study of a sample is sometimes most likely to produce more reliable results.

There are two types of samples, namely probability and non-probability samples. Probability sampling is when every element in a population has a known chance of being selected in the sample, while in non-probability sampling elements in the population don't have any probability attached to their being selected (Sekaran, 2010).

In non-probability sampling there is no control placed on the sample selection process and as a result findings from the study of the sample cannot be confidently generalised to the population (Sparrow, 2010). In probability sampling, control is placed and the results can be generalised to the whole of the research population with a degree of confidence which is more applicable to this study (Sparrow, 2010).

There are two types of probability sampling namely unrestricted or simple random sampling and restricted or complex probability sampling. In simple random sampling each element in the population has a known and equal chance of being included in the sample while in complex probability sampling procedures offer a viable, and sometimes more efficient, alternative to the unrestricted design (Sekaran, 2010). In complex probability sampling efficiency is improved in that more information can be obtained for a given sample size using some of the complex probability sampling procedures than the simple random design. However, due to limited research expertise of the researcher and limited resources simple random sampling was used in this study. In this study a sample of 110 was randomly selected from the population of 158 participants of the data-base of the Msunduzi Municipality. Simple random sampling was used to ensure that each contractor had a known and equal chance of being selected in the sample.

3.4 Research approach

3.4.1 Qualitative and quantitative methods

Dawson (2011) argues that when deciding on the research methodology to be used, the starting point is to differentiate between qualitative and quantitative research. The main difference between the two methods is that qualitative research is subjective while quantitative is objective.

Quantitative research involves measurements and according to Walliman (2011), measurement must be quantitative, objective and statically valid. For it to be statically valid, quantitative research is predetermined and it must involve a large number of participants (Dawson, 2011). Quantitative research involves calculating sample size that best represent the population and that can help achieve results with an acceptable degree of accuracy (Anderson, 2006). Qualitative research method of collecting information is different. Information is collected, analysed, and interpreted by observing attitude, behaviour and experience from participants using individuals, in-depth interviews and focus groups (Dawson, 2011). Since the research method seeks to get in-depth opinion from the participants, fewer people take part in the research, but the contact with these people tends to last a lot longer (Dawson, 2011).

In summary, according to Anderson (2006:45), “quantitative research refers to counts and measures of things” while, “qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of things”. Quantitative research generalise data and is most suitable for establishing cause and effect, while qualitative looks for in depth understanding of the context (Anderson, 2006).

A decision of which method to choose is a theoretical question (Anderson, 2006) and according to Dawson (2011), there is no method which is better than the other, they are just different and both have their strength and weakness. Dawson (2011), argues that the choice depends on the skills, training and experiences of the researcher while, Anderson (2006:45), argues that it depends on the “nature of the project, the type of information needed, the context of the study and the availability of resources”.

3.4.2. Quantitative method

According to Dawson (2011), quantitative research generates statistics through the use of large survey research, using method such as questionnaires or structured interviews. The method employed in this study was the quantitative method using questionnaires.

This method was chosen because the population size is large and the quantitative method is ideal for a large number of participants because this gives analysis more statically power. Quantitative research was also chosen because of its statically analysis strength to allow for generalisation to the entire population.

3.5 Data collection

According to the aim of this study the most appropriate method of collecting data from the market is the survey method. According to Sparrow (2010), survey research involves attaining information about individuals or groups of people, such as opinions or attitude, by asking questions and tabulating answers and is used to refer to descriptive, quantitative research. Therefore, in this research an empirical study was conducted using self-administered questionnaires developed for small and medium sized contractors.

3.6 Development of the Instrument

The empirical study was conducted using the self-administered questionnaire developed for small and medium sized contractors to assess the status of their enterprises and also to examine and determine the critical success factors that influence the success of their businesses. The study focused on owner/directors/managers of these companies. Table 10.3 developed by Sekaran, (2010) of sample size for a given population size was used to select size of sample for these study. The sample of 110 selected small and medium sized contractors from the data-base of Msunduzi Municipality with the population 158 was used. The permission to use the data-base of Msunduzi Municipality was obtained from their Supply Chain Management department. Ranking scales was used for major questions where participants were asked to rank the critical success factors. Participant's socio-demographic questions were asked to determine age, gender and race distribution, participant's position at work, and participant's level of education. Questions profiling companies were asked such as number of employees, annual turnovers, number in operation, and number of projects completed. Due to limited time, the study was only conducted in Pietermaritzburg.

3.7 Validity and reliability

Sekaran, (2010:157) argues that, “it is important to make sure that the instrument that we develop to measure a particular concept is indeed accurately measuring the variable, and that, in fact we are actually measuring the concept that we set out to measure”. This ensures that the important dimensions and elements are not overlooked and that irrelevant ones are not included (Sekaran, 2010). Therefore, it is important to use correct instruments to ensure more accurate results and enhance the scientific quality of the research. Basically, reliability and viability test how consistently and how well an instrument that is developed measures the concept it is intended to measure respectively.

The effort was made when developing the questionnaires to ensure that the intended concept is covered and measured correctly and that irrelevant ones are not included. To ensure reliability and viability the selection of the sample from the population was in such a way that it is a correct representation of the population. The questionnaires were intended for owners/ directors/ managers of the small to medium sized contractors to ensure that the correct information is collected about SCM and the correct concepts are measured.

3.8 Limitations of the study

Limitations are influences that the researcher cannot control. They are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on your methodology and conclusions.

3.8.1 Contacting respondents

Contacting responded was a problem since the data-base from Msunduzi Municipality was used to conduct research and contact details were to be extracted from that data-base. The problem was that some of the contact details of the respondent from the selected sample were no longer in operation. This could be both that the respondents have changed their contact details or changed offices and the information was not updated on the Msunduzi Municipality data-base.

3.8.2 Administering of questionnaires

The questionnaires were first sent via e-mails for respondents that had e-mail address on the data-base. However, the response was very poor. The respondents were then contacted telephonically to make appointments and that was not successful either since most of them were not available. The questionnaires were then circulated during tender briefing meetings. This proves to be the most effective way of getting response from the participants however, it required more time since tender briefing meeting were limited.

3.8.3 Limited time and resources

Due to challenges contacting respondents the researcher needed more time and human resources in order to administer the questionnaires.

3.8.4 Non-response measures

As the corrective measures to deal with challenges or limitation to the study as highlighted above and to ensure successful administering of questionnaires, the questionnaires were distributed during tender briefing meetings and respondents were given 15 minutes before or after tender briefing to complete questionnaires. This corrective measure proved to be effective, however, it required more time since we had to wait for tender briefing meetings to take place and there were not taking place frequently.

3.9 Analysis of Data

After data have been collected from a representative sample of the population, the next step is to bring meaning to the data collected in order to answer the research question, satisfy the research objective and test the research hypotheses (Sekaran, 2010). This requires the use of the some analytical software package depending on the specific needs such as research problem, and or conceptual model. In this study Statistical Package for the Social Science (SPSS) was used to complete data analysis.

In this study both exploratory and descriptive analysis will be used with the aim to summarise main patterns and notice further patterns that may be relevant.

Exploratory analysis is used when not much is known about the situation (Sekaran, 2010). However, it can also be used when some facts are known, but more information is needed for developing a viable theoretical framework. For instance, in this case when we want to get important factors that influence the success of small and medium sized contractors. This may be because the factors that were identified in the previous studies to be critical in success of SMC's are no longer important and new ones have to be identified. On the other hand, descriptive analysis is used to ascertain and be able to describe the characteristics of the variables of interest in a situation (Sparrow, 2010). Descriptive analysis was used to describe characteristics of our participants in terms of percentage of participants for the positions they hold in their respective companies, experience, sex composition, education level, age, number of projects completed etc.

To bring meaning and understanding to the data collected for the study a visual presentation was done in a form of bar graphs, pie charts and tables. Based on this data presentation, clear conclusions can be made on the skills that are lacking and on the critical success factors influencing the success of small and medium sized contractors as well as recommendations on what needs to be done to deal with these factors. Interventions required from government or policy makers to address such challenges will also be highlighted.

3.10 Summary

In this chapter the research methodology employed to conduct the study was discussed. The aim of the study together with the objectives were discussed. Sample of 110 from the population of 1096 was selected. This research used quantitative methods where questionnaires were used as the research instrument. A low response rate of 51 out 110 questionnaires that were speculated from the population of 158 was achieved. This constituted a 46% response rate. Limitations to the study were highlighted followed by response measures to such limitations. During development and administration of the research instrument, reliability and viability of the instrument was addressed to ensure relevant data collection. Data collected as per this using self-administered questionnaire was analysed and presented in meaningful way in the next chapter.

CHAPTER 4

PRESENTATION OF RESULTS

4.1 Introduction

This chapter provides a presentation of the results found through the collection of data. The results are presented in the form of graphs and tables and have been broken down into sections such as the socio-demographics of the respondents, company profile, critical skills, and internal and external critical success factors.

There were 51 self-administered questionnaires that were completed. Participants socio-demographic information's are summarized between figure 4.1 and 4.5. Company profile information is summarized between figure 4.6 and 4.9, critical skills are summarized in figure 4.10 and table 4.1, while internal and external critical success factors are summarized in table 4.2 and 4.3.

4.2 Participant Socio-Demographics analysis

4.2.1 Age distribution

More than half of the participants were between the ages of 30 years and 44 years (58%), 30% were 45 years of age or more and 12% were less than 30 years of age with a mean age of 40.46 years with a standard deviation of 9.3 years (Figure 4.1).

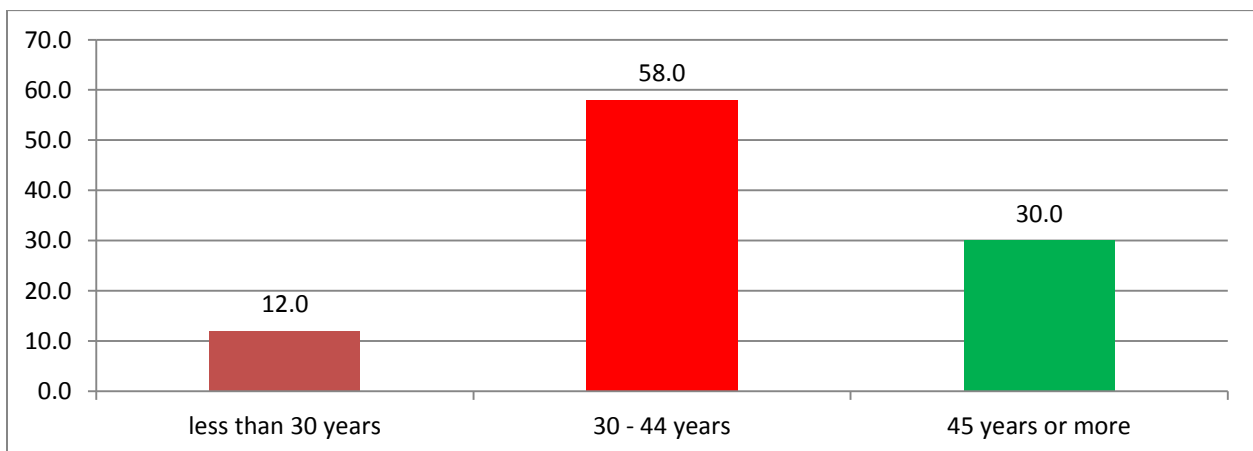


Figure 4.1: Age distribution of participants

4.2.2 Gender distribution

Results had shown that the majority of the participants were male (84%) while (16%) were female (Figure 4.2),

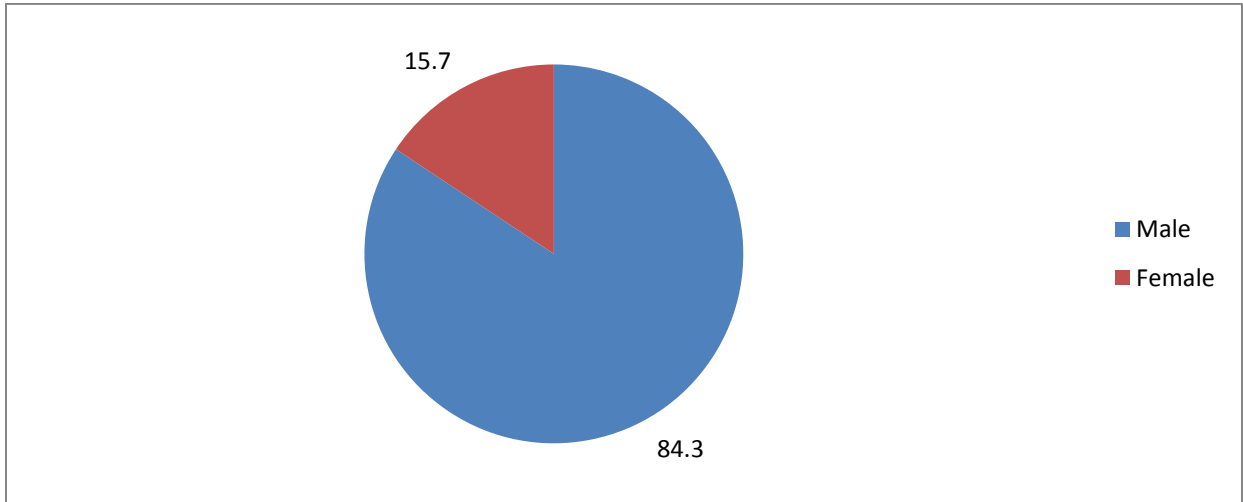


Figure 4.2: Gender distribution of participants

4.2.3 Race distribution

In terms of race distribution the result has shown that the majority of the participants (43.1%) were African followed by Indians with (29.4%) then Whites with (23.5%) and last Coloured with (3.9%) (figure 4.3).

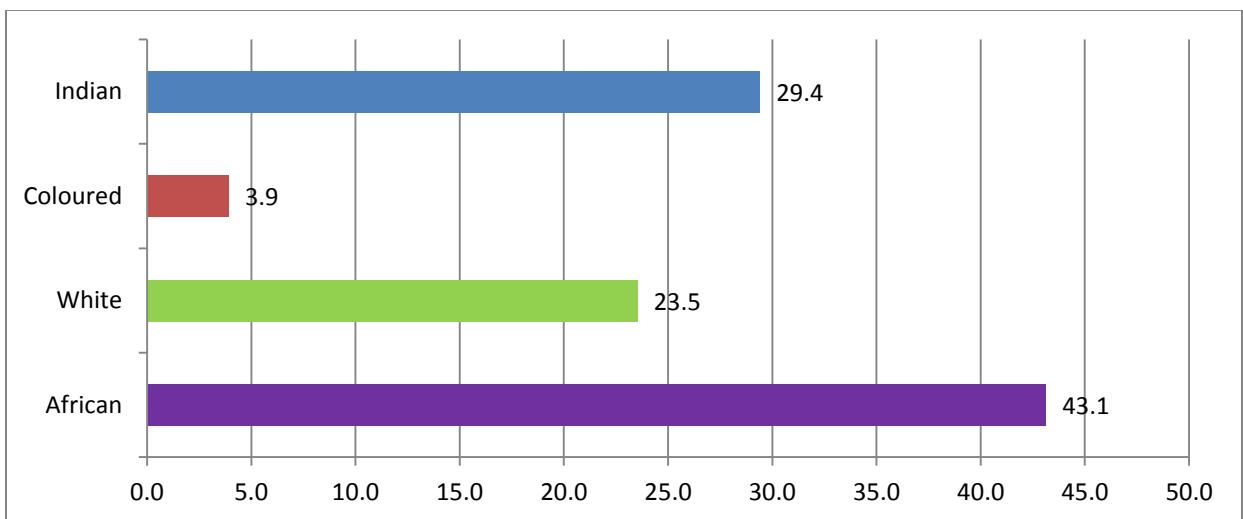


Figure 4.3: Frequency distribution of race of the participant

4.2.4 Participant position at work

With regard to participants' position at work, it was reported that more than a third (35%) were directors followed by project managers (23%) (Figure 4.4).

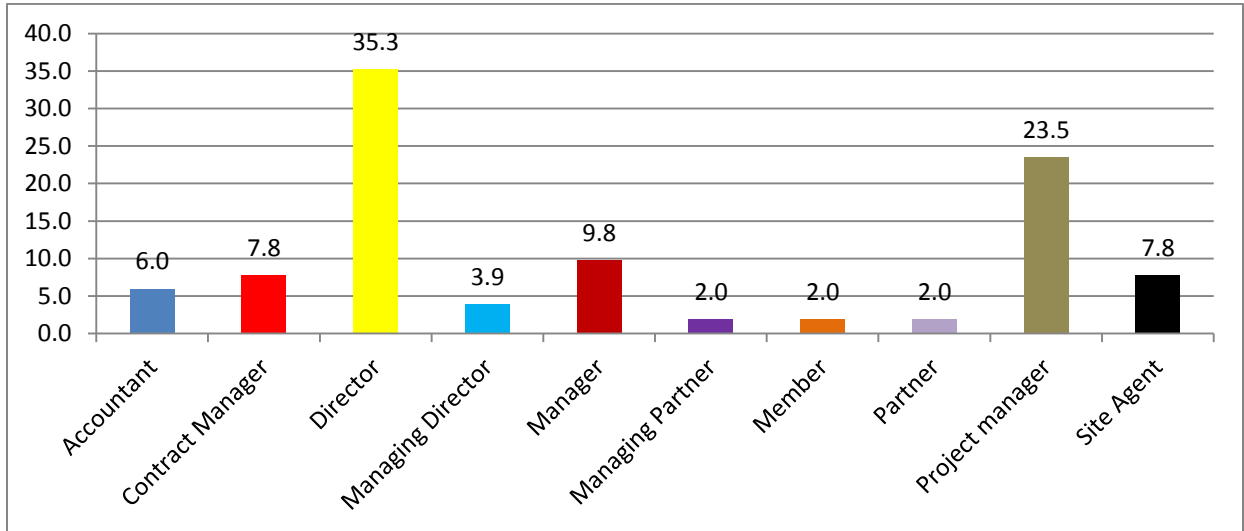


Figure 4.4: Participants position at work

4.2.5 Participant level of education

Results had shown that just over a quarter (29%) of the participants had a certificate or diploma while the majority (41%) had matric as their highest qualifications (figure 4.5).

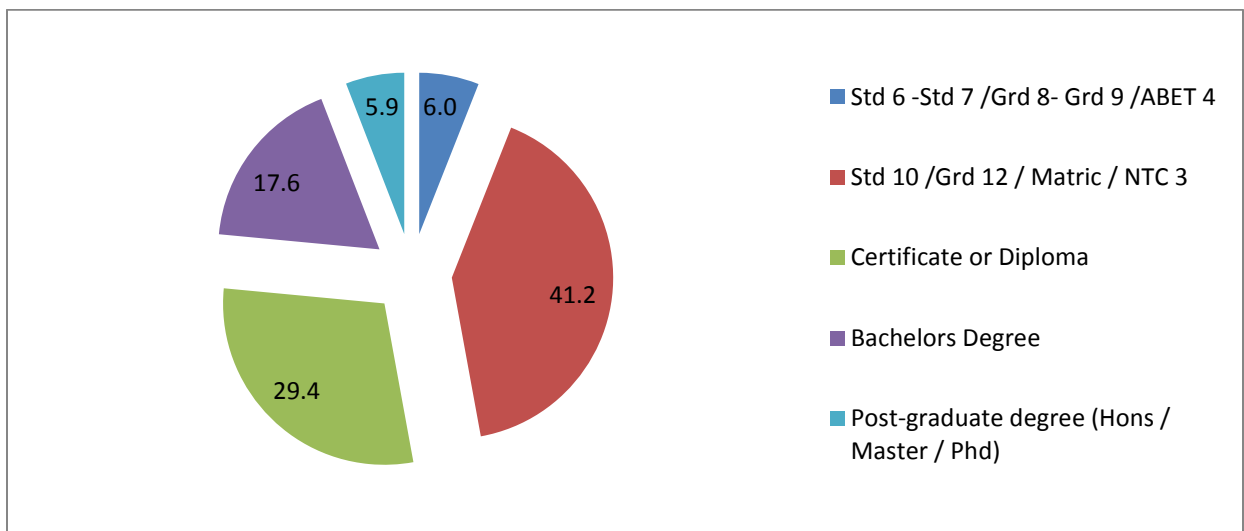


Figure 4.5: Participants level of education

4.3 Company profile

4.3.1 Number of employees

Results show that (41%) of the companies had between 10 and 19 employees and (31.4%) of the companies had less than 10 employees followed by (17 %) with employees between 20 and 29, with a mean of 17 employees and standard deviation of 13 employees (Figure 4.6).

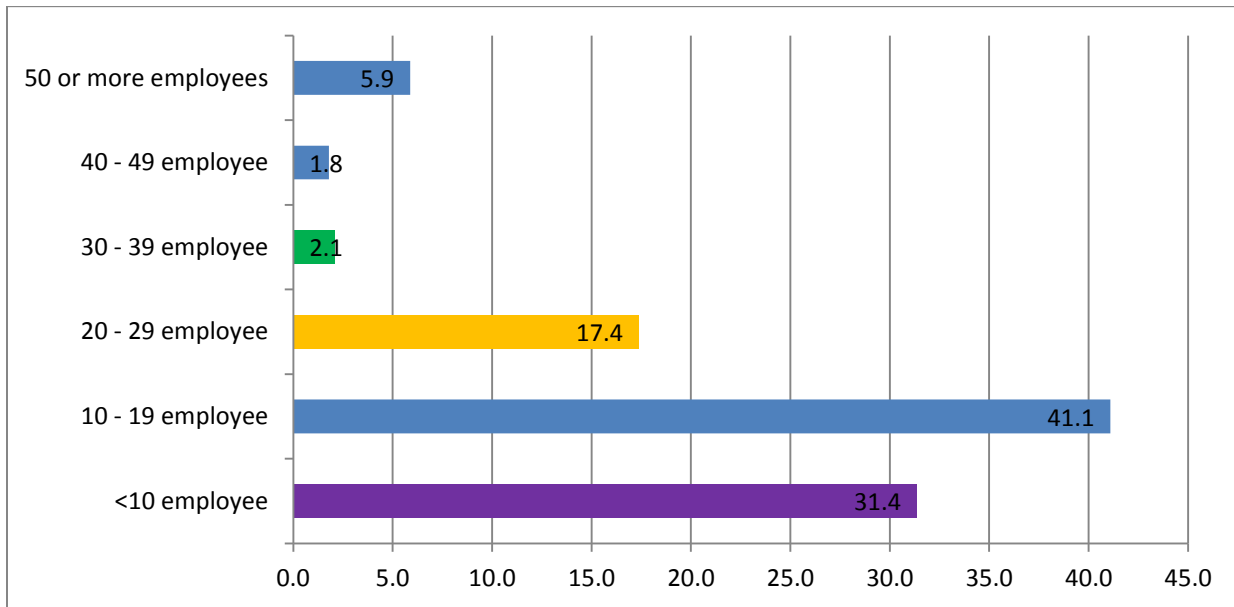


Figure 4.6: Distribution of number of employees in the company

4.3.2 Annual turnover of the companies

With regard to annual turnover of the companies, it was found that less than half of the companies had between R1 million and R5 million as annual turnover (Figure 4.7). Descriptive analysis showed that the average turnover of the companies was R10 million with a standard deviation of R20 million. From the result it is evident that the maximum annual turnover is between R15 and R20 million and not more than R20 million. This is in line with annual turnover set by National Small Business Act 102 of 1996 as highlighted in chapter 2 literature review which state that the maximum annual turnover for medium sized contractors is R20 million.

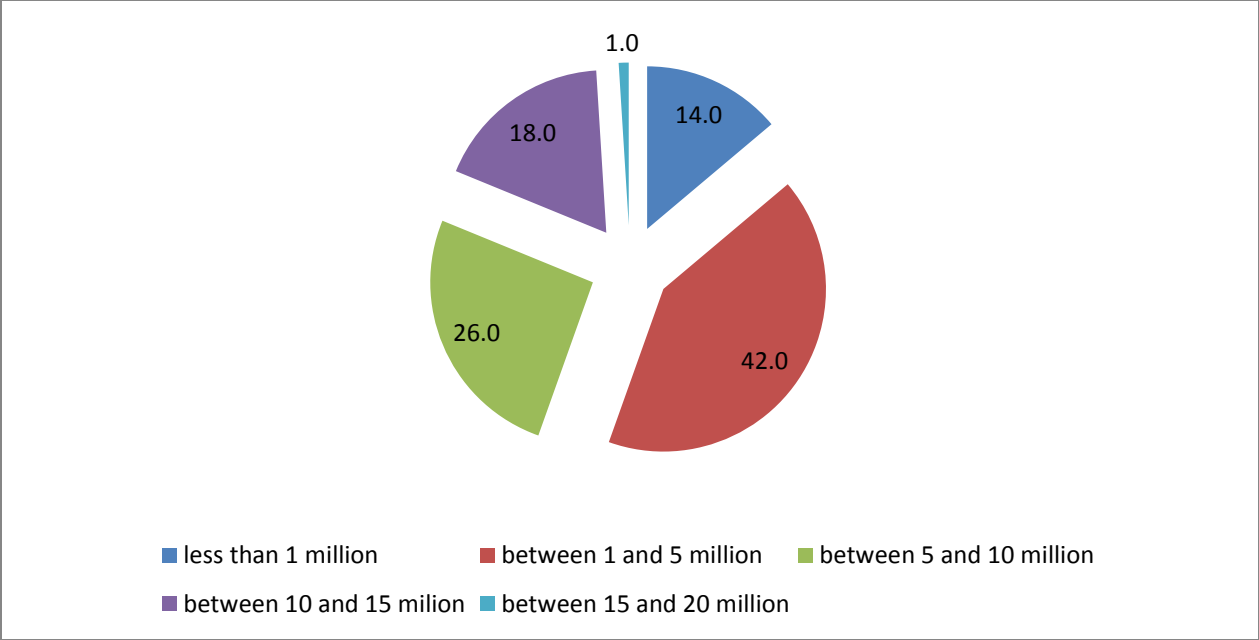


Figure 4.7: Annual turnover of the companies

4.3.3 Number of years in operation

The majority of the companies (74%) were in the business between 5 years and 14 years. The average years in the business was 11 years with a standard deviation of 5 years.

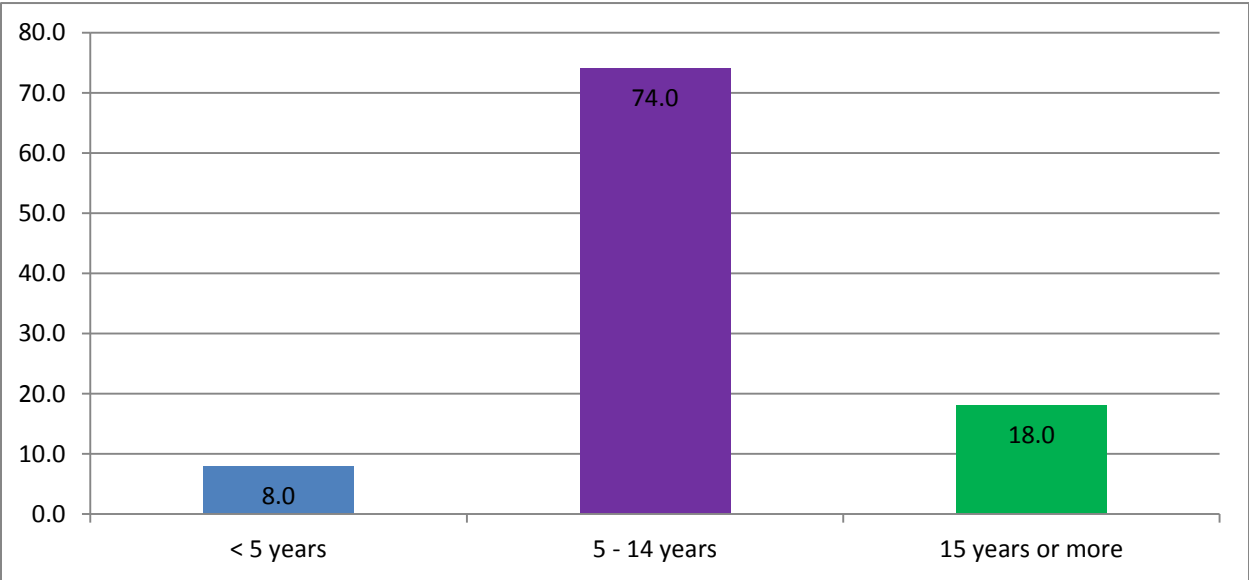


Figure 4.8: Number of years in operation

4.3.4 Number of projects completed

Results has shown that (42%) of the companies had completed between 6 to 10 projects and (30%) of the companies had completed between 3 and 5 projects (Figure 4.9).

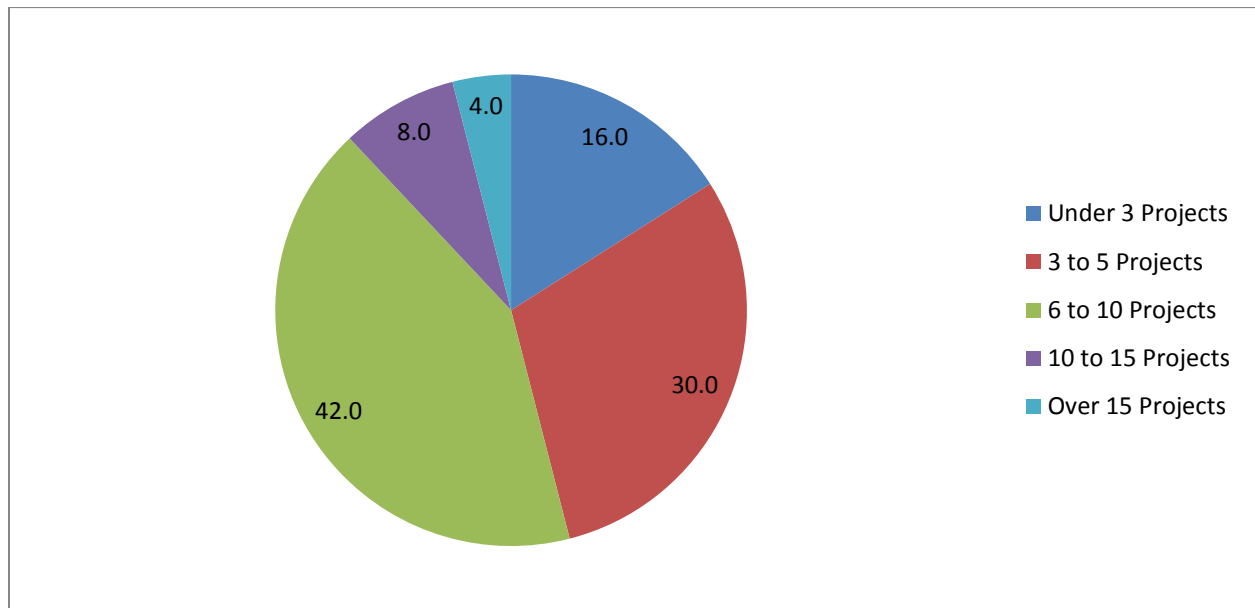


Figure 4.9: Numbers of projects successfully completed by the company

4.4 Critical skills

4.4.1 Critical skills lacking in the company

The majority of the participants indicated that marketing (88%) was the most important critical skills lacking in the company followed by human resources (61%) and financial skills (59%) respectively (figure 4.5). The least critical skill lacking was the technical skill.

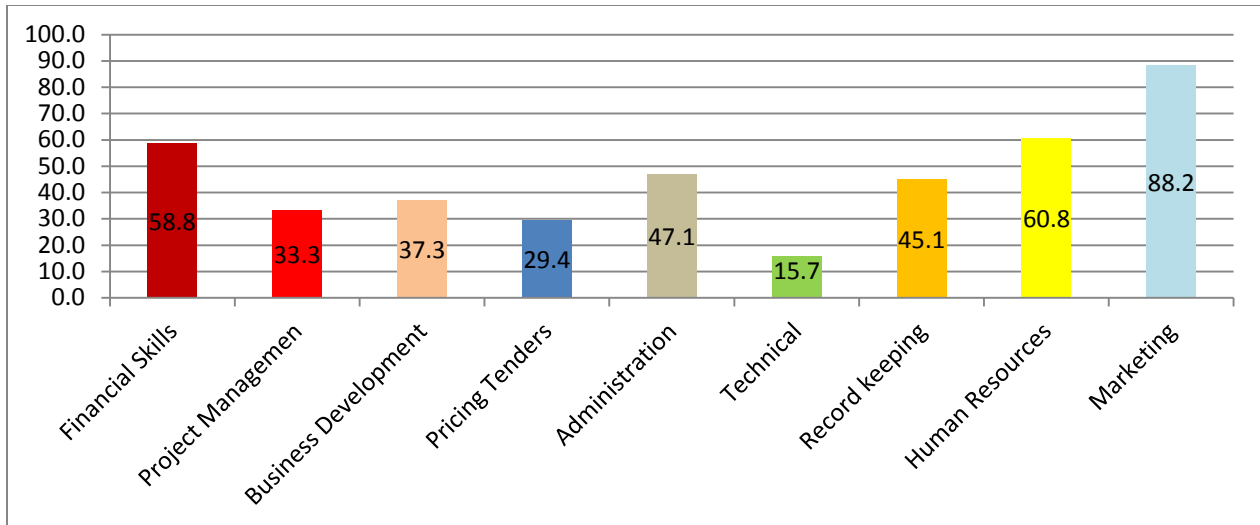


Figure 4.10: Critical skills lacking in the company

4.4.2 Ranking of critical skills

Participants were asked to rank the most important skills that are critical to the success of the company. Project management skills were found to be most important skill to ensure success of MSC's followed by financial skills and then pricing of tenders. The summary of the ranking of critical skills are shown in table 4.1.

Table 4.1: Ranking of critical skills reported by the participants

| Critical skills | Ranking | | | | | | |
|----------------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Financial Skills | 4.3 | 31.9 | 12.8 | 36.2 | 8.5 | 6.4 | |
| Project Management | 73.5 | 16.3 | 8.2 | | | | 2.0 |
| Business Development | 15.0 | | 20.0 | 5.0 | 20.0 | 25.0 | 15.0 |
| Pricing Tenders | 16.7 | 29.2 | 37.5 | 8.3 | 8.3 | | |
| Administration | | 2.2 | 4.3 | 21.7 | 26.1 | 30.4 | 15.2 |
| Technical | 14.6 | 18.8 | 31.3 | 22.9 | 6.3 | 2.1 | 4.2 |
| Record keeping | 6.1 | 14.3 | 12.2 | 14.3 | 34.7 | 16.3 | 2.0 |
| Human Resources | 3.3 | 10.0 | 6.7 | 10.0 | 6.7 | 30.0 | 33.3 |
| Marketing | 3.7 | 3.7 | 3.7 | 3.7 | 18.5 | 11.1 | 55.6 |

4.5 Critical success factors

4.5.1 Ranking of external critical success factors

With regard to external critical success factors, participants were asked to rank the factors listed. In this section, participants could rank the same for more than one factor. It was found that majority of the participants indicated late payments (62%) as the top critical factors followed by fraud (37%) and inability to get tender (33%). The second most external critical factors were fraud (43%) followed by competition (29%) and inability to get tenders (26%) (Table 4.2). The third most external critical success factors were competition (37) followed by inability to get tenders (22%) and procurement policies and availability of skilled labour both at 22%.

Table 4.2: Ranking of external critical success factors

| External critical success factors | Ranking | | | | | | |
|-----------------------------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Competition | 7.8 | 29.4 | 37.3 | 15.7 | 5.9 | | 3.9 |
| Inability to get tenders | 33.3 | 25.5 | 21.6 | 7.8 | 9.8 | | 2 |
| Fraud | 37.3 | 43.1 | 7.8 | 5.9 | 2.0 | 2.0 | 2.0 |
| Access to finance | 15.7 | 23.5 | 11.8 | 25.5 | 15.7 | 3.9 | 3.9 |
| Procurement policies | 4 | | 22.0 | 22.0 | 14.0 | 18.0 | 20.0 |
| Availability of skilled labour | 8.0 | 6.0 | 22.0 | 14.0 | 26.0 | 10.0 | 14.0 |
| Late payment | 62.0 | 12.0 | 6.0 | | 6.0 | 12.0 | 2.0 |
| Laws and regulations | 2.9 | 5.9 | 2.9 | 5.9 | 26.5 | 47.1 | 8.8 |
| Innovation & technology | | 3.0 | 3.0 | 3.0 | 6.1 | 24.2 | 60.6 |

4.5.2 Ranking of internal critical success factors

For internal critical success factors, more than half of the participants (52%) ranked effective management as number one. Financial management and lack of skills were ranked second and third by 28% and 26% of the participants respectively.

About a third of the participants (30%) ranked pricing of contracts in the third position. Table 4.3 summarizes participants ranking of internal critical success factors.

Table 4.3: Ranking of internal critical success factors

| Internal critical success factors | Ranking | | | | | | |
|-----------------------------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Effective management | 52.0 | 10.0 | 14.0 | 10.0 | 6.0 | 8.0 | |
| Financial management | 10.0 | 28.0 | 6.0 | 22.0 | 20.0 | 4.0 | |
| Lack of resources | 14.0 | 18.0 | 24.0 | 14.0 | 10.0 | 14.0 | 6.0 |
| Lack of skills | 14.0 | 26.0 | 12.0 | 20.0 | 16.0 | 8.0 | 4.0 |
| Inability to market | 14.0 | 10.0 | 14.0 | 18.0 | 16.0 | 22.0 | 6.0 |
| Pricing of contracts | 10.0 | 24.0 | 30.0 | 14.0 | 12.0 | 10.0 | |
| Fronting of established companies | 6.0 | 4.0 | 6.0 | 12.0 | 12.0 | 6.0 | 54.0 |

4.6 Summary

The results show that the majority of the small and medium sized contractors are owned or run by males of which most of them Africans followed by Indians then Whites in terms of race. The majority of the participants are of the middle age group between 30 and 44 years. In terms of the participant's position at work, one the third of them are directors in the company followed by project managers. The majority of the participants just below half have matric as their highest qualification followed by national certificates or diplomas. Less than a quarter of the participants have bachelor's degree or post graduate degrees.

Marketing, human resources, financial skill, administration and record keeping were found to be the most critical skills that are lacking in small and medium sized contractors, while marketing was the most critical skill lacking followed by human resources then financial skill. Project management was ranked as the most important skill that is critical to the success of small and medium sized contractors, while financial skills and pricing of tenders were ranked second and third respectively.

In terms of external critical success factors, late payment has been rank by the majority as the number one critical factors followed by fraud and inability to get tenders. Fraud has been ranked by the majority as the second highest ranked external critical success factor followed by competition then inability to get tenders. Competition was ranked as the third highest external factor.

Under internal critical success factors the results show that effective management is the number one critical success factors and financial management was second as the highest factor followed by pricing of contracts.

CHAPTER 5

DISCUSSIONS OF RESULTS

5.1 Introduction

In this chapter results obtained from the study as presented in the previous chapter will be discussed. The main aim of this chapter is to discuss most important critical skills that are lacking as per the results obtained in chapter 4 and highly ranked internal and external critical success factors. This will be done in comparison with the previous studies done on critical success factors for small and medium sized contractors by looking at similarities and difference. This chapter will also help develop recommendations for the study.

5.2 Participants socio-demographics factors

Demographic results for respondents show that the majority of individuals responsible for running of the small and medium sized contractor are male and this is the evidence that male dominates the construction industry. The majority of age group is between the age of 30 and 44 years while, most of them are Africans followed by Indians then Whites and Coloureds are the least. The majority of the respondents are directors of the company followed by project managers. It must be noted that most of them (41%) have matric as their highest qualification.

5.3 Objective 1 - Examine the factors that influence the success of SMC's

The literature review (Thwala, 2009 and Abor, 2010) has shown that the following success factors influence success of small and medium sized contractors which includes; lack of effective management, lack of financial management; lack of entrepreneurial skills; lack of proper training; lack of resources; lack of technical skills, lack of contractual and managerial skills; inability to get credit from suppliers; fronting for established contractors; the inability of contractors to market, competition, fraud, access to finance, procurement policies, inability to get contracts, availability of skilled labour,

and late payment to contractors. Literature review (Lu *et al*, 2008) argues that it is important to reduce vast number of factors to some manageable few but vital ones. This is because environment changes and so are the success factors. As a result it is possible for firms to establish a strong position during the early stage of its operations, but then lose grounds later when the key success factors change because the most important critical success factors now may be the least import factor in the future. Therefore, to yield a maximum outcome of overall success, it is important to identify critical success factors and allocate sufficient resources to them.

5.4 Objective 2 - Determine critical success factors facing SMC's

5.4.1 Internal critical success factors and critical skills

5.4.1.1 Marketing

The study has shown that marketing is the number one critical skill that is lacking within small and medium sized contractors and is the least important skill. The reason for that is because marketing in construction industry is different from other industries and it is difficult to apply traditional marketing strategies due to peculiarities of the industry. Therefore, according to Arditi *et al*, (2008) marketing strategies tailored specifically to match the construction market are required. This requires a combination of industrial and service marketing theories (Arditi *et al*, 2008). Therefore, a traditional marketing theory where parameters such as product, price, promotion, and place are considered is also useful in differentiating some aspects of contractors operations. Due to the nature of the construction industry where decisions to enter into a contract involving parties is dependent or influenced by the quality of relationship between them therefore, it is recommended that a fifth parameter be added which is i“people” (Arditi *et al*, 2008).

- **Product**

Quality of workmanship or technical performance of contractors is the most important aspect to consider when marketing product of the contractor in the construction industry. Basically this involves “level of conformance with governing standards and specifications, the extent to which innovative means and methods of construction are used, the quality of workmanship, the quality of human relations, the rigor involved in scheduled management practices, and level of professionalism in construction management practice” (Arditi *et al*, 2008:256).

- **Pricing of contract**

Pricing of tender is one of the most important aspects in construction industry and it is mostly a determining factor to secure contract during tender process. As a result, pricing is defined by Gerwick, (1982:29) “as the tangible end point of the marketing effort and very effective and incisive marketing tool”. However, the use of price as the sole means of differentiation among construction companies is not recommended (Arditi *et al*, 2008). This tends to compromise quality of work, undermines profitability of the construction company, and discourages construction innovation. Therefore, it is crucial to consider other differentiating factors such as accelerated construction process, cost and schedule management, innovative methods, etc. when pricing for contract (Arditi *et al*, 2008).

The common mistake made by contractors when pricing is understanding the scope of the project. This can be achieved by reading tender documents and project specifications and asking questions to get further clarity about what the project entails.

- **Promotion**

Due to the nature of the construction industry where construction procurement is motivated by client's needs which does not happens frequently because of long transaction time, high transaction cost, and uniqueness of construction the traditional promotional techniques may not be easily transferable to construction (Ardit *et al*, 2008). Therefore, the use of promotional techniques in construction industry should be tailored for that specific client obviously with the help of market research.

- **Place**

In construction industry it is crucial to know where the project is to be implemented, and location and availability of resources to be used for the specific projects. This is because in most cases contractors don't have control of geographic location of a construction project. Therefore, it is important for contractor to have suppliers of the construction material and their resources close to the construction site (Ardit *et al*, 2008). This helps to reduce logistic costs of moving these resources and also to secure contract by providing competitive bidding price. This cost savings can be achieved through provision of branch office in proximity to a potential market. This will help differentiate a company form outsiders and secure contract since most government departments are focusing on developing local contractors.

- **People**

Networking and interaction between project participants is crucial in construction industry in order to secure future contracts. According to Smyth (1999), relationship marketing focus on meeting client's needs and satisfying them by developing long term and sustainable contact between client and construction company. This is important because construction, "unlike any other industry, relies heavily upon people at each stage of procurement" (Ardit *et al*, 2008:257). Therefore, developing a person to person relationship with the clients can help secure major contracts.

5.4.1.2 Financial management

According to the study the results have shown that financial skill is second most important skill that is lacking for small and medium sized contractors. It was also ranked as second most important internal critical success factor. Poor financial management is the most common shortcoming for contractors and can hamper contractor's growth. This includes poor inventory and cash flow management, over-investing in fixed assets, poor credit arrangements, personal use of business funds, reflecting incorrect financial figures to avoid TAX, and reluctance to use professional accounting officer to compile annual financial statements. Therefore, proper financial management in a company ensures that resources are properly controlled and planned for (Rwelamila *et al*, 2004). The following good practise or tips are recommended for construction companies to assist them improve their financial management skills and sustain growth.

- **Understanding the requirements of the industry**

Currently, the entry to construction industry in South Africa is not controlled or regulated; as a result anyone can open a construction company without even understanding how the industry operates. This has resulted in an increase in the number of entries with a wrong perception that there is a lot of money to be made in this industry. Therefore, one needs to understand basic principle and law that applies to construction industry and be on top of the game. This can be achieved by attending a number business courses that are tailor made for small business and registering with professional bodies for professional development.

- **Mixing business with pleasure**

Not being able to separate business activities with personal gains is common in construction industry mostly amongst African owned contractors of which the study has shown that the majority of small and medium sized contractors are predominantly owned by them.

Therefore, maintaining strict separation of business and personal finance is a good starting point for successful financial management. This can be achieved by opening separate bank accounts.

- **Reinvesting cash into the business**

By separating business and personal finance it can help grow the business because the profit made on a previous project can be reinvested into a business to secure resources such as machineries that the business needs to grow. Reinvesting of profit in construction industry is very important due to its nature of operation. Before the start of the project contractors are required to have start-up capital and cash for sureties and guaranties that are normally required by the client before the start of the project. Therefore, reinvesting profit made from the previous projects can help cover these.

- **Cash flow management**

The importance of proper cash flow management in the construction industry cannot be stressed any further because without cash flow business will not survive. However, to address challenges of cash flow as start-up cost for small and medium sized contractors an upfront payment can be negotiated with the client.

- **Practicing good financial management systems**

This involves keeping good financial records of all your business income and expenses, and other financial transactions. Keeping records of all financial information can help assess how the business performs financially. This can be achieved through proper book keeping and preparation of sound financial statements. A service of professional accounting officer or auditors is required to address issue of book keeping and proper financial statements. Small and medium sized contractors are reluctant to pay for these services and they prefer doing it themselves of which some are not doing a great job.

Following proper financial management system can also help keep track of liquidity ratio where “current liability are not to exceed current assets, so that there is enough cash flow in the business to finance projects, emergencies or contingencies” (CIBD, 2012:3).

- **Presenting true financial status of the company**

This is common for contractors where different financial information is presented to save cost and financial gain (CIBD, 2012). For example, separate financial information can be presented to SARS for the purpose of minimising tax and a better financial information to the bank to secure loans. This practice is a criminal offence and can result in legal action taken against the company.

- **Use one financial institution**

Avoid using different banking situations, rather develop history with one bank and build strong relationship. This can lead to good standing with the bank and good credit record. However, if you are not satisfied with their offer feel free to negotiate new rate with that institution or change to another banking institution if need arises.

- **Insurances**

Always cover the company’s assets in the event of unforeseen circumstances. Different banking institutions provide such cover and the company can negotiate better rate with your institution.

- **Investing**

Culture of investment is not practised within some small and medium sized contractors. Exploring other avenues of growing your money by investing can also help build sound cash flow and grow business. This can be done through the use of professional services such as accountants, legal advisors, insurance and investment brokers.

5.4.1.3 Resources management

Without proper resources contractors will not survive. This includes human resources, construction plant, finance etc. According to the study human resources was found to be the third most critical skill that is lacking within small and medium sized contractors. Availability of skilled technical people is not just an internal issue however; it is a nation-wide problem. Therefore, to address such problems one need to make construction a first choice for young people and inspire those who have left the sector to return. Provide training schemes and opportunities for people to enter the industry and develop worthwhile careers. In the construction industry having skilled and competent human resources is not enough; the availability of plant and equipment is very important taking into consideration the nature of works involved in this industry. Therefore, it is recommended that contractors focus on owning such resources instead of hiring them which is the common practice with small and medium sized contractors.

However, securing all resources required is not enough; one needs to manage those resources. The most challenging resources to manage are people. People are an organisation's most valuable asset and this is especially true in relatively low-tech, labour-intensive industries such as construction. Unlike physical assets, people have their own individual needs which must be met and idiosyncrasies which must be managed if they are to contribute to organisational growth and development. People are individuals who bring their own perspectives, values and attributes to organisational life, and, when managed effectively, these human traits can bring considerable benefits to organisations. However, when managed poorly they have the potential to severely limit organisational growth and threaten the viability of a business.

5.4.1.4 Effective management

According to the study, effective management was ranked the number one internal critical success factor. This is because management plays an important role in the success of any organisation.

Good management means understanding of all factors that result in business success which includes good strategy, marketing, pricing, financial control, and project management. A high degree of qualified working team members with good managerial experience should be employed if the organisation wants to be competitive. Owners should also have some managerial experience so that they know how to deal with their employees and how to motivate them. This involves education, training and improvement of management skills and experience of managers, as well as quality of labour. Uncertainty and complexity of construction industry, coupled with the nationwide competitiveness and change regulatory requirements creates a need for highly educated and competent construction management individuals (Love *et al*, 2002).

5.4.1.5 Project management

According to this study, project management was ranked as the number one critical skill for success of small and medium contractors. Project management is the process of planning, organizing, motivating, and controlling available resources, procedures and protocols to successfully complete projects. Without proper project management practice contractors will be able to complete projects within allocated time frame and resources. Therefore, appointment of qualified project manager is necessary. Investing in a development of staff on project management in terms of education and training can also help.

5.4.2 External critical success factors

According to the study, the majority of participants ranked late payment as the number one challenge or external critical success factor while fraud was ranked number two followed by competition then access to finance. Inability to get tenders was also featured as a top challenging factor. However, inability to get tenders can be address by dealing with the above mentioned external and internal critical success factors.

5.4.2.1 Late payment

An effort has been made by the South African government to address issues of late payment which is common with government departments. Government has instructed various departments to make sure that invoices are paid to services providers within a period of 30 days. However, a more pro-active approach can be implemented where invoices are paid as and when they are received.

5.4.2.2 Fraud

In construction most fraud happens during procurement process and it is a complex problem and not easy to detect since “cases are rarely reported and subsequently it is difficult to measure the extent of the problem” (National Fraud Agency, 2011:3). They argue that when “detected resource is generally channelled into investigation and prosecution which is expensive and rarely ends in a conviction or the recovery of losses” (National Fraud Agency, 2011:3). Procurement fraud involves illegal award of contract and overpayment of suppliers for goods or services rendered. However, a lot can be done by government and other policy maker to combat procurement fraud. This means implementation of a spend-and-recovery audit on the account payable systems by government departments, agencies, and non-departmental public bodies to detect over payment to contractors. Development of procurement fraud training module for new and existing procurement specialist can also assist to combat such fraud. Fraud risk must be designed out of the “processes underpinning policies on transparency, lean procurement and centralised procurement” (National Fraud Agency, 201:4).

5.4.2.3 Competition

The literature review (Osama, 1997) highlighted that the introduction of emerging contractor development policies for black economic empowerment has resulted in a drastic increase in number of SMC's to compete in the market, hence, reduces the number of available projects per contractor.

This has caused the environment to be more competitive, making it hard for contractors to secure potentially profitable contracts. Lack of entry barriers or control of entry to the construction industry also contributes to this high number of contractors. To regulate entry to the industry government or policy maker needs to develop some entry requirements such as pre-training or qualification.

5.4.2.4 Access to finance

Access to finance by emerging contractors is a serious problem which requires intervention not only from government but also from private sectors. According to CIDB, (2011:14), it is important to bring “together financial sector role players with the aim to have the recommended models embraced by the sector so as to consolidate existing financial and non-financial support to contractors, and develop appropriate tailored models, products and packages that target the needs of the emerging construction contractors”. Therefore, to build a strong construction sector, the development of financing mechanisms that take into account the specific needs of upwardly migrating contractors must be promoted.

5.5 Summary

The study has shown that effective management which includes project management, financial management, resources management, marketing, pricing of contract are the most important internal factors that needs serious intervention from the contractors. Intervention from government, other role player and contractors themselves is needed to address external critical success factors that were identified by this study as important to the success of small and medium sized contractors. These include late payment, access to finance, fraud, and competition.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

Direct and indirect contribution of small and medium sized contractors to economic growth has been recognized in South Africa. They play a significant role in the provision of basic infrastructure such as roads, schools, water and sanitation etc. They also play a major role in addressing unemployment because of the nature of the work which is mostly labour intensive. An effort has been made by government to support emerging contractors through introduction of contractor's development programmes. However, even with the introduction of such programmes the status of many small and medium sized contractors in South Africa continue to be unstable and unsustainable.

Therefore, intervention from government through such programmes is not sufficient, critical success factors affect success of small and medium sized contractors needs to be identified and addressed. The literature review and results from this study has shown that the high rate of failure of emerging contractors is mostly due to challenges brought by these critical success factors. A serious intervention is required from all role players including contractors, government, private sectors and public at large to address challenges due to these success factors. This is because there are factors that affect internal operations of the company which the contract needs to address them, obviously sometimes with the intervention from other role players. These have been classified in this study as internal critical success factors.

On the other hand there are factors which are outside of the control of the company and have been classified as external critical success factors. These factors require serious intervention from government and other role players such as financial institutions and policy makers.

6.2 Outcomes, recommendation and implications of this study

The objectives set in this study were chosen with the aim of reviewing status of small and medium sized contractors and identifying, determining, understanding, and addressing critical success factors that influence their success. The set objectives were met as the result provided meaningful and useful information to provide realistic recommendations to address such factors.

In order to improve sustainability of small and medium sized contractor's vital but manageable and new critical success factors at a specific time needs to be identified and addressed. This is because the influence or importance of critical success factors changes with time, the critical success factors that are important now may be least important in the future.

Findings from this study will not only improve status and sustainability of small and medium sized contractor's, government will also benefit because high rate of unemployment will be reduced and country's economy improved. To address objectives set in this study, recommendation and implication on critical success factors identified and determined by the study will be provided.

6.3 Recommendations

The following are the recommendations on the intervention required from the role players to address factors influencing success of small and medium sized contractor's.

6.3.1 Internal critical success factors

The important internal critical success factors that require serious and immediate attention from the contractors were identified and determined by the study as marketing, financial management, resources management, effective management, and project management.

Marketing

- Ensure high level of quality of workmanship and technical performance through conformance with governing standards and specifications, use of innovative construction methods, use of qualified technical staff, and show high level of professionalism in construction management practices.
- When pricing for contracts don't use price as the sole means of differentiating the company from other contractors. Other differentiating factors such as accelerated construction process, cost and schedule management, innovative construction methods, location of site, and understanding of project specifications or requirements need to be considered.
- Use promotional techniques tailored for that specific client.
- Know where the project is to be implemented, location and availability of resources to be used. It is recommended to have suppliers of the construction material and their resources close to the construction site. If possible, open a branch office in the proximity near to potential market.
- Develop a long term and sustainable personal relationship with the client. Network and interact with other project participants.

Financial management

- Understand basic principles and laws that apply to construction industry. This can be achieved by attending a number of business courses that are tailor made for small business and registering with professional bodies for professional development.
- Maintaining strict separation of business and personal finance is a good starting point for successful financial management. Open separate bank accounts.
- Reinvest high portion of profit made from previous projects to sure more resources and cover for start-up cost, sureties and guaranties.
- Always have cash flow available to cater for start-up cost and cover for unforeseen expenses and contingencies.

- Practicing good financial management systems by keeping good financial records of all your business income and expenses, and other financial transaction. Use services of professional accounting officer or auditors to do book keeping and prepare financial statements.
- Present true financial statement of the company.
- Use one financial institution.
- Use insurance companies to cover all assets in the event of unforeseen circumstances.
- Explore different investment options with the help from accountants, legal advisors, insurance, and investment brokers.

Resource management

- Focus on owning construction resources instead of hiring them.
- Control your resources by allocating them to critical projects and critical path.
- Employ technically qualified staff and empower them through development and training programmes.

Effective management

- Understanding of all factors that result in business success which includes good strategy, marketing, pricing, financial control, and project management.
- A high degree of qualified working team members with good managerial experience must be employed.
- Education, training and improvement of management skills and experience of managers, as well as quality of labour need to be address.
- Highly educated and competent construction management individuals to be employed.

Project management

- Employ qualified projects manager and provide training to your staff on project management.

6.3.2 External critical success factors

The important external critical success factors that require serious and immediate intervention from government, private sector and policy makers were identified and determined by the study as late payment, fraud, competition, and access to finance.

Late payment

- Payment for invoices to suppliers should be made within a period of 30 days. However, a more pro-active approach can be implemented where invoices are paid as and when they are received.

Fraud

- Encourage relevant stakeholders to refrain themselves from fraudulent activities.
- Encourage relevant stakeholders including public to report such incidence through anonymous fraud hotline.
- A proper investigation, prosecution, conviction and recovery plan needs to be implemented when such fraudulent activities are detected by government and policy makers.
- Spend-and-recovery audit need to be implemented on the accounts payable systems by government departments, agencies, and non-departmental public bodies to detect over payment to contractor.
- Development of Procurement fraud training module by policy makers for new and existing procurement specialist can also assist to combat such fraud.

Competition

- Government needs to regulate entry into the construction industry by introducing some entry requirements such as pre-training or qualifications with the help from government SETA.
- Government departments need to create contractor's data base where contracts are awarded on a rotational basis.

Access to finance

- Financial sectors role players need to be brought together with the aim to have recommended models embraced by the sector so as to consolidate existing financial and non-financial support to contractors, and develop appropriate tailored models, products and packages that target the needs of the emerging construction contractors.
- Transparency on funding provided by government to support emerging contractors is important.

6.4 Recommendations for future studies

- Since the study was based in Pietermaritzburg particularly in the Msunduzi Municipality, the scope can be extended by investigating all the contractors within KwaZulu-Natal province or country as a whole. However, this will require more time and resources to be successful.
- Since this study looked at identifying different critical success factors, a focus study where critical success factors are analyzed or investigated individually is recommended. For example, "how does access to finance affect success of small and medium sized contractors"?
- Some of the recommendations are the views of the researcher as a result they need to be tested.

6.5 Summary

The status of many of small and medium sized contractors will continue to be unstable and unsustainable even with the introduction of emerging contract development programmes from government. This instability is due to critical success factors that influence their success. Therefore, serious intervention from all role players including contractors, government, the private sector, and the public sector is needed to address these critical success factors and avoid liquidation of emerging contractors.

REFERENCES

Aaker D.A, 2005, *Strategic Marketing Management* (7th edit), Wiley, Hoboken New Jersey.

Ablert P.C. Chan¹, David Scott, and Ada P.L Chan³, *Factors Affecting the Success of a Construction Project.*, Journal of construction engineering and management ASCE/ January/February 2004.

Abor, J and Quartey, P, 2010., *Issues in SME Development in Ghana and South Africa.*, International Research Journal of Finance and Economics,. ISSN 1450-2887 Issue 39 (2010).

Construction Industry Development Board (CIDB), 2011, *Construction Industry Financial Model Options for Contractor Support and Development*, September 2011.

Construction Industry Development Board (CIDB), 2012, *Contractor Tips and Advised: Financial Management*, CIDB, 2012

Cook P, and Nixon F, 2000., *Finance and Small and Medium-Sized Enterprise Development*, IDPM, 2000 University of Manchester, Finance and Development Research Programme Working Paper Series, Paper No 14.

El-Diraby T.E, Costa J, and Singh S, *How Do Contractors Evaluate Company Competitiveness And Market Attractiveness? The Casa of Toronto Contractors.*, Department of Civil Engineering, University of Waterloo, 33: pg: 596-608, 2006.

Eyiah A.K, Cook P, 2003, *Financing Small and Medium Scale Contractors in Developing Countries: a Ghana Case Study.*, Construction Management and Economics June 2003, Vol. 21, p 357-367, Institute for development Policy and management, Manchester University.

National Fraud Authority (NFA), 2011, Procurement Fraud in Public Sector, NFA, October 2011

Herzog, H, 1982., *Small And Medium-Size Firms in Sweden And Government Policy.*, American Journal of Small Business, Vol. VII, No. 2, Oct-Dec. 1982.

Isaacs E, and Friedrich C, 2010., *Service delivery to SMMEs: A pilot study of SMMEs in the Western Cape, South Africa.*, School of Business and Finance, University of Western Cape, RSA.

Jeon J, CCE PSP, 2009., Success Factors for a Lessons Learned System in a Construction Organization., *Cost Engineering*, Vol. 51, No. 5, May 2009.

Katwalo A.M, 2006., *Competence and Critical Success Factor Development as an Avenue for Achieving Sustainable Micro and Small Enterprises in Africa.*, Journal of Management Policy and Practice, vol. 11 No. 5, 2006, Strathmore University, Kenya.

Kulatunga U, Amaratunga D, and Haigh R, 2009., Critical Factors of Construction Research and Development., *Construction Management and Economics* Sep 2009, Vol. 27, p. 891-900. School of the Built Environment, University of Salford, Salford, UK.

Langford, D., and Male, S. _2001_. *Strategic management in construction*, Blackwell Science, Oxford, U.K.

Laryea S and Hughes W, 2011, *Risk and Price in the Bidding Process of contractors.*, Journal of Construction Engineering and Management ASCE / April 2011.

Lu W, Shen L, M.ASCE², and Yam M.C.H, M.ASCE³, 2008., *Critical Success Factors for Competitiveness of Contractors: China Study.*, Journal of construction engineering and management ASCE / Dec 2008

Mahadea D and Pillay M.K, 2008., *Environmental Conditions For SMME Development in a South African Privince.*, SAJEMS NS 11 (2008) No. 4.

Mochtar K and Arditi D, 2001, *Role of Marketing Intelligence in Marketing Price Policy in Construction.*, Journal of Management In Engineering,. July 2001.

Osama, J, 2008., *Reasons for construction Business failure in Saudi Arabia.*, Project Management Journal; Jun 97, Vol. 28 Issue 2, p32, 5p, 1 Black and White Photograph, 4 Charts.

Parke R, Riopelle R, and Steel W, 1995., *Small Enterprise Adjusting to Liberalisation in Five African Countries.*, World Bank Discussion Paper, No 271, African Technical Department Series, The World Bank, Washington DC.

Phaladi, M and Thwala, W, 2009., *Critical success factors for small and medium sized contractors in North West Province, South Africa.*

Pheng L.S, 2001, *World Markets In Construction: II. A Country by Country Analysis.*, Construction Management and Economics, Vol: 9, pg: 73-78, 2001.

Rwelamila, P.D, Lobelo. L, and Kupakuwana. P.S, 2004., *Insolence Among Civil Engineering Enterprises in South Africa – A Time to Reflect.* Cost Engineering; Vol. 46/No. 7 July 2004

Slaughter E.S 1998, *Model of Construction Innovation.*, Journal of Construction Engineering Management., 124(3), 226-231.

Tebin, H.I, 2009, *Pricing Tenders For Construction.*,. Cost Engineering, vol. 51/No. 1 February 2009.

Thwala W.D and Phaladi M.J, 2009, *An Exploration of Problems Facing Emerging Contractors In The North West Province Of South Africa.*, Department of Construction Management and Quality Surveying, May 2009, University of Johannesburg.

Torp, O, Austeng K, Mengesha W.J, 2004., *Critical Success Factors For Project Performance - A Study from Front End Assessment of Lager Public Project in Norway.*, Norwegian University of Science and Technology.

Xueyong, S, 2009., *A tentative analysis of challenges and correspondent strategy for small and medium sized contractors (SMCs) in Tanzania.*, The Contractor.

Annexure 1: Introductory letter

THOKOZANI NHLANHLA MCHUNU
GRADUATE SCHOOL OF BUSINESS & LEADERSHIP,
UNIVERSITY OF KWAZULU-NATAL,
WESTVILLE CAMPUS

DEAR RESPONDENT, I, THOKOZANI NHLANHLA MCHUNU, (STUDENT NUMBER: 200272663), AM
A MBA STUDENT, CONDUCTING RESEARCH ON A PROJECT ENTITLED:

**CRITICAL SUCCESS FACTORS FOR SMALL AND MEDIAUM SIZED
CONTRACTORS IN PIETERMARITZBURG**

THROUGH YOUR PARTICIPATION I HOPE TO UNDERSTAND THE IMPORTANCE OF STRATEGIC ALIGNMENT WITH A COMPANY ENVIRONMENT. YOUR PARTICIPATION IN THIS PROJECT 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 SURVEY/FOCUS GROUP. CONFIDENTIALITY AND ANONYMITY OF RECORDS IDENTIFYING YOU AS A PARTICIPANT WILL BE MAINTAINED BY THE GRADUATE SCHOOL OF BUSINESS, UKZN. IF YOU HAVE ANY QUESTIONS OR CONCERNS ABOUT COMPLETING THE QUESTIONNAIRE OR ABOUT PARTICIPATING IN THIS STUDY, YOU MAY CONTACT ME OR MY SUPERVISOR AT THE NUMBERS LISTED BELLOW. THE SURVEY SHOULD TAKE YOU ABOUT 10 MINUTES TO COMPLETE. I HOPE YOU WILL TAKE THE TIME TO COMPLETE THIS SURVEY.

I CAN BE CONTACTED AT:
EMAIL: THOKOZANI.MCHUNU@MSUNDUZI.GOV.ZA
CELL: +27 83 401 2544

MY SUPERVISOR IS DR A KADER.
CONTACT DETAILS: EMAIL: ABDULLAK@NEDBANK.CO.ZA
PHONE NUMBER: +27 82 901 02 25

THANK YOU FOR YOUR CONTRIBUTION TO THIS RESEARCH.

SINCERELY

THOKOZANI NHLANHLA MCHUNU

Annexure 2: Informed Consent Letter

Informed Consent Letter

UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

Dear Respondent,

MBA Research Project

Researcher: Thokozani N Mchunu Cell: 083 401 2544

Supervisor: Dr Abdulla Karder & Prof Shahida Cassim Tell: 031 206 1479

Research Office: Ms P Ximba 031-2603587

I, Thokozani Nhlanhla Mchunu Student No: 200272663 am MBA student, at the Graduate School of Business and Leadership, of the University of KwaZulu Natal. The MBA programme requires all candidates to complete a research dissertation. You are invited to participate in a research project entitled **CRITICAL SUCCESS FACTORS FOR SMALL AND MEDIUM SIZED CONTRACTORS IN PIETERMARITZBURG, KZN.**

The aim of this study is to:

- To examine the factors that influence the success of small and medium sized contractors.
- To determine critical success factors facing small and medium sized contractors and.
- Suggest creative solutions for policy makers to mitigate these challenges.

Through your participation I hope to understand or obtain information about the current status of small to medium sized contractors and identify the challenges they face in today's environment. Therefore, it is recommended that only owner / managers of the company participate in this study.

Your participation in this project 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 survey.

Your responses will remain confidential. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business and Leadership, UKZN.

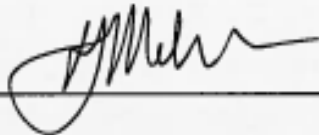
If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about 10 minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigator's

signature



Date

This page is to be retained by participant

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

MBA Research Project

Researcher: Thokozani N Mchunu Cell: 083 401 2544

Supervisor: Dr Abdulla Karder Prof Shahida Cassim Tell: 031 260 1479

Research Office: Ms P Ximba 031-2603587

RESPONDENTS CONSENT FORM

I.....(full names of participant)
hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

.....

.....

This page is to be retained by researcher

Annexure 3: Ethical Clear Clearance



16 November 2012

Mr Thokozani Nhlanhla Mchunu 200272663
Graduate School of Business and Leadership
Westville Campus

Dear Mr Mchunu

Protocol reference number: HSS/1208/012M
Project title: Critical success factors for small and medium sized contractors in Pietermaritzburg.

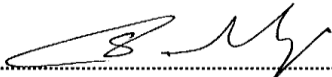
Expedited Approval

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

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

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

Yours faithfully


.....
Professor Steven Collings (Chair)

/px

cc Supervisor Professor Shahida Cassim
cc Academic Dr SA Bodhanya
cc School Admin. Mrs Wendy Clarke

Professor S Collings (Chair)
Humanities & Social Sc Research Ethics Committee
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 3587/8350 Facsimile: +27 (0)31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za
Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville



INSPIRING GREATNESS

Annexure 4: Questionnaire

QUESTION 1: COMPANY PROFILE

1.1 Name of the business.

| | | |
|-----|--|--|
| 1.2 | Number of employees employed by your company | |
|-----|--|--|

| | | |
|-----|--------------------------|--|
| 1.3 | Annual turnover in Rands | |
|-----|--------------------------|--|

| | | |
|-----|---|-------|
| 1.4 | Number of years the business has been in operation? | years |
|-----|---|-------|

| | | | |
|-----|---|-------|-------|
| 1.5 | What proportion of your construction work is urban / rural? <i>(Please provide % e.g. 60% rural and 40% Urban)</i> | Urban | Rural |
| | | | |

| | | | | | |
|-----|---|-----------------|------------------|-------------------|------------------|
| 1.6 | Number of projects successfully completed by your business in the past 5 years? <i>(Mark with a cross the most appropriate answer)</i> | | | | |
| | Under 3 projects | 3 to 5 projects | 6 to 10 projects | 10 to 15 projects | over 15 projects |
| | | | | | |

| | |
|-----|--|
| 1.7 | List the development programmes that your company has participated in? <i>(e.g. CIDB programmes, Department of Public Works programmes etc)</i> |
| | |
| | |
| | |
| | |

If NONE, please specify what was the reason?

.....

.....

QUESTION 2: RESPONDENT'S BIOGRAPHICAL DATA

| | | |
|-----|---|-------|
| 2.1 | Age of the respondent (<i>Your age</i>) | years |
|-----|---|-------|

| | | | |
|-----|--|------|--------|
| 2.2 | Sex of the respondent (<i>Mark with a cross the appropriate answer</i>) | Male | Female |
| | | | |

| | | | | |
|--|-------|----------|--------|-----------------|
| 2.3 What is your race group? (<i>Mark with a cross the appropriate answer</i>) | | | | |
| African | White | Coloured | Indian | Other (Specify) |
| | | | | |

| | | |
|-----|--|--|
| 2.4 | What position do you hold in your company? | |
|-----|--|--|

| | | | | |
|---|--------------|---------------|--------------|---------------|
| 2.5 How many years of experience do you have in the construction industry? (<i>Mark the most appropriate answer with an X</i>) | | | | |
| under 3 years | 3 to 5 years | 6 to 10 years | 11 to 15 yrs | over 15 years |
| | | | | |

| | |
|---|--|
| 2.6 What is your highest educational qualification? (<i>Mark the most appropriate answer with an X</i>) | |
| a) No schooling | |
| b) Up to Std 1 / Grd 3 / ABET 1 | |
| c) Std 2 – Std 3 / Grd 4 – Grd 5 / ABET 2 | |
| d) Std 4 – Std 5 / Grd 6 – Grd 7 / ABET 3 | |
| e) Std 6 – Std 7 / Grd 8 – Grd 9 / ABET 4 | |
| f) Std 8 / Grd 10 / NTC 1 | |
| g) Std 9 / Grd 11 / NTC 2 | |
| h) Std 10 / Grd 12 / Matric / NTC 3 | |
| i) Certificate or Diploma | |
| j) Bachelors Degree | |
| k) Post-graduate degree (Hons/Masters/Phd) | |

QUESTION 3: CRITICAL SKILLS

| | | |
|--|----------------------|--|
| <p>3.1 Which of the following skills do you think are lacking in your company? <i>(Mark the most appropriate answer with an X and more than one skill can be marked).</i></p> | | |
| 3.1 | Skills | |
| a | Financial Skills | |
| b | Project Management | |
| c | Business Development | |
| d | Pricing Tenders | |
| e | Administration | |
| f | Technical | |
| g | Record keeping | |
| H | Human Resources | |
| i | Marketing | |

| | | |
|--|----------------------|------|
| <p>3.2 Please provide us your assessment of the following skills that are critical to the success of your company and construction business. <i>(Please present them on a scale of 1 to 7 (with 1 representing the most important to 7 representing the least important).</i></p> | | |
| 3.1 | Skills | Rank |
| a | Financial Skills | |
| b | Project Management | |
| c | Business Development | |
| d | Pricing Tenders | |
| e | Administration | |
| f | Technical | |
| g | Record keeping | |
| H | Human Resources | |
| i | Marketing | |

QUESTION 4: CRITICAL SUCCESS FACTORS (CSF's)

4.1 EXTENAL CRITICAL SUCCESS FACTORS

External Critical Success Factors (CSF's) can be defined as challenges that are outside of the control of the company, and not entirely dependent or influenced by the internal operations of the company.

Please provide us your assessment of the following External factors that are critical to the success of your construction business.

(Please present them on a scale of 1 to 7 (with 1 representing the most important to 7 representing the least important).

| 4.1 | External CSF's | Rank |
|-----|--------------------------------|------|
| a | Competition | |
| b | Inability to get tenders | |
| c | Fraud | |
| d | Access to finance | |
| e | Procurement policies | |
| f | Availability of skilled labour | |
| g | Late payment | |
| h | Laws and regulations | |
| l | Innovation & Technology | |

Other external factors

.....

4.2 INTERNAL CRITICAL SUCCESS FACTORS (CSF's)

Internal CSF's can be described as factors that influence internal success or operation of the organisation. These are the factors that the firm has control over. They need to be identified and dealt with properly for the organisation to succeed.

Please provide us your assessment of the following Internal factors that are critical to the success of your construction business.

(Please present them on a scale of 1 to 7 (with 1 representing the most important to 7 representing the least important).

| 4.1 | Internal CSF | Rank |
|-----|---|------|
| a | Effective management | |
| b | Financial management | |
| c | Lack of resources | |
| d | Lack of skills (Technical, Management, etc) | |
| e | Inability to market | |
| f | Pricing of contracts | |
| g | Fronting of established companies | |

Other internal factors:

.....

.....

Thank you for your participation.

Annexure 5: Turnitin Report

Turnitin Originality Report

Critical success factors for Small and medium size contractors by Thokozani Mchunu
From Critical success factors for Small and medium size contractors (Thokozani)

- Processed on 09-Nov-2015 3:01 PM CAT
- ID: 597531921
- Word Count: 14874

Similarity Index

11%

Similarity by Source

Internet Sources:

0%

Publications:

0%

Student Papers:

11%

sources:

1

11% match (student papers from 19-Sep-2011)