Exploring Challenges Faced by SMMEs in the Construction Industry in Mangaung Metropolitan Municipality of the Free State Province

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A field study submitted to the UFS Business School in the Faculty of Economic and Management Sciences in partial fulfilment of the requirements for the degree

Magister in Business Administration

at the

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University of the Free State
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Date: 14 November 2022

DECLARATION

I declare that the Field Study hereby submitted for the Magister in Business Administration at the UFS Business School, University of the Free State, is my own independent work and that I have not previously submitted this work, either as a whole or in part, for a qualification at another university or at another faculty at this university.

I also hereby cede the copyright of this work to the University of the Free State.

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Name: Ntahle Snowhite Charlotte Khetha

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Date: 14 November 2022

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ABSTRACT

Since the democratic dispensation, the Small, Medium, and Macro-enterprises (SMMEs) have witnessed significant support from the government, which was not available before 1994. The entrepreneurial support and contribution to the development of emerging businesses were informed by the identified roles these businesses played in a country's economy. The promulgation of the White Paper on National Strategy for the Development and Promotion of Small Business in South Africa (1995) contributed to this transformation, which the government saw, fit since millions of citizens live in poverty due to unemployment. In this regard, small businesses, mainly those regarded as SMMEs, play a pivotal role in the mission to address challenges faced by South Africa in absorbing labour, and expanding the economy by penetrating new markets through innovation and creativity. SMMEs are needed to contribute to economic growth, job creation, and equity in South Africa. Small enterprise development in South Africa is envisioned as an engine of employment growth through creating jobs. However, the SMMEs in the construction industry, particularly those in the Mangaung Metropolitan Municipality, is still faced with significant growth challenges.

Therefore, the purpose of this research was to explore growth challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State Province so that the appropriate strategies can be provided to enhance the performance of these SMMEs as far as growth is concerned.

This research followed a quantitative research approach. A self-administered questionnaire (open-ended) was developed to understand these challenges that affect SMMEs in the construction industry. In developing the questionnaire, the supervisors guided the whole process of developing the research instruments, and the Cronbach Alpha test was used to test the reliability and validity of the statements. The approved questionnaires were distributed to 154 participants, all of them SMMEs owners. These participants were selected purposively, which resulted in a 100% response rate.

This study found that 55% of SMMEs in the construction industry show some progress, compared to 45% of those still struggling to show good profit margins or grow in the construction industry. Some reasons are linked to this challenge, such as the unavailability of policies guiding SMMEs to operate sustainably lack of access to government financial support. Moreover, this study found that macro-environmental factors such as crime, corruption, inflation, interest, and labour regulations contribute to the slow growth of SMMEs in the construction industry.

Furthermore, this research found that the lack of managerial skills (72%), a skilled labour force (72%), acceptance of technology (69%), acquisition of marketing skills (66%), access to finance (64%), and networking and convenient location (63%) have the most significant impact. Therefore, these factors are needed to reduce the impact of the challenges facing SMMEs in the construction industry. This study found that factors such as tendering process are among the factors contributing to the failures of emerging SMMEs in the construction industry (68.2%). On the other hand, a lack of cash flow (47.4%), lack of financial management knowledge (50.6%), lack of communication (29.9%), an increase in equipment factor lease prices (48.7%), and an increase in the cost of skilled labour (49.4%) in the industry are also seen as contributing factors.

From these findings, this study recommends key strategies to mitigate the challenges faced by SMME companies in the construction industry in the Mangaung Metropolitan Municipality in the Free State Province. Small to medium enterprises should employ advanced technologies to improve their operations. Technologies offer various benefits to quality and market-related problems. Technologies can also improve small businesses' profitability and sustainability. Small to medium enterprises should improve their participation in municipal incubation contractor programs to mitigate tendering irregularities. These programs can contribute significantly to the success of small businesses in the construction industry. Regarding cash flow financing, it is advised that contractors create a thorough financial plan with efficient controls based on the study's findings to assure plan compliance and prevent cross-financing of several projects.

A financial strategy must be created and followed to provide adequate financial management, which will then ensure cash flow stability and, as a result, improve project performance.

Given the role of government as stipulated in the White Paper on National Strategy for the Development and Promotion of Small Business in South Africa (1995), the government must develop policies and strategies to assist small to medium regional enterprises and access markets, equipment, and research and development services. The government and small businesses must work hand in hand with non-governmental organisations to improve sustainable development challenges. Policy formulation and the implementation of access to financial resources can be made easier for SMMEs through the intervention of the government and other stakeholders. Lastly, this study recommends that local authorities be mandated to create a conducive environment for SMMEs' growth, increase business support and reasonably extend tender support services to SMMEs, and improve sustainable development initiatives or policies.

Keywords: Small, medium, micro-enterprises, construction industry, economic development, Mangaung Metropolitan Municipality; Free State Province, South Africa.

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B-BBEE	Broad-Based Black Economic Empowerment
CCMA	Commission for Conciliation, Mediation, and Arbitration
CIDB	Construction Industry Development Board
GNU	Government of National Unity of South Africa
IT	Information Technology
JSE	Johannesburg Stock Exchange
POPI Act	Protection of Personal Information act
SMME	Small, Micro, and Medium Enterprise
SPSS	Statistical Package for Social Scientists
SA	South Africa
SOPA	State of the Nation Address
StatsSA	Statistics South Africa
QES	Quarterly Employment Statistics

CHAPTER 1: BACKGROUND AND INTRODUCTION

1.1 INTRODUCTION

The South African Department of Small Business Development defines a small enterprise as a *"Separate and distinct business entity, together with its branches or subsidiaries, if any, including cooperative enterprises, managed by one owner, or more carried out predominantly in any sector or subsector of the economy,"* (Republic of South Africa, 2019:1). Furthermore, to classify a business entity as a small enterprise, it must meet the criteria to be classified as a micro, a small, and a medium enterprise, by certifying the number of employees, as well as the level of turnover (Republic of South Africa, 1996; 2003; 2004).

Before 1994, the South African (SA) government did not support small enterprises sufficiently (Mosala, Venter & Bain, 2017). However, the democratically elected government post-1994 identified the importance of the SMME in the country's economy. According to the White Paper on the National Strategy for the Development and Promotion of Small Business in SA (1995), the Government of National Unity of South Africa (GNU) has since placed priority on issues of economic empowerment and growth and stated that with '*millions of South Africans unemployed and underemployed, the government has no option but to pay full attention to the fundamental task of creating and generating sustainable and equitable growth,'* (Republic of South Africa, 1995).

In this regard, SMMEs play a crucial role in the mission to address challenges faced by South Africa in absorbing labour and expanding the economy by penetrating new markets through innovation and creativity. SMMEs are the vehicle government needs to advance the challenges of job creation, economic growth, and equity in South Africa (Bvuma and Marnewick, 2020). Small enterprise development in SA is envisioned as an engine of employment growth through creating jobs (Vuba, 2019). However, the Global Entrepreneurship Monitor Report (2017) reports that South Africa lags compared to other developed countries regarding entrepreneurial activities. Given this nature of business, in 2020, South Africa reported a huge 14% decline of SMMEs in quarter 3 (2020Q3),

constituting 290 000 (11%) from 2.65 million to 2.36 million (The Small Enterprise Development Agency [SEDA], 2021). Furthermore, 90% of the jobs were lost in the SMMEs sector by then, and these businesses employed 10 058 355 million in 2020Q3 compared to 15 106 060 in 2020Q2 (SEDA, 2021). From these numbers can be argued that this is causing distress, considering that the critical focus of South Africa's development strategy is to promote and facilitate the growth of jobs to alleviate poverty and to reduce the number of government grant recipients, as re-emphasised by the President of South Africa (Ramaphosa, 2020).

This treatise begins with an introduction, followed by a review of key literature (background of the study) that explains the overall understanding of the construction industry in South Africa and SMMEs in the construction industry. This chapter further presents the research problem, objectives, and research questions. Moreover, this chapter discusses the introduction to the research design and methodology, the demarcation of the study, ethical considerations, and chapter layout.

1.2 BACKGROUND OF THE STUDY

1.2.1 Construction industry in South Africa

The construction sector is of extraordinary strategic significance for South Africa, estimated to be R11,1 billion in 2020, which shows a huge decline of 6,1% compared to R13,4 billion in 2017 on construction works and related activities (StatsSA, 2022). Decreased public infrastructure investment has taken a heavy toll on construction enterprises due to the economic meltdown, which resulted in 90% job losses (StatsSA), 2021). The decline in the construction industry has been exacerbated by the market in some instances (The South African Construction Report, 2019).

Metelerkamp (2018) outlines the global scenario and group of factors affecting the South African economy, with attention drawn to the United States of America's (USA) imposition of tariffs, which have a severely adverse, undulating effect on the global economy (Petterson, 2018). Metelerkamp (2018) further explains that although there was an appearance of caution across the country in the performance of the first quarter of 2018,

the construction sector remains consistently regarded as those entrusted with "*planning, design, construction, maintenance, and eventual demolition of buildings and the common infrastructure*" (Chun, Hwang & Byun, 2015), at the same time, this industry plays a significant role a critical role in the development of the country as far as the generation of constructed physical facilities and in employment creation is concerned (Arantes, Ferreira & Costa, 2015).

As a service industry, construction gains its ideas (inputs and outputs) from various sectors (Pillay and Mafini, 2017). At the end of 2020, the total employment in the construction sector stood at 473 214 compared to 592 12 in 2017 (StatsSA, 2022). These numbers show a significant decrease of 7,2% over employment. It can be argued from this available data that a significant decline is from the following construction services (StatsSA, 2022):

- construction of civil engineering structures with – 89 010 jobs,
- construction of buildings with – 17 972 jobs,
- construction by specialist trade contractors with – 10 480 jobs; and,
- Other building installations with – 8 505 jobs.

The abovementioned discussions show that SMMEs in the industry constitute 14.3% (StatsSA, 2021). This work is out of sync with the government drive because the chance laid out on profitable configuration is targeted at large construction establishments, yet SMMEs overpower the assiduity. For this reason, the study aims to understand the underlying challenges SMME companies face in the construction industry in the Mangaung Metropolitan Municipality.

1.2.2 The relationship of SMMEs in the construction industry in South Africa

SMME enterprises in national building and economic development are essential in the South African economic debate. The role of small businesses is undebatable as a significant contributor to economic growth. Small businesses are recognised even in first-world economies such as the United Kingdom and the United States of America and

contribute an estimated one-third of industrial employment. An estimated 95.8% of businesses in South Africa are small, medium, or micro-enterprises (66.9% classified as informal; and 28.9 as formal) (Schirmer and Visser, 2021). The sector is the most significant contributor to the economy as safe-rate employment creation and absorption of previously retrenched people from both public and private sectors, respectively (Bvuma et al., 2020).

Despite the decline of the involvement of SMMEs in economic contribution and development, the South African government still identified the SMME sector as the means to attain accelerated economic and developmental growth (Krüger, Dickason, and Meyer, 2020). To draw attention to the gravity of the decline in the industry, in March 2019, the South African construction industry was rocked by news of Group Five's bankruptcy after 45 years of trading on the Johannesburg Stock Exchange (JSE). The *Daily Maverick* (2019) indicates that "*The big five construction companies were worth about R60 billion in total a decade ago in 2009, but in March 2019, when filling for business rescue, they were worth about R15-billion*."

The Managing Director of Economic Development Solutions, Janine Espin, explains that there has been a significant change under prominent construction players as market forces changed and SMME contractors stepped up to contribute more to the sector (2019). According to Krüger et al. (2020), the South African government identified the SMMEs sector as the means to attain accelerated economic and developmental growth. This further concurs with Espin (2019) that representation in the industry is the future of the construction industry in the country and that development is vital; not only to meet the requirements of the Broad-Based Black Economic Empowerment (B-BBEE) but or the growth of the SMMEs in the construction industry (Espin, 2019). As restructuring occurs within the large contractors, those retrenched workers search for alternatives, and the same applies to the construction customers (Krüger et al., 2020).

1.3 PROBLEM STATEMENT

According to Ofori, Ali Lin, and Tjandra (2012), the growth and development of construction companies in the lower grades of the CIDB is a critical component globally because a strong SMMEs base can produce quality infrastructure. In the South African construction industry, SMMEs face recurring challenges not limited to a lack of capital due to difficulty accessing finance and a lack of experience. More importantly, they lack exposure to general management and business training business sustainability in their market share (Tubane, 2017).

Various scholars have discussed the reasons for business failure in construction SMMEs (Eke, Aigbavboa, and Thwala, 2015; Tubane, 2017; Vaitla, Daikwad, Reddy, and Yoon, 2022). Numerous solutions have been developed to address the growth of SMMEs in the construction industry. Yet, one gap and area has not been adequately addressed, such as its growth, given its pivotal role in economy development. The construction sector in South Africa is of great strategic importance, with an estimated total expenditure of more than R430.2 billion (SEDA (2021). However, the primary construction industry benefits from government financial relief schemes, according to the South African Construction Report (2019). For the past ten years, the SMMEs have shown an economic decline in turnover, weakened with a notable shift in the construction industry with 14%. This problem has also been advocated in the Commission for Conciliation, Mediation, and Arbitration (CCMA) annual report of 2018/19 that the outlook for the construction industry is depressing, as it continues to register significant losses, resulting in 3 584 retrenchments. Thus, adding to South Africa's high unemployment rate (CCMA report, 2020).

It is evident from the literature that emerging construction companies in South Africa play an essential role in the economy yet are still confronted with several challenges in the third decade of democracy. Within the focus of this study, the challenges facing SMMEs in South Africa have been studied (Eke et al., 2015; Anugwo, Shakantu, Saidu, and Adamu, 2017; Tubane, 2017), but not SMMEs in the construction industry in Mangaung Metropolitan Municipality. The available literature shows that while the opportunities for

SMMEs are growing in various industries, at the same time, there is a growing concern over the slow growth of SMMEs in the construction industry. These challenges include access to relief schemes and a lack of business acumen and management skills, which confound their ability to grow (Espin, 2019). These challenges are not unusual for SMMEs in the Mangaung Metropolitan Municipality.

For this reason, the study aims to understand and explore underlying challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State Province.

1.4 RESEARCH AIM AND OBJECTIVES

1.4.1 Research aim

The main aim of this study is to explore challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State Province.

1.4.2 Research objectives

- Identify the challenges contributing to the failure of SMMEs in the construction industry in the Mangaung Metropolitan Municipality.
- Identify barriers contributing to the slow growth of SMMEs operating in the construction industry.
- Investigate what strategies are employed by SMMEs in the construction industry to counter the challenges they are facing.

1.5 RESEARCH QUESTIONS

For the researcher to fully achieve the study objectives, the following research questions were framed:

- What are the challenges facing SMMEs in the construction industry in the Mangaung Metropolitan Municipality?
- What barriers contribute to the slow growth of SMMEs operating in the construction industry?

- What strategies are employed by SMMEs in the construction industry to counter the challenges they face?

1.6 PRELIMINARY LITERATURE REVIEW

The significance of construction derives from its part in the generation of constructed physical installations and employment, which, in turn, play a critical and largely visible part in the development of a country (Arantes et al., 2015). According to the CIDB report (2020), the construction sector encompasses all building and civil works. Dang and Pheng (2015) state that there are three situations to define construction, "*at one minimum, construction is appertained to as a profitable exertion that involves the entire construction process from producing raw and cultivated structure accoutrements and factors and furnishing professional services similar as design and design operation, to executing the physical work on point*."

In this view, construction is a profitable exertion across all three profitable sectors; the primary sector involves the birth of natural coffers (Dang et al., 2015). The secondary sector involves the manufacturing structure of accoutrements and factors, including the metamorphosis into finished structures (Dang et al., 2015). The tertiary sector provides consultancy services similar to design operation, design, and structural engineering, as stated by (Dang et al., 2015).

The significance of construction derives from its part in the generation of constructed physical installations and employment, which, in turn, play a critical and largely visible part in the development of a country (Arantes et al., 2015). At the end of Q1 2018, the total employment in the construction sector stood at 609 000 people in the formal sector, with civil engineering construction contributing 60% of the bulk and 30% from the building sector, according to StatsSA Quarterly Employment Statistics (QES, 2019).

In terms of composition, at least 78 construction enterprises are composed of small- and medium- scale contractors (Rust et al., 2013). This composition is out of sync with

government enterprises because the chance spent on a profitable structure is targeted at large construction enterprises. Yet small and medium enterprises dominate the assiduity.

It is evident from the literature that emerging construction companies in South Africa play a vital role in the economy and are still confronted with several challenges in the third decade of democracy. StatsSA highlights that the influence of small businesses on turnover is weakened by a notable shift in the construction industry, with 14.3% (StatsSA, 2021). The CCMA annual report 2018/19 states that the outlook for the building and construction industry is depressing as it continues to register significant losses and retrenchments (CCMA, 2020). It further states that the construction sector recorded 3 584 employees facing retrenchment, adding more to South Africa's 46.2%% unemployment rate (StatsSA, 2022). Therefore, the study aimed to understand the underlying challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State province.

1.7 RESEARCH METHODOLOGY AND DESIGN

1.7.1 Research methodology

According to Creswell (2013), two distinct types of research philosophical paradigms can be used to collect data: positivistic and phenomenological. Rajasekar, Philomination, and Chinnathambi (2013) define research philosophy as a systematic way to solve a particular problem. Research methodology is a set of procedures used to describe, explain and predict phenomena. Zukauskas et al. (2018) summarises research philosophy as creating a research hypothesis, its comprehension, and its nature. Two types of research, qualitative and quantitative, influence research methodology (Rajasekar et al., 2013). For this research study, the quantitative research approach was used.

To address the primary objective of this research: *to explore the challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State Province*, the quantitative method was used as a method of data collection. The appropriateness of this approach was informed by the fact that it was collecting data using a structured self-administered questionnaire: which in this research:

- is less costly,
- data collection and analysis are quicker.

Moreover, the quantitative approach was chosen because it allows a researcher to cover a larger sample, as this research adopted a sample size of 154 SMMEs in the Mangaung Metropolitan Municipality.

1.7.2 Research design

the research design falls within what has come to generally be referred to in the literature as the quantitative paradigm. Describing this approach, Babbie and Mouton (2009: 53) document that the quantitative paradigm is a "*philosophical approach which is quite popular in the social sciences research*." This research design approach exists independently of the participants' opinions and feelings. Akhtar (2016) explains a research design as the structure of research. It is the 'glue' that holds all the elements in a research project together; in short, it is a plan for the proposed research work. In simple terms, it is a plan for a study.

A research design aims to answer specific research questions using well-developed principles of scientific inquiry. During the research process, the researcher attempts to answer the research questions that triggered the need to conduct the study (Creswell, 2013). The research design, therefore, articulates which data are required, which data collection methods will be used to collect information, and how all these will answer the research questions (Creswell, 2013). The nature of the present research can be classified as exploratory or descriptive (Andrew, Pedersen, & McEvoy, 2011).

Exploratory studies aim to connect ideas to understand causes and effects. This helps to provide insights into an understanding of the problem faced by the researcher (Andrew, Pedersen, & McEvoy, 2011). On the other hand, descriptive research mainly describes functions and characteristics of events, persons, or situations (Andrew et al., 2011). The research design for this study is described below:

- **Primary data**: As indicated in the previous section, primary data was collected through structured questionnaires (self-administered questionnaires). The individuals selected for this type of data were SMMEs owners, particularly those in the construction industry. The quantitative data is collected from the first-hand experience of SMMEs owners. In other words, this data has not been published anywhere. For that reason, it is considered reliable and objective. The primary data for the study is necessary and sufficient to cover the study's primary objective, as outlined in section 1.4.

- **Secondary data**: In addition to primary data collection, secondary data will be collected from books, journals, periodicals, and various references in combination with the primary data in some instances.

1.7.2.1 Quantitative research

A quantitative research approach can collect numerical data and test theories by investigating relationships among variables and measuring those variables using mathematical procedures (Bryman & Bell, 2011). Apuke (2017), however, further postulates that quantitative research, as the name suggests, deals with quantifying and examining variables for results to be revealed. He continues to say that quantitative research involves using statistical techniques to analyse numerical numbers. Furthermore, Williams (2011) interjects that quantitative research begins with a problem statement. Next follows the generation of assumptions, literature review, and quantifying the data. Quantitative research involves the application of strategies such as experimental procedures and surveys to collect data, using data collection instruments to provide statistical data (Williams, 2011).

The quantitative research approach was chosen over the qualitative approach for the following reasons:

- Data collection and analysis are faster since they follow a structured questionnaire.

- It allows for a high sample size since it uses structured questionnaires that enable the researcher to cover many SMMEs in the Mangaung Municipality.
- It enables the researcher to establish relationships between particular variables/questions of interest. For example, during the research, we could explore the factors leading to the failure of an emerging small construction business in the region. This would eventually help to determine the critical success factors thereof.

The quantitative research method deals with the interrelated constructs of analysing data, which help to explain a phenomenon between two or more variables (Apuke, 2017).

1.8 POPULATION AND SAMPLING

1.8.1 Target population

According to Bryman et al. (2011), the term 'population' refers to the total sum of all units with specified characteristics such as people, nations, organisations, cities, regions, etc. The target population for this study consists of 250 registered construction SMMEs in the Mangaung Metropolitan Municipality in the Free State Province, as obtained from the Free State Department of Economic Development and Small Enterprise Development Agency database.

1.8.2 Sampling

Bryman et al. (2011) define sampling as *"an element of data collection."* The study population largely determines the sampling techniques. The minimum number of respondents or participants needed to detect statistically significant improvements may be specified as the correct sample size (Burrmeister & Aitken, 2012). The research study only considered 154 SMME contractors within the Mangaung Metropolitan Municipality that have been in business in the last five years. The research aimed to explore the challenges faced by contractors from the start-up phase to the growth phase in the construction industry within the Mangaung Metropolitan Municipality.

The sampling method used in this study is a purposive sampling strategy with only the SMMEs in the construction industry. The specific groups targeted for the study are SMMEs in the construction industry within the Mangaung Metropolitan Municipality of the Free State Province. The selected representatives from the organisations who completed the questionnaires were business owners and managers in construction companies. The researcher assumed that the representatives were directly involved in the day-to-day running of the business and would answer the questions honestly and candidly.

1.9 DATA COLLECTION

According to Kabir (2016), data collection is the process of gathering and measuring the gathered information methodologically and systematically, resulting in answers to the stated research problem, with the hypothesis being revealed. He further says that the goal of data collection is to obtain quality data, which then plays a crucial role in ensuring that the integrity of the research study is guaranteed.

1.9.1 Types of data

The types of data are categorised into two components, qualitative and quantitative. For this study, data were collected quantitatively. In other words, contrary to qualitative data, quantitative data are numeral by nature and can be calculated mathematically (Kabir, 2016). Quantitative approaches use surveys and questions in a standardised manner. One of the advantages of this type of data is that it is easier and not expensive to implement and mainly relies on random sampling and structured data collection (Kabir, 2016). Typical quantitative data collection techniques include experiments, observation, and recording and administering of questionnaires.

The quantitative research method was used in this study; therefore, a standard questionnaire with close-ended questions was designed. The self-completion questionnaire method was selected because it is easy to complete, saves participants and researcher time, encourages mass participation in a short period of time, and requires minimal resources to administer and collect data. A 5-point Likert scale, ranging from ‘strongly disagree’ to “strongly agree,” was applied to the close-ended questions. It

consisted of several statements from which respondents could indicate the degree to which they agreed or disagreed with the statements. The questionnaire took approximately 10 minutes to complete. The questionnaires were e-mailed to the SMME owners and, where possible, hand-delivered to ensure that those SMMEs without access to e-mail or the internet could receive and return the questionnaires.

1.10 DATA ANALYSIS

Data analysis involves applying various statistical techniques, which offer the best way of drawing inductive conclusions from data and distinguishing or characterizing any effects or natural phenomena from arbitrary oscillations (Ali & Bhaskar, 2016). The Statistical Package for Social Scientists (SPSS) was employed to analyse all primary data collected through self-administered questionnaires. These tools were selected due to their ability to present data results in a format that is easily understandable by most people. Before analysis, data coding of responses and analysis was done. The data were coded to SPSS software as the raw data from questionnaires to analyse the data obtained easily.

1.11 ETHICAL CONSIDERATIONS

In recent years, ethical considerations have become integral to the research process. In the words of Louw et al. (2014: 262-263), *"Ethics is a matter of integrity on a personal level, but their implications go much further than the individual. A researcher who acts with integrity adheres to ethical principles and professional standards essential for sensibly practicing research, even in the face of adversity. In research, specifically, ethics are crucial because they potentially affect all stakeholders in research."*

All participants were guaranteed confidentiality through the request letter, and all participants who decided they would not be willing to complete the questionnaire could do so. As such, no parties would be coerced into participating in the research.

Ethical clearance letters detailing the purpose and objectives of the research were obtained from the University. These letters were accompanied by a consent form for each participant to sign and send back to the researcher. The permission letter clearly stated that the information obtained would only be used to complete the research proposal and

that no information about the participants would be disclosed to the public. Finally, no information or citation would intentionally or deliberately be falsified by the researcher, who would recognise, at all costs, the ideals of the participants used in completing the research proposal.

1.12 CHAPTER LAYOUT

This thesis is organized into five chapters. The outline of each is presented below:

CHAPTER 1: This chapter overviews the introduction, study background, problem statement, aim and objectives, research questions, preliminary literature review, research methods and design, delimitation, and ethical considerations.

CHAPTER 2: This chapter discusses the literature that focuses on the international and South African perspectives on the construction of SMMEs.

CHAPTER 3: This chapter details the research design and the study's method.

CHAPTER 4: This chapter presents quantitative data results and analysis through tables, figures, or graphs, as well as the findings and interpretation of qualitative research.

CHAPTER 5: This chapter presents recommendations from the research findings, including opportunities for further research.

1.13 CHAPTER SUMMARY

Construction businesses are considered the foremost possible drivers of job formation, equality, and innovation in South Africa. Emerging construction companies have the potential to uncover new opportunities to create jobs as well as be a route to economic empowerment. However, the South African construction industry is faced with the certainty of losing emerging construction companies. The research report in this study will outline the challenges SMMEs in the construction industry of the Mangaung Metropolitan Municipality of the Free State Province face.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews the literature from publications on topics related to the research problem. While there is not sufficient literature on the research focus, which is SMMEs in the construction industry, particularly in South Africa, this research borrows some ideas from studies conducted on SMMEs in a general context due to such a theoretical deficit. Therefore, relevant information was utilised from published journals, textbooks, and databases such as Emerald. The chapter covers the role of SMMEs in the construction industry on economic growth and the risks that SMMEs in that field face. Critical success factors for SMMEs are also discussed.

2.2 THE ROLE OF THE CONSTRUCTION INDUSTRY IN ECONOMIC DEVELOPMENT

The economy's construction industry oversees organizing, designing, erecting, maintaining, and eventually demolishing buildings and other types of infrastructure (Chun et al., 2015). The significance of the construction is derived from its contribution to the creation of built physical facilities and employment, both of which are essential and highly visible components of a nation's growth (Arantes et al., 2015). According to the CIDB (2020), the construction industry includes all varieties of building and civil activities. According to Dang et al. (2015), there are three levels at which construction can be defined. At the one extreme, construction is referred to as an economic activity that involves the entire construction process, from producing raw and manufactured building materials and components to offering professional services like design and project management to carrying out the actual work on the site (Eke et al., 2015).

According to this perspective, the economic activity of construction spans all three economic sectors: the primary sector, which involves the extraction of natural resources; the secondary sector, which involves the production of building materials and components and the transformation of these materials into finished buildings; and the tertiary sector,

which involves the provision of consulting services such as project management, design, and structural engineering.

The significance of the building is derived from its contribution to the creation of built physical facilities and employment, both of which are essential and highly visible components of a nation's growth (Arantes et al., 2015). At the end of 2018, 609 000 people were employed in the official construction sector, with civil engineering construction accounting for 60% of the total and the building sector accounting for 30% (StatsSA, 2019). However, in 2021, the construction industry saw a decline of 3.6%. This is expected to improve in 2022, with a 9.1% expansion, according to KH Plant (2022).

While the available research on SMMEs shows that government spending on economic infrastructure targets major construction firms, the industry is dominated by small and medium-sized businesses (Tubane, 2017). Therefore, this composition is at odds with government intentions (Anugwo et al., 2018). The literature makes it clear that South Africa's developing construction enterprises are crucial to the economy and continue to face difficulties in the third decade of democracy (Abor & Quartey, 2010; CIDB, 2013, 2020; Aigbavboa & Thwala, 2014). According to The South African Construction Report (2019), the strategic importance of the building sector in South Africa is demonstrated by the fact that the country spent more than R430.2 billion on construction works and related activities in 2018.

2.3 GEOGRAPHY OF THE FREE STATE

South Africa is a country located in the southern part of Africa. It comprises nine provinces: the Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, and North-West and Western Cape. South Africa is a developing country. According to the South African International Institute Affairs (SAIIA) report of April 2019, South Africa established itself as the leading African voice in the Southern Hemisphere (SAIIA, 2019). The statement is supported by the vast visible involvement of the country in multilateral fora like the United Nations, G20, BRICS, India-Brazil-South Africa, and the World Trade Organisation.

South Africa has continuously acted as a leading agent in the cultivation of world peace and safety. It has tirelessly made efforts to address problems emerging on the African continent, thus acting as a leading force in the development and progress of the African continent at large (SAIIA,2019). According to the World Trade Organisation, which South Africa has been a member of since 1 January 1995, South Africa has continued to play a vital role within the World Trade Organisation through its valuable commodities. South Africa is the 36th-largest export economy in the world.

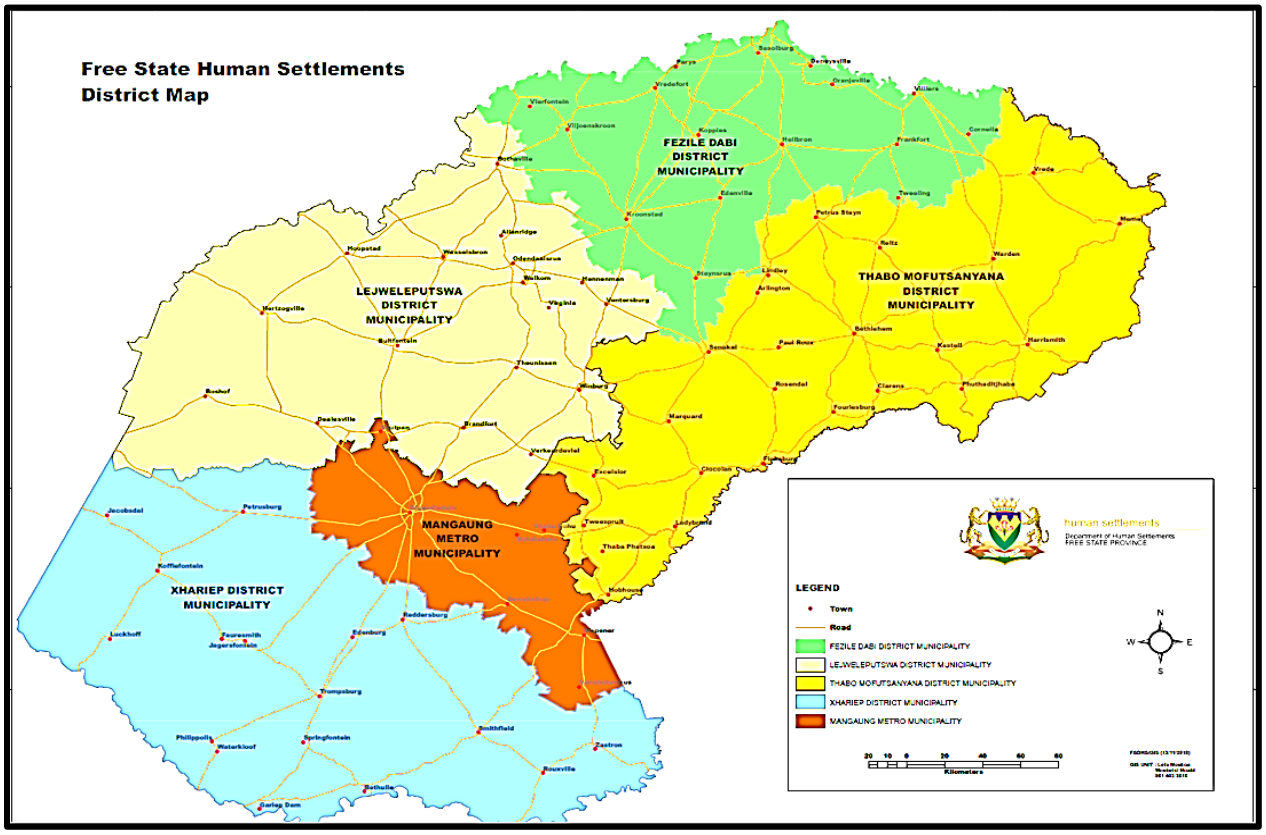


Figure 2.1: Geographical outlook of Free State District Map

Source: Free State Human Settlements (n.d.)

Of the nine provinces, the Free State Province is geographically situated in South Africa, bordered by the Eastern Cape, Gauteng, KwaZulu-Natal, Mpumalanga, Northern Cape, and North-West Provinces, as well as Lesotho. The highlight of the province is the mountainous landscape, the goldfields, broadly disseminated towns, and the agricultural sector. The Free State Province comprises one Metropolitan Municipality (Mangaung

Metropolitan Municipality) and four district municipalities: Xhariep District, Thabo Mofutsanyana, Lejweleputsoa, and Fezile Dabi.

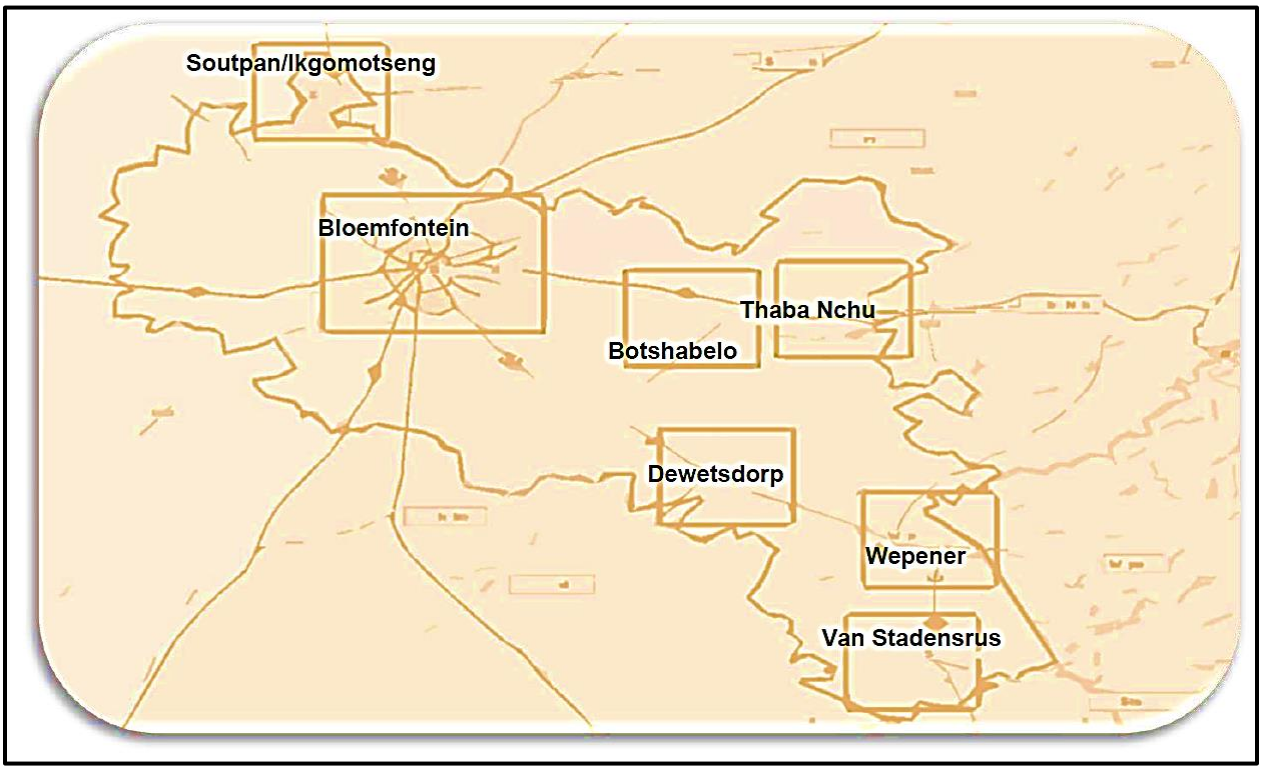


Figure 2.2: Mangaung Metropolitan Municipality Spatial reflection

Source: Mangaung Metropolitan Municipality – Draft Integrated Development Plan 2022/2027 (2022:7)

The Mangaung Metropolitan Municipality as the focal point consists of seven (7) towns, namely Bloemfontein, Botshabelo, Dewetsdorp, Soutpan, Thaba Nchu, Van Stadensrus, and Wepener (Mangaung Metropolitan Municipality – Draft Integrated Development Plan [IDP] 2022/2027, 2022).

2.3.1 Population

The South African (StatsSA) mid-year report estimated the South African population at 59.62 million in 2020. The report estimated that 51.1% (30.5 million) of the population were female. The report further indicated that black people were in the majority with 81% (48.2 million), followed by the Coloured population at 5.2 million, the white population at

4.7%, and the Indian/Asian population at 1.5 million. The overall rate of population growth in South Africa increased between 2019 and 2020 by 1.4% (StatsSA, 2019). The Free State Province is the third-largest province in South Africa, approximately 129 825 km² (Machemedze, Kerr & Dorrington, 2020). Bloemfontein is the province's capital city and the country's judicial arm. The province has one metropolitan municipality, the Mangaung Metropolitan Municipality, and four district municipalities subdivided into 18 (eighteen) local municipalities (IDP, 2022).

2.3.2 Economy

Due to poor health results and emigration, the Free State is falling behind the majority of other provinces and has lost key workers. On the national average, there are significant rates of unemployment and poverty. Just one-third of persons who are of working age are employed. The Free State is a landlocked, centrally located area without readily apparent regional advantages and has a faltering economy. After the Northern Cape, it makes up the second-smallest portion of South African GDP. Agriculture, mining, and industry comprise the Free State Province's economy. About 90% of this province is cultivated to produce crops, earning it the nickname "the breadbasket of South Africa" (Sebeho, 2017). About 34% of South Africa's total maize production, 37% of its wheat, 55% of its sorghum, 33% of its potatoes, 18% of its red meat, 30% of its groundnuts, and 15% of its wool are produced in the Free State Province (Ogunkoya, 2014).

The province is the fifth-largest producer of gold in the world, accounting for 20% of global gold production, with mining being the primary industry (OECD, 2012). Most of the silver produced in the nation comes from gold mines in the Free State, and as a by-product, significant amounts of uranium present in the gold-bearing conglomerates of the goldfields are recovered. Due to Sasol's massive synthetic fuel business, it is a chemical sector leader (OECD, 2012). The province has had difficulty replacing its reliance on natural resources or strengthening connections between the primary and secondary industries, except for the petrochemical industrial base in Sasolburg. The low-skilled worker population now has fewer job options and is leaving rural regions and townships due to the transition from primary sector employment.

2.4 SMMES DEFINED

Small businesses are divided into four categories by the *South African National Small Business Act 102 of 1996* (RSA, 1996): micro-enterprises, including survivalist firms; very small enterprises; small enterprises; and medium enterprises. The words SMME and SME are interchangeable in South Africa. The definition of SMMEs differs from nation to nation. The distinction between these groups is based on the size of the companies. To define SMMEs' research and development, the number of employees per firm and the turnover bands may be combined (RSA, 2016). A "*separate and distinct business entity, together with its branches or subsidiaries, if any, including cooperative enterprises, managed by one owner or more predominantly carried out in any sector or subsector of the economy*" is what the South African Department of Small Business Development (2019) defines as a small enterprise.

In contrast to Vietnam, where a headcount of less than 200 (three hundred) qualifies as an SMME, most European nations and the United States define SMMEs as having less than 500 (five hundred) manpower. Egypt defines SMMEs as having a headcount of between five and fifty employees (El-Sady, Ahmed & Hamdy, 2022; Masroor & Asim, 2019). These variations demonstrate how SMME structures fluctuate among nations, even though the World Bank (2015) typically classifies registered enterprises with less than 250 employees as SMMEs (Ardic, Mylenko & Saltane, 2011). Small and medium-sized businesses can employ unskilled workers and foster and develop entrepreneurial abilities due to their intrinsic qualities (Smit & Watkins, 2012).

2.5 THE ROLE OF SMMES IN THE CONSTRUCTION INDUSTRY IN ECONOMIC DEVELOPMENT

The available literature acknowledges the significance of the role of small and medium-sized businesses, particularly those in the construction field, in nation-building and economic growth (Senzile, 2013). There is little doubt that small businesses play a significant role in economic progress because 90% of companies in South Africa are considered small, medium, or micro-firms (Masama & Bruwer, 2018). The sector that contributes the most to the economy is also the one that absorbs previously laid-off

workers from the private and public sectors at a steady rate of employment creation. The South African government (Watson, 2009) has selected the SMME sector as the method to achieve quicker economic and developmental growth; hence, the introduction of the Skills Development Act no. 97 of 1998 (RSA, 1998) with the primary aim to improve skilled workforce competency, as well as alleviating unemployment in the country (Tubane, 2017).

2.5.1 SMMEs in the construction industry in developing countries: The case of Ghana and Kenya

Given that SMMEs in the construction industry plays an important role in developing the country's economy, the available research shows that, in most cases, there is a prevalent lack of risk management strategies and processes in place in SMMEs in the construction field (Chileshe, 2012).

This gap is available in South Africa and developing countries such as Ghana and Kenya. In Ghana, the available research shows that SMMEs in construction lack the relevant skills required by the sector (Chileshe, 2012). This practical gap in construction entities lacking project management training has been argued to be necessary for the employees to learn relevant project management skills. At the same time, it has been alluded to in the literature that project management practitioners should establish consulting firms that provide expert assistance and advice to SMMEs in the construction industry as far as the risk management processes are concerned (Chileshe, 2012). This gap also is identified in this research as one of the critical challenges impacting the growth of SMMEs in the construction industry in South Africa.

While it has been emphasized in this study that SMMEs are the main contributors to the country's economy, especially from a job creation perspective, Kenya is not exceptional from this narrative. Although SMMEs in the construction industry face many challenges that always hamper their growth, this type of business in Kenya is still considered a contributor to employment and poverty alleviation. It boosts the country's GDP (African Review of Business and Technology. 2017). This narrative is supported by a recent

survey conducted in Kenya, which shows that SMMEs in Kenya constitute 98% of all business in the country and 30% of jobs are created by SMMEs annually, which make up 3% of the country's GDP (African Review of Business and Technology. 2017). In 2014, Kenya conducted a survey that revealed that 80% of the 800 000 jobs created in that year came from the informal sector, which in Kenya is dominated by SMMEs (African Review of Business and Technology. 2017).

Although Kenya shows much progress in the role of SMMEs in construction entities, at the same time, these entities are faced with significant challenges. In Kenya, SMMEs are faced with limited resources that have a negative impact on their growth to become large entities (Nyarku and Oduro, 2017. While many constraints hamper the growth of SMMEs in Kenya, accessing funding is the main challenge (Benedict, Gitonga, Agyeman, and Kyei, 2021. The existing literature shows that 2.2 million SMMEs contribute to the economy, of which 11% are not registered (In-On Africa [IOA], 2018). These businesses still struggle to receive credit from financial institutions such as the banking sector, while others have not received government assistance (IOA, 2018).

Due to the nature and perception that SMMEs are high-risk, in most cases, the financial institution requires too much information from SMMEs as part of credit accessibility and lending requirements of various formal lending institutions, which results in SMMEs opting for borrowing costs (Tubane, 2017). Thus, SMMEs, in this case, resorted to using their savings or raising funds from external sources such as friends, relatives, or families (Tubane, 2019). On the other hand, SMMEs are constrained to credit accessibility through their suppliers because of their lack of creditworthiness. The accessibility and constraints of funding of SMMEs in Kenya are like those experienced by SMMEs in South Africa, particularly in the construction industry.

2.5.2 SMMEs from South Africa's perspective: An overview

Internationally, as seen by the literature between industrialized and developing nations, the importance of the SMME sector is acknowledged. Tiny businesses were divided into four categories by the *South African National Small Business Act 102 of 1996* (RSA,

1996): micro-enterprises, including survivalist firms; very small enterprises; small enterprises; and medium enterprises. The future and economic prosperity of South Africa, a developing nation aiming for economic progress, depend more on encouraging the growth and development of small enterprises in both the official and informal sectors. With a current employment rate of only 29%, the South African government has prioritised the SMME sector for its potential to create jobs and reduce the country's high unemployment rate. Between 52% and 57% of the Gross Domestic Product of South Africa is produced by SMMEs (SEDA, 2016). More than 70% of South Africans work in the small business sector, according to Bowler and Dawood (2007), and small company ventures account for around 80% of all new job prospects. According to Van Scheers (2011), the small-company sector is *"a crucial component in fostering and accomplishing economic growth and development and the broad generation of wealth and employment."*

Despite the significant contribution the SMMES in the construction industry provide to the economic development and prosperity of South Africa, these small businesses encounter difficulties that impede their expansion (Senzile, 2013). According to Bureau for Economic Research (2016), 70% and 80% of small firms in South Africa fail, and those in construction struggle to grow due to the lack of financial accessibility (Senzile, 2013). Understanding the difficulties that South African construction companies encounter (Senzile, 2013) is crucial. The acronym SMME stands for Small, Medium, and Micro-Enterprises and refers to the separate cells of Micro, Very Small, Small, and Small and Medium-sized firms in South Africa (Republic of South Africa, 1996). The various SMME classifications and descriptions are listed in Table 2.1 below.

The *National Small Business Act no. 102 of 1996* (Republic of South Africa, 1996) amended the Schedule of the Small Enterprise Definition based on the new turnover threshold values, the number of employees, and the size or class category.

Table 2.1: Categories of SMMEs

Category	Description
Micro	● Informal – no license, formal business premises, or labour legislation. ● Employs 1 to 5 employees, which in most cases is the owner and family.
Very small	● Operates in the formal economy and has access to technology. ● Employs 10 to 20 employees, depending on the industry.
Small	● More established than very small enterprises operate in the formal economy and are registered. ● Employs a maximum of 100 employees.
Medium	● A decentralized management structure characterizes enterprises. ● Employs 100 to 200 employees, depending on the industry.

Source: RSA (1996)

This current study is based on Senzile's work in the field (Senzile, 2013) to understand the challenges that hinder the growth of SMMEs in the Mangaung Metropolitan Municipality. The scholar found that SMMEs in the construction industry plays a significant role in economic development. Yet, they still face various issues such as financial constraints, lack of management skills, volatility in subcontracting, inadequate personnel, and innovation, all of which contribute to SMMEs' growth in construction entities to become large companies (Senzile, 2013). The following section discusses those challenges.

Table 2.2: The new thresholds from the National Small Enterprise Act for definite enterprise size classes by sector

SECTOR	SIZE	MAXIMUM TURNOVER
Agriculture	Medium	R35 million
	Small	R17 million
	Micro	R7 million
Mining and quarrying	Medium	R210 million
	Small	R50 million
	Micro	R15 million
Manufacturing	Medium	R170 million
	Small	R50 million
	Micro	R10 million
Electricity, gas, water	Medium	R180 million
	Small	R60 million
	Micro	R10 million
Construction	Medium	R170 million
	Small	R75 million
	Micro	R10 million
Retail, motor trade, repair	Medium	R80 million
	Small	R25 million
	Micro	R7.5 million
Wholesale	Medium	R220 million
	Small	R80 million
	Micro	R20 million
Catering, accommodation, other	Medium	R40 million
	Small	R15 million
	Micro	R5 million
Transport, storage, communication	Medium	R140 million
	Small	R45 million
	Micro	R7.5 million
Finance and business services	Medium	R85 million
	Small	R35 million
	Micro	R7.5 million
Community, social, personal service	Medium	R70 million
	Small	R22 million
	Micro	R5 million

Source: *Republic of South Africa* (2019:2)

2.5.2.1 Market-related challenges

Understanding marketing fundamentals is crucial for SMMEs to succeed in the competitive business world. In SMMEs, marketing should take precedence because it decides whether the company will prosper or fail in the long run (Ndlovu, 2020). The most uncomplicated essential premise is that potential clients will not understand what a firm does if they are unaware of its products and services. Small businesses succeed better when marketing is done differently and in a fundamentally different way (Gilmore & Carson, 2018). According to Naradda Gamage et al. (2020), business planning and strategy creation are less critical for business and market share growth in SMMEs than marketing adoption.

2.5.1.2 Management skills-related challenges

The worldwide experience shows that globalization increases the requirement for "learning-led competitiveness" (Geo-JaJa & Zajda, 2021). Effective methods to raise people's and businesses' knowledge and skills are said to be crucial components of corporate responses to the competitiveness problem in the context of globalization.

In the construction industry, business owners or those entrusted with running that business, such as managers, often lack the business acumen or management skills required by construction companies. These practical gaps are advocated in the existing literature that construction companies, especially those in the category of SMME space, have never received any training necessary to undertake business roles and enhance their managerial capacities (Senzile, 2013). Furthermore, the lack of managerial skills in this context is exacerbated by inadequate human resources, weak financial strategies in place or cash flow management, lack of effective risk management tools, poor planning, and project management (Senzile, 2013). Thus, it is believed that SMME businesses must invest in training and skills development to learn how to expand (Ogunade, 2019).

2.5.1.3 Finance-related challenges

Given the nature of business, businesses in the construction sector, large or small, require a lot of money to succeed. This statement concurs with Tubane (2017) that construction entities are price sensitive to be sustainable. Similarly, for businesses in the

construction field to improve their performance and to be effective in their daily operation as far as business processes are concerned, they need to invest in research and technology and enhance their activities' performance. As indicated, these businesses are cost-sensitive. Similar to their growth and sustainability, SMMEs, compared to large firms in the construction industry, are more cost sensitive. Research shows that the high-interest rate causes SMMEs' slow growth. These businesses are perceived as high-risk, leading to credit limitations because of a lack of security and poor track record or performance (Senzile, 2013).

Although the literature has argued that SMMEs play a significant role in South Africa's economic development, their failure rate is calculated at 75%, the highest in the world (Tubane, 2017). Lack of financial access is one of the significant challenges resulting in a total collapse or slow progress of emerging SMMEs in the construction failure in South Africa (Senzile, 2013). This 75% is argued to be related to the rejected financial applications for financial (bank) credit by SMMEs (Senzile, 2013; Tubane, 2017). From this narrative, it can be argued that SMMEs, despite their area of focus, are perceived as the leading economic contributors in various countries. Thus, it is imperative for governments worldwide to focus on the development of the SMME sector so that they [SSMEs] can continuously contribute to economic growth (Tubane, 2017).

As indicated in Chapter 1, SMMEs in South Africa contributes 91% of the formalised enterprises, providing about 60% labour force and 34% of GDP (Verwey & Du Toit, 2016). While one of the objectives of this investigation is to identify the challenges or barriers that contribute to the failure or growth of SMMEs in the construction industry in the Mangaung Metropolitan Municipality, this study finds it imperative to discuss issues related to funding challenges. Thus, this research surveyed SMME owners in the Mangaung Metropolitan Municipality, with 154 respondents.

2.5.1.4 Technological challenges

The development of technology has led to the idea that we live in a global village (Srinivasan, 2018; Farooq & Raju, 2019). Despite globalisation, many small firms

continue to function and use the conventional approach to company management instead of embracing technology. This raises the question of how they do not have enough money to implement technology in their business operations (Akpan, Udoh & Adebisi, 2022). Small firms, particularly those in developing countries, are characterized by poor productivity and low-quality goods or services, which prevent them from competing in local or even international markets (Das, Kundu & Bhattacharya, 2020). Small businesses will see a considerable improvement because of embracing technology and satisfying market expectations.

Many experts have noted that the primary reason impeding SMMEs' development transfers into the challenges associated with technology adoption (Bowen & Morris, 2019; Lutfi et al., 2022; Prasanna et al., 2019). The key factors that these researchers identified as obstacles to implementing information technology (IT) are unstructured procedures and processes for assessing SMME requirements. They add that SMMEs have difficulty finding appropriate systems that work with their operations. Managers and SMME owners are frequently too busy with day-to-day business operations to take the time to become familiar with cutting-edge software-based tools and technologies (Afolayan & De la Harpe, 2020).

Due to financial limitations, SMME business owners more often choose IT tools and technologies primarily on the price than on their capabilities or business compatibility. This ultimately leads to a lack of knowledge, expertise, or personnel to embrace and use software technology. Non-technical issues accounted for 80% of the technical difficulties that small businesses must overcome (Gumbi & Twinomurinzi, 2020). He continued by saying that small business managers view technology adoption as a cost rather than a strategic asset and are concerned about the possibility that it would decrease productivity rather than boost it. It follows that SMMEs cannot compete with giant organisations since they lack the resources. Examples include having an extensive sales network and getting equity quickly. SMMEs in the construction industry are required to implement initiatives like the adoption of technology to compete both locally and globally for them to thrive in the challenging and competitive business climate (Senzile, 2013; Tubane, 2017).

2.6 CRITICAL SUCCESS FACTORS FOR SMMES IN THE CONSTRUCTION INDUSTRY

Success is characterized by an organization's liveliness, gainfulness, and growth. A business's principal goal is to expand and become profitable (Senzile, 2013). Critical success elements are necessary for a firm to continue operating, such as company characteristics, owner-managers, and business environment, as illustrated in Figure 2.3 below (Senzile, 2013; Simpson et al., 2012).

2.6.1 Entrepreneurial factors

In a small business setting, decisions are solely based on what is known as human factors (Simpson et al., 2012). Entrepreneurship is described as "*An activity that involves discovery, evaluation, and exploitation of opportunities to introduce new goods and services, ways of organising markets, processes, and raw materials through organizing efforts that previously have not existed*" (Shane & Ventataraman, 2000). The owner's or entrepreneur's goal, business skills, and environmental opportunities must all be harmonious for a small business to succeed (Shane & Ventataraman, 2000). There are two types of motivational elements for entrepreneurs: psychological and non-psychological.

2.6.1.1 Psychological motivation factors

The drive to perform well and achieve goals is a psychological motivation element. The motivation to succeed considers a person's orientation, willingness, and drive for fulfilment or a sense of success. This is shown by persistent effort and acknowledged a long-suffering desire to accomplish something exceedingly difficult. Risk tolerance is also a psychologically motivational component. When presented with uncertain circumstances or conditions, risk-taking examines a person's attitude toward how much they will expose themselves to potential personal or financial loss or damage (Sirec & Mocnik, 2010). Another psychological and motivational aspect that influences whether a small business succeeds or fails is vision (Bushe, 2019). The vision for future performance serves as the basis for developing a plan. An organisation's mission and vision provide the foundation

for success. However, it is crucial to note that, for the strategy to be effective, it must be communicated to all company personnel.

Figure 2.3: Critical success factors categorization

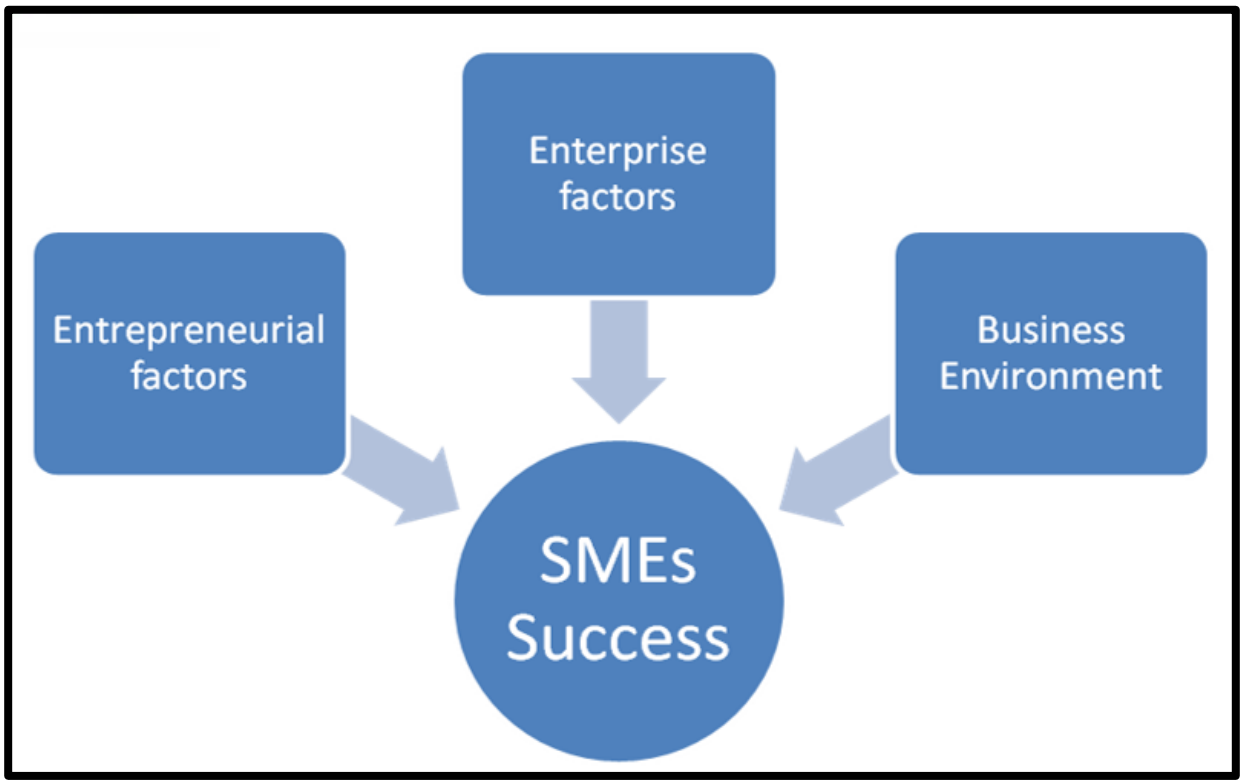


Figure 2.3:

Source: Simpson, Padmore, and Newman (2012)

2.6.1.2 Non-psychological motivation factors

One of the non-psychological motivational variables for small business success is the experience of entrepreneurs. Entrepreneurial traits include product and service expertise, stakeholder relationships, marketing, and IT communication, and, according to Numprasertchai, Srinammuang, and Skuna (2018), they are essential for small firms.

2.6.2 Enterprise factors

Enterprise characteristics of a firm's company, such as age, business networks, financial resources, customer relationship management, human capital, marketing, and strategic planning, mainly determine small business success and longevity. Small businesses

expand faster than larger, more established companies (Begenau, Farboodi & Veldkamp, 2018). According to the study's results, age should be considered when determining performance and growth. Due to their inability to keep up with more established entities, new entities risk failing due to changes in experience, financial access, business networks, and reputation. In terms of credibility, older businesses have an advantage over newer ones, contributing to their success (D'Amato & Falivena, 2020).

Human capital can be characterised as the attitudes, values, commitment, knowledge, experience, education, capability, skills, and abilities that assist the entrepreneur (and his team) in the tasks of starting, operating, and growing a business to learning more about how to do so, and to make owners more effective in how they act in operating their business and in performing complex tasks. The entrepreneur's history, actions, judgments, tactics, and leadership style are human capital elements that affect whether new enterprises are successful or unsuccessful (Lombardi et al., 2020).

2.6.3 Factors of the business environment

The development of new small firms is markedly impacted by the business climate (Ndiaye et al., 2018). Factors in the business environment are those that either directly or indirectly affect an organization's ability to succeed or fail. There are internal and external aspects in the business environment influence an enterprise's performance. Examples of internal influences include networking, management abilities, and financial access.

2.6.3.1 Access to finance

Every firm needs financial resources to continue operating. A lack of financial resources can limit an enterprise's ability to develop (Senzile, 2013: Tubane, 2017). For small businesses in South Africa, access to financing is a significant barrier (Bushe, 2019).

2.6.3.2 Management skills

Management skills are a set of knowledge, skills, and attitudes that enhance personal effectiveness (Senzile, 2013; Mbumbo, Benedict & Bruwer, 2019). To expand and

guarantee the survival of their companies, owners, and managers of small businesses must possess exceptional business management skills. The expansion of small enterprises in South Africa, particularly those in construction, has been hampered by a lack of knowledge on adequately managing a company organization (Senzile, 2013).

2.6.3.3 Location and networking

For growth and opportunity for new organizations, location, and business networks are particularly important (Senzile, 2013). Emerging small entities are more likely to be recognised and explore potential when they are geographically close to either customers or suppliers (Houé & Duchamp, 2020). The creation of networks enables business owners to access external resources successfully (Tubane, 2017; Pulka, Ramli & Mohamad, 2021; Singh et al., 2021).

2.6.3.4 Eternal business environmental factors

Firm density, inflation, interest rates, unemployment rates, crime and corruption, and labour restrictions are only a few external economic elements that impact the performance of SMMEs. These elements are considered part of the business environment (Haider & Abdulcadir, 2022).

2.6.3.5 Enterprise density

The number of businesses in each location at a given moment is known as enterprise density (Tubane, 2017). Simply described, it is the ratio of existing small businesses to those that could exist (Fritsch & Wyrwich, 2018). According to SEDA (2021), SMMEs in construction experienced a massive 14% decline in quarter 3 (2020Q3).

2.6.3.6 Inflation rate

The growth of small businesses is correlated with the rate of inflation. According to Halim et al. (2017), rising inflation slows growth by lowering investment and productivity. This is so that the economy can fund investments that spur economic development, which requires a certain amount of savings (Ajagbe, 2012; Tubane, 2017). Lower inflation, on the other hand, promotes growth by guaranteeing that prices and salaries are more

flexible. With South Africa's current inflation rate sitting at 4.7%, possibilities for small enterprises in construction are inevitable as the value of wealth rises (Stats SA, 2021).

2.6.3.7 Interest rates

Firm sustainability depends on the macroeconomic climate of the nation in which it operates. Sawaya and Bhero (2017) claim that higher interest rates impact SMME start-ups and sustainability because they deter further investment as the cost of borrowing increases (Tubane, 2017). When financing rates fluctuate, small business owners and managers would be particularly hesitant to expand or take on a new project (Senzile, 2013). On the other hand, businesses would be more willing to borrow money and invest in new projects when interest rates are low (Senzile, 2013).

2.6.3.8 Unemployment

It is well-recognised that unemployment is a significant factor impeding economic progress and contributing to poverty (Tubane, 2017). While several avenues, such as incubation hubs, *among other things,* South African Business Hubs, among others, have been created to help solve the unemployment challenges and respond to the needs of small businesses in South Africa (Senzile, 2013). Despite government encouragement for entrepreneurship and public-private partnerships that encourage SMMEs, South Africa is still experiencing an entrepreneurial decline compared to other developing nations, especially those in the construction industry (Senzile, 2013).

The percentage of SMMEs in construction in the South African economy that creates formal jobs is only 60% (Senzile, 2013). The continuous increase in the unemployment rate and the 70 to 80% start-up rate of SMMEs in construction combine to produce an adverse business climate for SMME survival (Senzile, 2013). Although more people are choosing to start small businesses, their purchasing power is still limited (Tubane, 2017).

2.6.3.9 Crime and corruption

Businesses need a low crime rate and a safe working environment to succeed and survive. Because the impacts of sales levels and high levels of criminality have a

detrimental effect on the success of any commercial enterprise (Senzile, 2013). South Africa is listed as one of the countries with the highest murder rates, according to the United Nations Office on Drugs and Crime (2007). In South Africa, corruption in governmental and private institutions is rising (Von Holdt, 2019). South Africa is ranked 67th overall, scoring 44 on Transparency International's annual corruption perception index (CPI) (Transparency International, 2018). Corruption among SMMEs is often attributed to issues with bureaucracy and regulatory compliance (Nyarku & Oduro, 2017).

2.6.3.10 Labour and regulations

To continue development, emerging SMMEs in construction require access to appropriately qualified staff (Senzile, 2013). Due to the high cost of recruiting qualified labour, SMMEs in construction are in a challenging position when trying to do so due to financial constraints (Senzile, 2013; Tubane, 2017). Some SMMEs in construction use unskilled labour for roles that need skilled workers because they do not adhere to the Employment and Minimum Wage Regulations (Tubane, 2017). For all SMMEs, SARS compliance is a significant barrier (Senzile, 2013). New businesses are needed to pay taxes and get licenses. The expense of regulation might hinder the development of new SMMEs, (Matsongoni & Mutambara, 2018). According to Akhtar and Liu (2018), financial literacy is essential for small companies' success. SMME owners in construction can participate in numerous choices as part of their daily activities (Senzile, 2013). They are supposed to decide on various issues that affect, among other things, their company's strategy, performance, and system development (Tubane, 2017). Senzile (2013) contends that because small business owners in construction sometimes lack a strong background in finance, they may not fully understand the impact of their actions on the organisation.

Making poor judgments leaves organisations open to many operational issues. Managers of small business owners in construction with extremely low financial literacy are more prone to make irrational decisions about the business's capital structure, such as contributing less to the formal financial system and taking out loans at higher interest rates (Senzile, 2013). According to Tubane (2017), SMMEs in the construction industry

are particularly susceptible to the effects of bad and weak financial decisions due to their restricted access to the financial markets and limited other sources of finance. The aspects of the business environment that were previously mentioned provide SMMEs in construction a heads-up on their chances of success or failure. The biggest obstacle, especially in developing nations, is that the government does not sufficiently support and encourage the expansion of SMMEs (Senzile, 2013; Tubane, 2017; Epede & Wang, 2022).

2.7 CHAPTER SUMMARY

The general SMMEs context was also applied in this chapter due to limited literature on SMMEs in the construction industry. The literature review focused primarily on the challenges of SMMEs in construction businesses, looking closely at their role in economic growth and development and the critical success factors for survival in the industry. Although extensive research has been done, it lacks present-day experiences of small, medium, and micro-enterprises due to the dynamic business environment. This is especially lacking for SMMEs in the construction industry. Additionally, while SMMEs in general across the globe have similar growth challenges with a slight difference between developed and developing countries, at the same time, this also applies to SMMEs in the construction industry. Therefore, the literature review findings lay the foundation for this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

In chapter 1, an overview of the research was provided. This research investigated challenges facing SMMEs in the construction industry, giving various justifications provided in the literature that the SMMEs in the construction industry are significant contributors to economic development and job creation. Yet, these businesses still face various challenges, which are understood theoretically but not in a practical context. As a result of the problem statement provided in Chapter 1, with the aim of this study towards an intended understanding, what were those challenges?

Given the aim and objectives of this present research, this study found it imperative to analyse the existing knowledge of the construction industry and its contribution to economic development. Furthermore, this study looked at the actual role and challenges faced by SMMEs in the construction industry, particularly those in the Mangaung Metropolitan Municipality. In doing so, the researcher endeavoured to generate a new understanding of why it is argued that SMMEs are significant role-players in the country's economic development in theory but not in a practical context. Consequently, this chapter attempts to substantiate the choices this current study made by operationalizing the research design and methodology theme.

The research design and methods applied in this research were considered suitable to ensure that the goals and objectives set out in chapter 1 of this research were achievable. This study required discussing the rationale for the applied research design and methodology. Firstly, this is to provide the research plan or blueprint for the research project. Secondly, this choice of research designs and methods provides a researcher with various appropriate choices (Creswell, 2013). These approaches are considered more applicable to this research to ensure the validity of the results, even though the study will not generalize the findings. However, they can still be applied to SMMEs in the same category of small enterprises or elsewhere, if applicable. As explained above, a research design is a blueprint; it guides the data collection process and analyses the

project throughout its phases. A research design identifies the type of information to be collected and from which data source, including the data collection procedure (Kumar, 2011). Research methodology refers to all the study methods, procedures, and techniques applied to gain an understanding of a particular field of research or study (Creswell, 2013).

This chapter focuses on the instrument used to collect data, including the validity and reliability, followed by the data analysis process and the presentation of the research findings and recommendations. This researcher first found it imperative to provide a theoretical framework for the research design, followed by the methodology.

3.2 THEORETICAL FRAMEWORK FOR THE RESEARCH METHODOLOGY AND DESIGN

Even though the concept of theory necessitates some clarification in research, it has been argued in the literature regarding research design and methodology that the most challenging factor researchers are confronted with is establishing a connection and alignment between various components of the research methodology. Various scholars acknowledge that theory plays a vital role in research; hence, it is understood as a blueprint that guides a researcher (Blumberg, Cooper & Schindler, 2011). As a result, instead of describing or predicting, a theory should be able to explain why things happen.

Despite different meanings assigned to what constitutes a theory, the social sciences arena provides a different perspective. It is opined that theory is "a *set of statements describing and explaining the relationship between human behaviour and the factors that affect or explain it"* (Vosloo, 2014: 299). The theory is understood as a plausible approach or principle to give meaning to and explain some phenomenon (Best and Kahn, 2006). These scholars argue that even those non-observable constructs must be considered when developing a general explanation for observable phenomena (Best & Kahn, 2006). Moreover, Best and Kahn (2006) postulate that in social sciences, a theory describes the relationship and interconnectedness among crucial variables that are assumed to contribute to either current explaining situations or to predict the future.

As a result, one can conclude that theory plays a significant role in social science research by providing explanations for phenomena. In doing so, it can be understood that theory focuses on determining cause-and-effect relationships. Given all these significant roles a theory provides, this implies that a theoretical framework for research design and methodology guides researchers in executing meaningful research using relevant and aligned methodologies. Theory construction can establish theoretical gaps and missing ideas or links, including the amount of data required to understand how the phenomena are connected fully, as well as establishing sets of generalisations or propositions Vosloo (2014).

Hence, a theory is considered an essential tool of research for filling a knowledge deficit while at the same time contributing to the advancement of knowledge (Kawulich, 2009; Inglis & Maclean, 2005). However, what needs to be considered is that while the theory should guide and drive the whole research process, it should also provide a framework for understanding procedures and the rationale for the research arrangements. The view of authors and researchers can provide the impetus and endorse the view and rationale for a discussion of the research design and methodology chapter.

3.2.1 Research design

According to Cooper and Schindler (2011), various scholars acknowledge that a research design is a framework followed when conducting research projects. A research design is a procedure used when collecting the required information to solve the research problem or statement at hand to achieve the research objectives by answering the research question (Saunders, Lewis & Thornhill, 2012; Blumberg et al., 2011; Berndt & Petzer, 2011). Cooper and Schindler (2011:140) indicate that a research design process encompasses various processes, as discussed below:

3.2.1.1 Research design and methodology classification

The literature on research design and methodology shows two research design classifications, among other things exploratory (qualitative) and conclusive research

designs (quantitative). Therefore, this study followed a quantitative research approach known for being objective in fact-finding. The approach utilises numerical information to analyse the phenomenon to provide objective and universally agreed-upon outcomes. In other words, a quantitative approach quantifies research outcomes; this approach is often understood as being objective and uses standard measurements across the field (Creswell, 2013). A quantitative research design uses a large sample population to understand the underlying patterns in research through various data collection techniques, such as surveys, which are more directive and structured than qualitative analysis (Wyse, 2011).

3.2.1.2 Justification for the use of the quantitative research approach

After carefully considering the difference between a qualitative and quantitative approach and the advantages and disadvantages of both the qualitative and quantitative approach, it was concluded that a quantitative research approach would be adopted. The quantitative approach was the most appropriate research approach to address the primary objective of this research: to explore the challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State Province.

A quantitative research approach was also chosen over the qualitative approach for the following reasons:

- Data collection and analysis are faster as they follow a structured questionnaire.

- It allowed for a high sample size coverage since, for instance, it used structured questionnaires that enabled the researcher to cover a considerable number of SMMEs in the Mangaung Metropolitan Municipality.

- It enabled the researcher to establish relationships between variables/questions of interest, for example, in this research being able to explore the factors leading to the failure of emerging construction small businesses in the region, which would eventually help to determine the critical success factors thereof.

Furthermore, the guidance from Apuke (2017) suggests that quantitative research methodologies should be aligned with positivist paradigms, using questionnaires in data analysis and descriptive designs, and the nature of the phenomenon being focused on is the core of the study adopted. This research has aligned these relevant sections of the methodology, in addition to having quantitative variables to enhance measurement. The quantitative research method deals with the interrelated constructs of analysing data, which help to explain a phenomenon between two or more variables (Apuke, 2017). The quantitative method also offers the advantage of being economical and providing ease of measuring and presenting results.

3.2.2 Research methodology

As explained in Chapter 1, a research methodology is a blueprint that guides research. This approach considers and explains the rationale behind the research methods one follows (Welman, Kruger & Mitchell, 2009). Research is all activities a researcher undertakes to find answers to the research questions or existing problems. These activities, among others, include data collection, analysis, and report writing (Reinard, 2001). As a result, the knowledge gained from these activities can assist in filling the gap in the literature to understand the challenges encountered by SMMEs in construction companies.

The research methodology plays a crucial role in presenting a clear picture of how the research was conducted and simultaneously confirming the credibility, trustworthiness, and validity of the collected data. The research methods presented in this chapter reflect the research design, as shown in Figure 3.1. The method chosen in this study concurs with Collis and Hussey (2009) that research methodology is considered the overall research approach to the entire research process, among other things, from the theoretical standpoint to the data collection and analysis. A research methodology proves that research procedures and activities do not operate in a vacuum; instead, they follow a well-planned protocol (Welman et al., 2009). This process can be done through proper

choice of the target population, sampling strategy, measurement techniques, and a questionnaire survey or interviews, among other things (Creswell, 2013).

3.2.2.1 Control of variables

A research approach presents two research designs: experimental and ex-post facto. The experimental research design allows a researcher to manipulate or control the research variables, while in the *ex-post facto* design, the researcher cannot manipulate or control the variables (Cooper and Schindler, 2011). Given the focus of this research, no control variable is established for this study, and in that sense, the *ex-post facto* design was adopted.

3.2.2.2 Study population and sampling strategy

The study population consists of owners of registered construction SMMEs in the Mangaung Metropolitan Municipality in the Free State Province. The available data on the registered SMMEs in the construction field show that the Mangaung Metropolitan Municipality has 250 SMMEs. A sample size of 154 (n=154) participants was recruited to participate in the study. The participants were recruited through the available list of registered SMMEs on the Construction Industry Development Board database.

Two types of contractor lists are available. The first list is public and can be accessed directly from the CIDB website. However, this list does not have the relevant information the researcher needs to recruit participants, such as emails and contact numbers.

The second list, however, is classified information as it contains relevant information the researcher needs to conduct the research, specifically complying with the *Protection of Personal Information (POPI) Act*. To ensure that the researcher complies with the POPI Act and Ethics Committee principles of conducting research on humans as research participants, the researcher sent the request for permission supported by the ethical clearance from the University to the executing authority of the CIDB Free State Province for permission to access this database.

The participants were recruited by email and telephone and asked whether they would be willing to participate in this research by providing those (participants) with a consent form.

3.2.2.3 Sampling strategy

Saunders et al. (2012) define sampling as a subset of persons, groups, or things from a larger population. Bryman and Bell (2011) define sampling as "an element of data collection." This subgroup of elements is also known as a '*sampling frame*' (Scott and Morrison, 2007: 219). A sampling frame is understood as a representation of a particular population (Neuman, 2011: 246). The minimum number of respondents or participants needed for statistically significant improvements to be detected may be specified as the correct sample size by Burrmeister and Aitken (2012). Available literature in the research methodology presents two sampling techniques: probability and non-pro-probability sampling techniques.

A non-probability sampling procedure (Cozby, 2009: 139-140) was used to select only emerging SMMEs in the construction industry that was fewer than five years in existence in the Mangaung Metropolitan Municipality. For this reason, these participants were selected purposively. Since this research did not aim to generalise the findings, the selected number of participants was considered sufficient. This saturation principle can be confirmed since the number of selected participants was sufficient to provide the information required for this investigation. The sample size for this research was only $n = 154$ of 250 SMME companies in the database. In that sense, this study followed a purposive sampling strategy. This sample size is statistically determined, reducing both research errors and matching population characteristics.

3.2.2.4 Sample determination or technique

Notwithstanding that collecting data from a large population is time-consuming and costly, Welman et al. (2009) points out that if the population that interests the researcher is large, it will not be easy to cover all of them. Thus, sample determination plays a significant role. In that sense, only SMMEs in the construction industry in Mangaung Metropolitan

Municipality were considered, and the sample size was limited to a smaller sample. The researcher further applied nonprobability sampling methods in selecting participants, which does not align with quantitative research; this was done to allow the researcher to identify relevant participants in the construction industry. For this research, 154 SMMEs were drawn from the entire selected population of SMMEs in the Mangaung Metropolitan Municipality. This sample size is estimated through a statistical approach introduced by Yemani's (1967) statistical formula, where *N* is the department's total workforce, n is the sample size, and e is the accepted error level at 0.05.

According to Mugenda and Mugenda (2009), the sample size is the total function of the entire population and is estimated as follows, where *n* represents the sample size, while *N* is the total target population, and *e* is the acceptable level of significance level, 5% were accepted:

n = 250/; [1 + 250($0{,}05^2$**)**

n = 250/; (1+0.625)

n = 250/; (1.625)

n=154

Therefore, as indicated above, this study estimated the sample size to be **154** SMMEs.

3.3 DATA COLLECTION

According to Kabir (2016), data collection is the process of gathering and measuring the gathered information methodically and systematically, which answers the stated research problem, revealing the hypothesis. The goal of data collection is to obtain quality data, which then plays a crucial role in ensuring that the integrity of the research study is guaranteed, Kabir (2016). Even though Chapter 2 presented a theoretical overview of the study, the primary data collection methods for this study were quantitative, using questionnaires.

To fulfill this research's objectives, first-hand data had to be collected, also classified as primary data for the primary data source. The researcher utilised an official electronic mail

to select participants with an invitation to participate. As shown in Table 3.2, this research used a quantitative approach according to the various objectives of the study. Therefore, the research design classification fit for the study is descriptive. A research design aims to answer specific research questions by using well-developed principles of scientific enquiry.

- **Exploratory research design**: The objective of exploratory research is the development of hypotheses rather than their testing. The researcher is unfamiliar with the subject area and thus explores by gathering a wide range of data and impressions using an open approach. Problems or issues are rarely answered conclusively, whereas formalised research studies involve substantial structure and specific hypotheses Creswell (2013:187).

- **Descriptive research design**: Descriptive research includes surveys and fact-finding enquiries of different kinds. The primary purpose of descriptive research is a description the situation as it exists at present Creswell (2013: 188).

- **Causal research design**: Causal research design is about a cause-and-effect relationship. Shukla (2008: 45) states that a causal study provides answers to research questions requiring answers to that need, identifying, and explaining which variables are the cause (independent variables) and which are the effects (dependent variables).

The research design for this study falls within what has become generally referred to in the literature as the *quantitative paradigm* – describing this approach, Babbie and Mouton (2009: 53) document that a quantitative paradigm is a philosophical approach that is quite popular in social sciences research. This research design approach exists independently of the opinions and feelings of the participants.

3.3.1 Types of data

3.3.1.1 Quantitative data

A quantitative approach utilises surveys and questions in a standardised manner. One of the advantages of this type of data is that it is easier and not expensive to implement, primarily relying on random sampling and structured data collection Kabir (2016). Typical quantitative data collection techniques include experiments, observation, recording, and administering questionnaires.

A quantitative research method was used in this research study. A standard questionnaire with closed-ended questions was used (**see Appendix A**). The self-completion questionnaire method was selected because it is easy to complete, saves the participants and researcher time, encourages mass participation in a short period of time, and requires minimal resources to administer and collect data. Therefore, the survey was divided into four sections, and various scales were developed for each section:

- Section A: Demographic and Business information.
- Section B: Managerial skill
- Section C: Economic factors affecting the construction industry in the Mangaung Metropolitan Municipality of the Free State Province.
- Section D: Economic factors in reducing the impact of challenges faced in the construction industry.
- Section E: Factors that cause the failure of emerging construction companies.

The questionnaires were emailed to the SMME owners, and where participants did not have access, the researcher contacted the participants telephonically to get participants to respond to the questionnaire. The researcher would complete the questionnaire on behalf of the participants according to the participants' telephone responses.

3.4 RELIABILITY, VALIDITY, AND OBJECTIVITY

The researcher gathered current data from the Mangaung Metropolitan Municipality to ensure the study's validity. Since the issue of reliability and validity cannot be eliminated

in a case study, the researcher attempted to reduce this threat using data specific to the Mangaung Metropolitan Municipality. It is hoped that this measure will eliminate issues relating to researcher bias. Bryman et al. (2011) state that reliability tests the consistency of the measure of a concept and evaluates whether a measure fluctuates. If not, it is re-administered. Validity assesses whether a measure of a concept measures the concept it is intended to measure. The stability of the measure was ensured by administering three different tests.

Congeneric reliability was undertaken to determine to what extent specific questions measure the same thing. It is based on factor analysis and aims to find an underlying factor explaining the responses of a group of questions. According to Taber (2018), the measure calculating this is related to Cronbach's alpha. Reliability measures lower than 0.7 suggest that multiple concepts are being measured, while measures above 0.95 suggest that one asks the same thing in different ways. If one tries to measure a single concept reliably, a value in the target range of 0.7 to 0.95 is desired.

3.5 ANALYSIS OF THE EMPIRICAL SURVEY

Descriptive statistics will be used for the analysis. During data cleaning, the collected data were coded thematically and with the Stata computer statistical package, Version 13.1. Descriptive statistics, as indicated, will generate information such as mean scores, percentages, and proportions, which will later be presented in frequency tables in Chapter 4. This approach to data analysis enabled the researcher to describe distributions and measurements, organise, and then summarise data.

3.6 ETHICAL CONSIDERATIONS

In recent years, ethical considerations have become integral to the research process. Louw et al. (2014: 262-263): "*Ethics is a matter of integrity on a personal level, but their implications go much further than the individual. A researcher who acts with integrity adheres to ethical principles and professional standards essential for sensibly practicing research, even in the face of adversity. In research, specifically, ethics are crucial because they potentially affect all stakeholders in research."* All participants were

guaranteed confidentiality through the request letter, and all who decided they were unwilling to complete the questionnaire could do so. No parties were forced to participate in the research.

Ethical clearance letters detailing the purpose and objectives of the research were obtained from the University. These letters were accompanied by a consent form for each participant to sign and return to the researcher. The permission letter clearly stated that the information obtained would only be used to complete the research proposal and that no information about the participants would be disclosed to the public.

The research was conducted in conjunction with the *Protection of Personal Information Act 2013,* which commenced on 1 July 2020. The researcher adheres to Sections 2 to 38; Sections 55 to 109; Section 111; and Sections 114 (1), (2), and (3), which are essential parts of the Act and comprise sections that pertain, among others:

- The conditions for the lawful processing of personal information.
- The regulation of the processing of special personal information.
- The information regulator issues codes of conduct.
- Procedures for dealing with complaints.
- Provisions regulating direct marketing using unsolicited electronic communication and general enforcement of the act.
- No information or citation will intentionally or deliberately be falsified by the researcher, who would recognise, at all costs, the ideals of the participants used in completing the research proposal.

Finally, it is essential to point out that the researcher is the director of two civil and general building construction companies in the Mangaung Metropolitan Municipality. However, the two companies were excluded from the research, so the researcher could not influence the research outcome.

3.6.1 Obtaining permission

Permission to conduct the research had to be received from the University of the Free State Ethics Committee and the management of the participating emerging construction companies in the Mangaung Metropolitan Municipality. In this regard, the approval of Ethical Clearance was issued by the university with ethical clearance number: HSD2022/0105/22. (**See Appendix B**).

The fundamental consideration in requesting permission is to confirm that the research will not violate the company's code of conduct or any contractual limitations on disclosures that may bind companies' staff from discussing certain aspects of the business. In this way, the researcher ensures fidelity to the code of conduct of all the participating companies. In this case, permission was requested from the CIDB executing authority to grant the researcher access to the list of SMMEs in the construction industry in the Free State Province and so extract only those in the Mangaung Metropolitan Municipality. The permission was granted (**see Appendix C).**

3.6.2 Informed consent

Louw et al. (2014: 264) point out that "participants should know that they are participating in a research study." They should be formally informed of this and should give their consent. They should clearly understand what will be required of them during their participation, whether and how their identities will be protected, and how the results will be used. This information should preferably be stated in writing, and the participants should sign their consent and keep the documentation on record. The research to be reported in this study adhered diligently to these informed consent standards. (**See Appendix D**).

3.6.3 Confidentiality

When the researcher assures the participants of confidentiality, it means that even though the researcher will be able to match the identities to their research responses, that information will be known only to the researcher and will be made available to no one else

(Louw et al., 2014: 267-268). The researcher applied this confidentiality standard throughout the study.

3.6.4 Voluntary participation

The participants took part voluntarily; they were not pressed or coerced to participate in the study. To a certain extent, the topic under investigation will contribute to the intensified interest in participating in the study.

3.7 DEMARCATION OF THE STUDY

The study was carried out in the Mangaung Metropolitan Municipality. The research objective was to explore the challenges of SMMEs in the construction industry of the Mangaung Metropolitan Municipality in the Free State Province. Construction companies that have been in business for the last five years were sampled in the study.

3.8 CHAPTER SUMMARY

This chapter discussed the research design, strategy, and ethical considerations. A quantitative research approach was used in this research as an approach for both data collection and analysis. Positivist and phenomenological philosophical thinking were adopted in the study. In total, 154 SMMEs in the construction industry were sampled. Only those SMMEs in the Mangaung Metropolitan Municipality were surveyed to generate primary data.

Moreover, secondary data was collected through a comprehensive literature review to supplement the primary data collected. As indicated, self-administered questionnaires were distributed to SMMEs owners only, not their employees. Descriptive statistics will be used for the analysis. During data cleaning, the collected data were coded thematically and with the Stata computer statistical package, Version 13.1. Descriptive statistics, as indicated, will generate information such as mean scores, percentages, and proportions, which are presented in frequency tables and graphs in Chapter 4. This approach to data analysis enabled the researcher to describe distributions and measurements, organise, and then summarise data. Chapter 5 presents the analysis process.

CHAPTER 4: DATA PRESENTATION

4.1 INTRODUCTION

The preceding chapter discussed the data collection methods, data processing techniques, and data analysis strategies employed to answer the formulated primary and secondary study objectives. The current chapter starts by presenting the response rate of the study. This chapter further presents the data analysis, followed by a discussion of the findings of the empirical studies. This chapter is divided into our sections:

- Section A: Demographic and business information of the respondents.
- Section B: Empirical data on managerial skills.
- Section C: Economic factors, and
- Section D: Factors that cause failures of SMMEs in the construction industry.

The chapter concludes by summarising the main points drawn from discussions by comprehensively linking the findings with the study's secondary objectives as outlined in Chapter 1 of this research, *among other things*: (i) to identify challenges that contribute to the failure of SMMEs in the construction industry in the Mangaung Metropolitan Municipality (Section B and C); (ii) to identify barriers contributing to slow growth of the SMMEs operating in the construction industry (Section E); and (iii) to investigate what strategies are employed by the SMMEs in the construction industry in countering challenges they face (Section D).

4.2 RESPONSE RATE

Table 4.1: Response rate from respondents

Sample size	The number of Questionnaires responded	Percentage %
154	154	100%

Table 4.1 shows the response rate provided by the SMMEs in the construction industry in the Mangaung Metropolitan Municipality in the Free State Province.

4.3 RESULTS AND ANALYSIS OF DATA

4.3.1 Section A: Demographic and Business information.

The study sampled 154 respondents. The questionnaire for this section comprised 11 questions, of which four (4) were open-ended. Section A discussed respondents' perceptions on various aspects solicited by the researcher, which include reasons for venturing into the construction industry, how the respondents raised capital to start the business, how many people are employed by the respondent, the type of work the respondents specialized in within the construction categories, the CIDB grading, participation in the municipality incubation programmes, government support, success of the company and SMMEs' sustainability.

4.3.1.1 Top nineteen reasons for starting a new business in the construction industry.

The results of this question were drawn from an open-ended question about why they started construction businesses. Participants provided more than one reason. The results of similar reasons were grouped according to the frequencies presented in Table 4.2 from the highest to the lowest, with a total of 19 reasons constituting 95% (147) of the respondents. From the 19 reasons reported in this section, only the top 10 are reported in this research. These ten reasons are also reflected in other sections of this study; hence, their significance is to be reported. Data show that some of the reasons provided by the respondents behind venturing into business are unemployment, with 54% of the participants sharing the same sentiment. 46% of the respondents further indicated that creating their employment was the motivation to start a business. According to the data, a further reason for starting a business was the passion for starting a business, constituting 39% of the respondents. On the other hand, 37% of the respondents indicated that experience informed their reason to venture into the SMME business. The remaining 31% indicated that the reason was to increase women's participation in construction.

The above reasons suggested for starting a business in the construction industry correspond with reasons stated in the literature review of this study and concur with

Grimsholm and Poblete (2010), who alludes to unemployment factors as the main factor contributing to the economy, among others.

Table 4.2: Perceptions of respondents on the reasons for establishing businesses in the construction industry

Proposed Reason	Frequency	Percentage %
Unemployment	78	54%
Creation of employment	67	46%
Passion for the construction industry	58	39%
Experience	54	37%
Women empowerment	45	31%
Self-employment	43	29%
The sustainability of the business	41	28%
Problem-solving	38	26%
Increase youth empowerment	36	24%
Availability of growth opportunity	34	23%
Community development	34	23%
Possess qualifications in civil engineering	28	19%
Increasing income-generating opportunities	20	14%
Innovation purposes	17	12%
Improve skills development in the community	14	10%
Resuscitating family business	13	9%
Improvement in infrastructure development	9	6%
Increase black participation in the construction industry	9	6%
Diversification purposes	8	5%

Source: Researcher's own construction (2022)

4.3.1.2 Start-up capital

The figure below represents the sources of start-up capital used by the respondents—factors such as own savings, loans, and government agency tendering guided respondents' responses. The discussion follows the results obtained relating to how respondents sourced capital to fund new ventures in the construction industry.

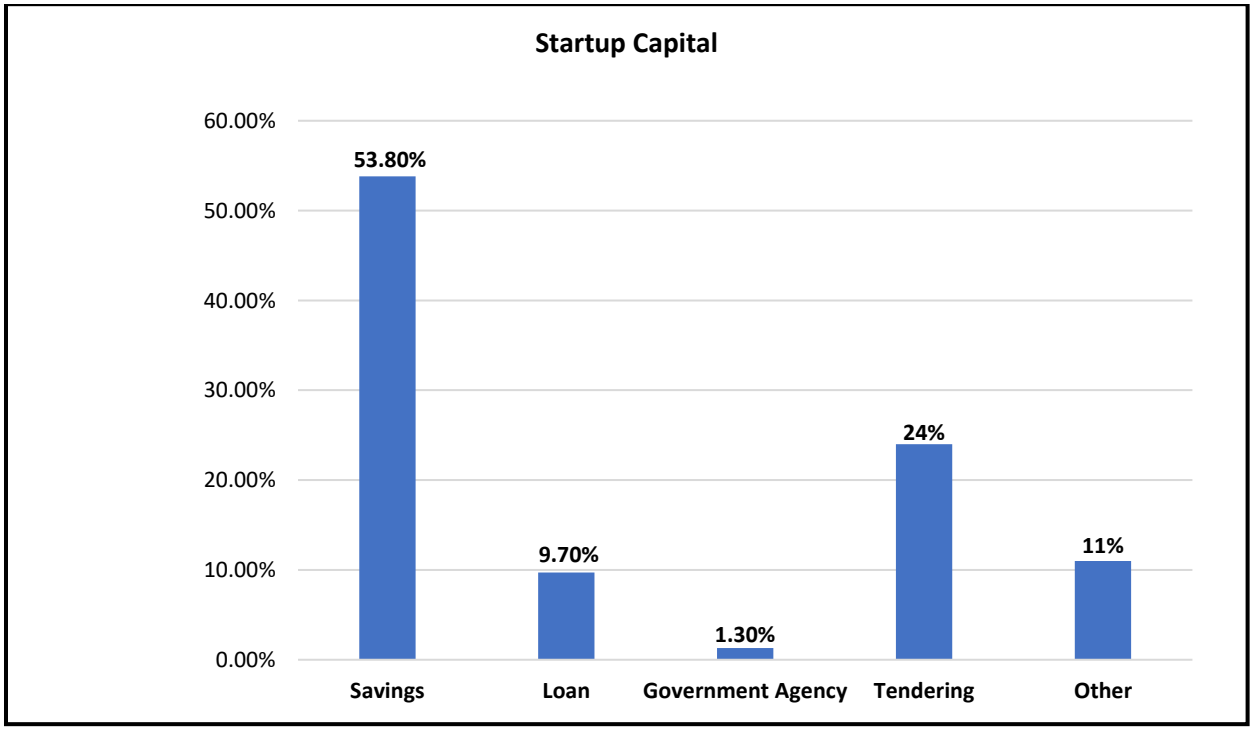


Figure 4.1: The Start-up Capital responses

Source: Researcher's own construction (2022)

Figure 4.1 shows that most start-up SMMEs in the construction industry in the Mangaung Metropolitan Municipality in Free State Province used their savings to start businesses. More than 53% of the respondents indicated that they use their own savings to fund their start-up businesses. Among the respondents, 24% used tendering as a financing strategy to start a business. On the other hand, 9.7% of the respondents used bank loans to finance their start-up costs, and government agencies supported 1.3%. 11% of the respondents stated that they had used other sources of finances to finance their start-up ventures. The results concur with those of Dang et al. (2015) regarding using their savings to start businesses in the southern region, particularly South Africa. Substantiating the

view of using their savings, the scholars further attest that ex-industry workers usually establish construction businesses, and corporate leaders do so upon retirement. This assertion also concurs with that of (Dang et al., 2015).

4.3.1.3 Number of people employed by SMMEs

The discussion in the following summarizes responses from the SMMEs on the number of employed people. It should be noted that from the responses, two types of employment are used in the industry, i.e., permanent, and part-time. In responding to this question, only 84 of the respondents provided such information, as illustrated in Table 4.3, the results on the number of employees SMMEs employed; out of the 84 respondents, 60 respondents indicated that at least 1 150 people are permanently employed in the industry, and 194 have been employed as part-time employees. From the table below, it can be acknowledged that SMMEs in the Mangaung Metropolitan Municipality contribute significantly to this current unemployment challenge in the province.

Table 4.3: The number of employees employed by small businesses

Number of employees	
Permanent	**Temporary**
1150	194

Source: Researcher's own construction (2022)

4.3.1.4 Type of work

The analysis below summarizes the work done by SMMEs in the construction industry. Figure 4.2 sums up the results of the type of work respondents specialise in within the construction industry in the Mangaung Metropolitan Municipality of the Free State. Among the four work categories in the construction industry, namely civil work, general construction, road and earthworks, and others. 44.1% of the respondents indicated that their businesses participate in the general building category, with 36.8% of respondents classified under civil works and 9.2% in road and earthworks. In comparison, 9.9% are engaged in other types of work within the construction industry.

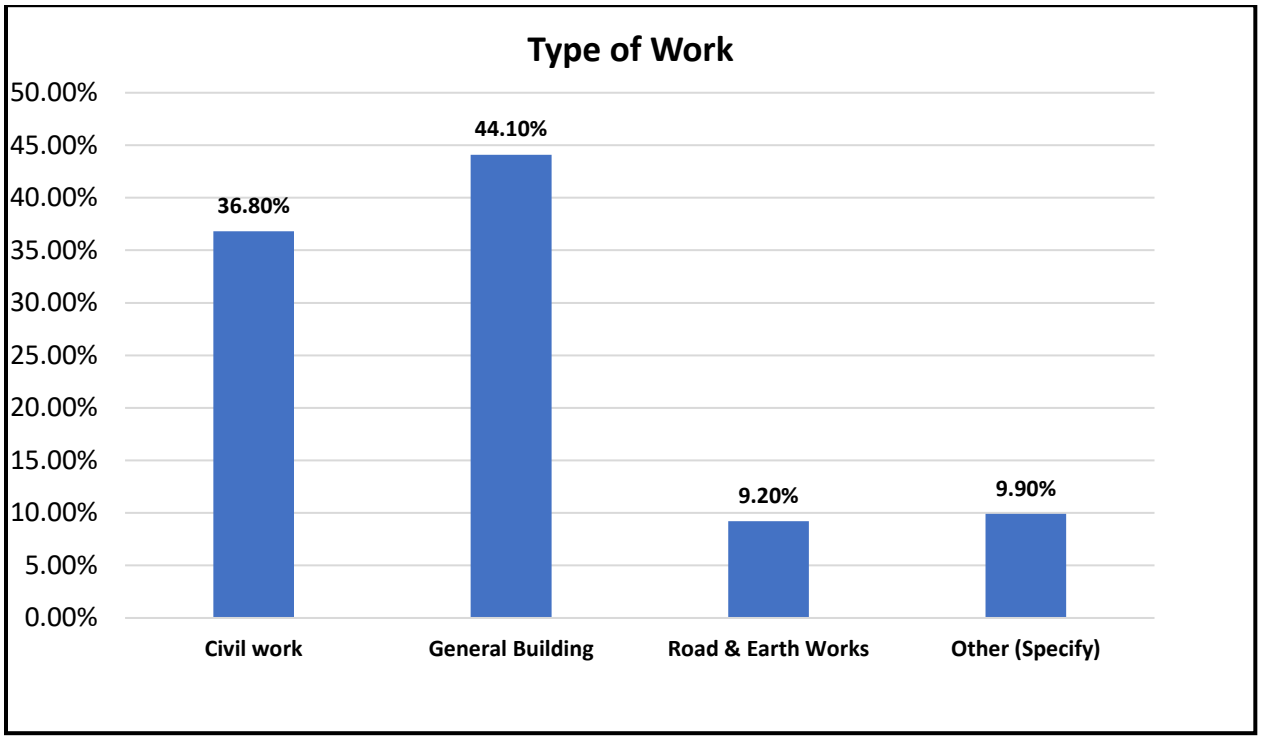


Figure 4.2: The type of work done by companies.

Source: Researcher's own construction (2022)

4.3.1.5 Results on the CIDB Grading of SMMEs

The discussion below summarises the results of the CIDB grading of SMMEs using the 1-9 scale. CIDB Grading is based on two main factors: construction work, track record, and capital. Capital refers to money that is ostensibly at one's disposal to begin a new endeavour. The CIDB examines the contractor's financial statement for the past two years to determine how much capital is available.

The discussion is based on responses of SMMEs on their financial status for the most recent trading period. The table below shows responses based on the scale provided. Table 4.4 shows that 70% of the respondents are in Grade 1 regarding the CIBD grading scale. The respondents in Grade 2 constitute only 10%, while the other 8% are in Grades 3 and 5, respectively. In addition, data show that 7% of the respondents are in Grade 4, while the other 3% are in Grade 6. Furthermore, the data show that 6% of the respondents are in Grade 7, and the remaining 2% are in Grade 8. The response is commensurate

with Ajagbe (2012) research, which emphasises the significance of cash flow in the construction industry.

Table 4.4: CIDB Grading

CIDB Grading	Frequency	Frequency percentage
1	99	70%
2	14	10%
3	11	8%
4	10	7%
5	12	8%
6	4	3%
7	9	6%
8	2	1%
9	1	0.7%

Source: Researcher's own construction (2022)

4.3.1.6 Results of the participation of SMMEs in the municipality incubation contractor programme

Figure 4.3 shows that 83% of the research participants did not participate in the government or municipal incubation contractor programme. Only the remaining 17% of the respondents participated in the program.

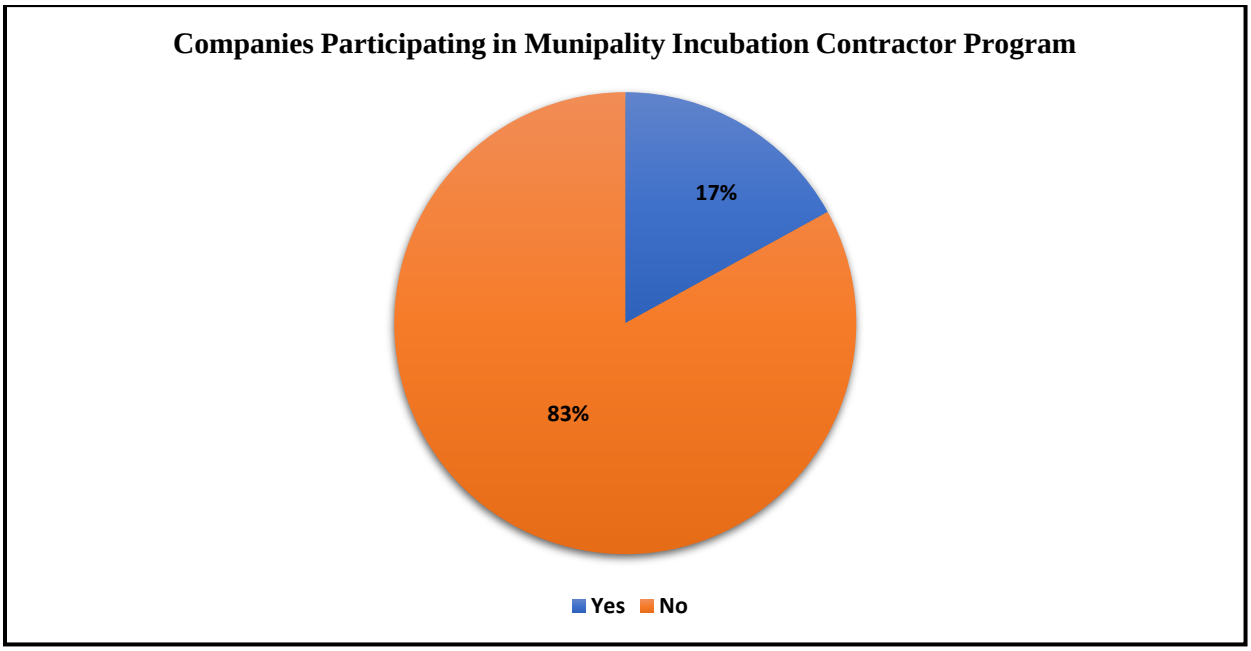


Figure 4.3: The company's participation in the municipal contractor incubation programme

Source: Researcher's own construction (2022)

4.3.1.7 Responses on the benefits derived from SMMEs participating in government incubation contract programmes

The results of this question were drawn from an open-ended question whereby the participants were asked about the benefits of participating in the government incubation programme. The open-ended questions were structured so that only "yes" or "no" was required from the participants. The participants' responses were calculated, and frequency was provided, as shown in Figure 4.3. Respondents gave many responses, and one of the three top benefits derived included increased skills in business management. From this finding, data show that 16% of respondents indicated their benefit from participating in the government incubation programme. The data further show that 5% of the respondents indicated that the government supported them by providing the

necessary equipment and machinery. The remaining 5% of the respondents indicated that they benefited from financial assistance from the government.

Although the above provides results on those, who benefited from government incubation programmes, the same data show that 55% of the respondents indicated that they had not participated in these programs or activities. These findings show fewer SMMEs owners benefiting from government incubation programmes. These findings on benefits correspond with the research of Ajagbe (2012), who also emphasises the need for government support to lead to businesses operating sustainably.

4.3.1.8 Responses on government support for SMMEs

Figure 4.4 shows the government's support factor responses regarding small to medium enterprises in the province. Most respondents did not support that the government supports small to medium companies in the area, constituting 82% of the respondents. In comparison, the remaining 18% agreed that the government has some strategies to support the small to medium enterprises in the research location.

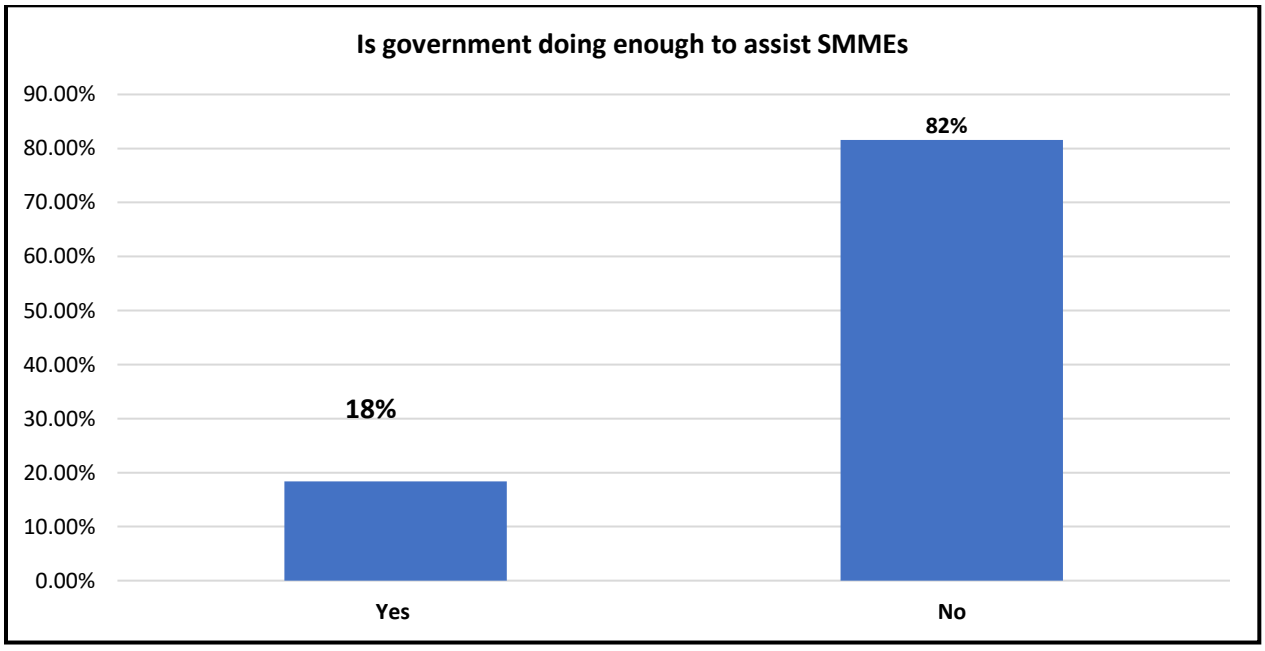


Figure 4.4: Responses to government support to SMMEs

Source: Researcher's own construction (2022)

The results of this question were drawn from an open-ended question whereby the participants were asked their opinion on what strategies the government should employ to support SMMEs in the Mangaung Metropolitan Municipality. The open-ended questions were structured so that only a “yes” or a “no” response was required from the participants. The participants’ responses were calculated, and frequency was provided, as shown in Figure 4.4.

4.3.1.8 Respondent's perceptions on ways the government should assist SMMEs.

Table 4.5 below shows responses on strategies the government should employ to assist SMMEs in the Mangaung Metropolitan Municipality. The data show that the respondents proposed 25 ways. However, for this research report, only the top five proposed strategies were selected due to their high frequency. The first strategy is proper monitoring and evaluation, with 68% of the respondents agreeing that those are needed. The second strategy was training and development, with a frequency of 60%, followed by financial support, with a frequency of 58%. The fourth strategy, with a frequency of 56% of the respondents awarding contracts or tenders to SMMEs, should be prioritised. Lastly, the fifth strategy is the establishment of transparent practices regarding sub-contracting schemes, with a 54% frequency. It is imperative to note that these findings agree with the literature study of this research and the measures or strategies by Grimsholm and Poblete (2010).

Table 4.5: The results of the government strategies to support SMMEs

Proposed strategies	Frequency	Percentage %
Proper monitoring and evaluation	98	68%
Training and development	87	60%
Financial support	84	58%
Timely payments of finished contracts	53	37%
Establish transparent sub-contracting schemes	78	54%
Award contracts/ tenders to SMMEs	81	56%
Improving CIBD assistance to SMMEs	65	45%

Creating independent tender portals	43	30%
Establish effective communication channels	37	26%
Increase transparency and fairness	57	40%
Establishing youth and women-focused empowerment schemes	41	28%
Improve contractor incubator program.	34	24%
Assist in research and development	48	33%
Provide machinery support to SMMEs	62	43%
Increase infrastructural development	33	23%
Establish regulatory boards to protect SMMES from big firms.	45	31%

Source: Researcher's own construction (2022)

4.3.1.9 Responses to the success of SMMEs

The figure below presents the success of SMMEs in the Mangaung Metropolitan Municipality. Respondents had only two options to choose their responses from to indicate whether they considered their companies successful.

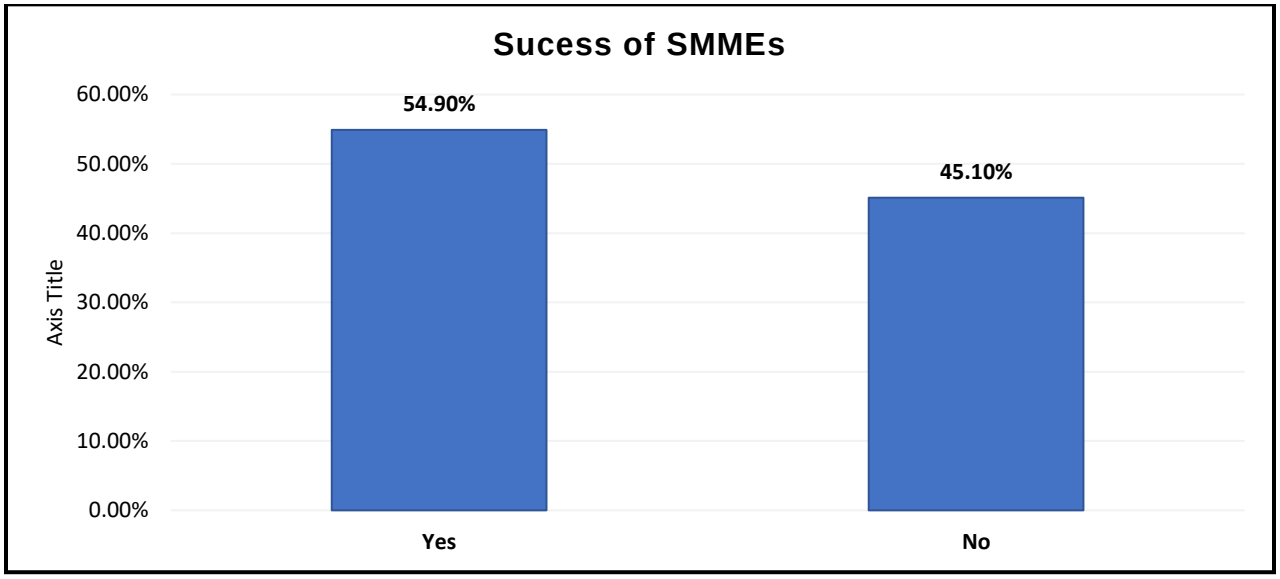


Figure 4.5: Responses to the growth of SMMEs

Source: Researcher's own construction (2022)

The results in Figure 4.5 show that 55% of the respondents agree with the statement. Despite good statistical reporting on the success of SMMEs in the construction industry in the Mangaung Metropolitan Municipality, 45% of the respondents indicated that they struggled to reach good profit margins or grow in the construction industry.

4.3.1.10 Results on the sustainability of SMMEs

Figure 4.6 shows the responses on the region's sustainability of small to medium enterprises. Sustainability is a globally recognised issue that requires every organisation to employ sustainable development strategies in all its business activities worldwide and any industry. From this narrative, only 51% of the SMMEs in the construction industry in the Mangaung Metropolitan Municipality attested to operating sustainably, while the remaining 49% of the respondents operated outside the bounds of the sustainable development goals and policies.

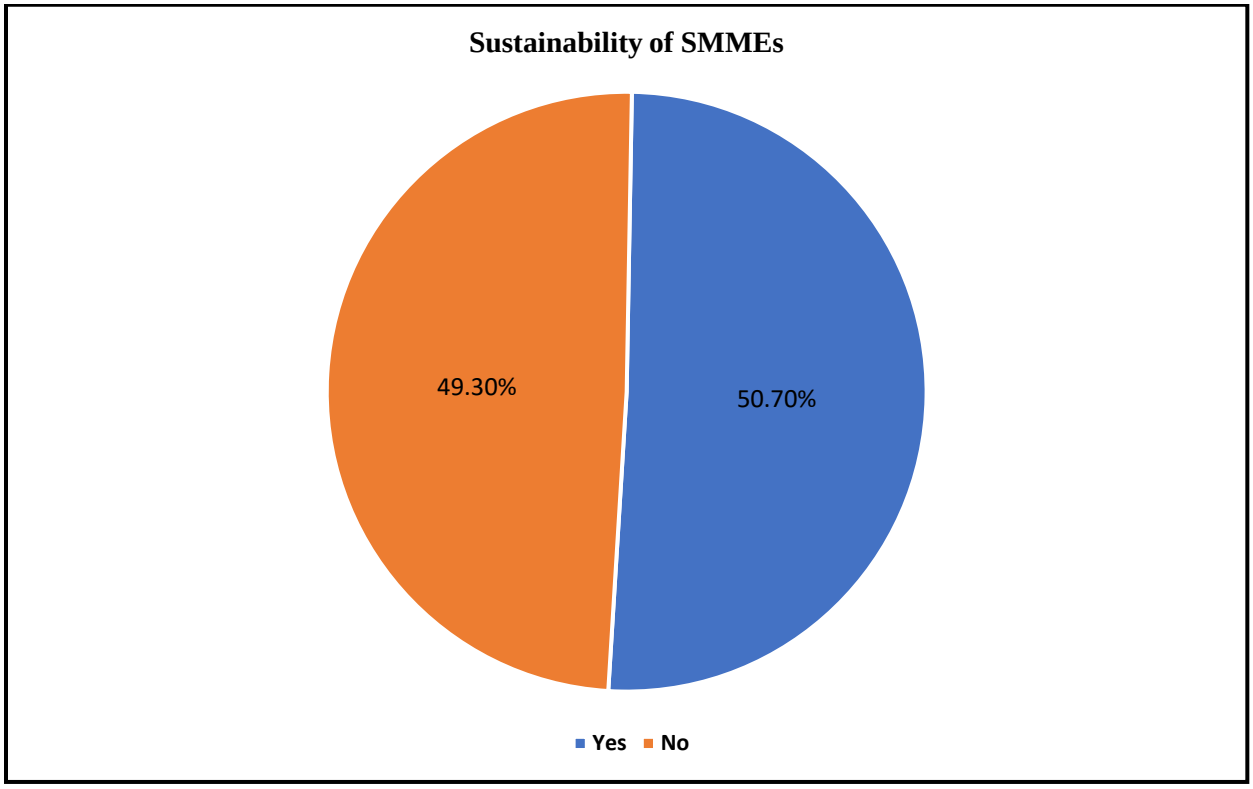


Figure 4.6: Sustainability of SMMEs

Source: Researcher's own construction (2022)

This practical gap concurs with that of Grimsholm and Poblete (2010) that the absence of sustainable policies within SMMEs in developing countries is a significant challenge and a threat to future generations. It is imperative to note that small to medium enterprises lag in achieving sustainable development goals and objectives.

Given the above data presentation of the demographics in this section, it can be recognized that the respondents raised significant issues. These issues include, among others, the rationale behind venturing into the SMMEs business, especially in the construction industry, which shows a significant gap when linked to government support results. The results show that most of the SMMEs owners in the region used their savings as a start-up cost, linked to the results showing a lack of government support for the development of SMMEs in the region. Moreover, the data presented in this section show that despite slow progress as far as the success factors of these businesses are concerned, they contributed to the development of the inhabitants of the livelihoods of the Mangaung Metropolitan Municipality as far as job creation is concerned, as depicted in Section 4.3.1.3.

Therefore, drawing from the data in this section, it is also important to present data on individual managerial skills possessed by construction SMMEs in the Mangaung Metropolitan Municipality. The primary objectives of the research guide the data presented in Section B.

4.3.2 Section B: Managerial skills

The results in this section are presented on the provided scale ranging between Poor (*P*), Moderate (*M*), and advanced (*A*). As shown in Chapter 3, Section 3.3.2.3 of this research, the sample size *n* (154) is the total function of the entire population and is estimated as follows: *n* represents the sample size, while *N* (250) is the total target population, and *e* is the acceptable level of significance level, of which 5% were accepted. The purpose of standard deviation and mean is to measure the variability of the data or responses. Statistics experts have established that measures within plus or minus 2 SD of the real value are more accurate than those that fall outside this range. A low standard deviation

indicates that the data are tightly grouped around the mean, whereas a significant standard deviation indicates that the data are widely dispersed.

Table 4.6: Managerial skills possessed by small businesses

Statement	n=	M	Dev	P	M%
Compliance (professional and regulatory)	76	1.9	0.3	8%	92%
Quality (planning and control)	90	1.9	0.3	10%	90%
Human Resources	122	1.9	0.3	13%	87%
IT (Computer Literacy)	95	1.8	0.4	23%	77%
Logistics (operational efficiency)	118	1.8	0.4	25%	75%
Finances (budgeting, costing, pricing, and cash flow)	118	1.7	0.4	26%	74%
Marketing (networking, tendering, advertising, and sales)	117	1.7	0.5	33%	67%

Source: Researcher's own construction (2022)

Table 4.6 shows the responses regarding the managerial skills possessed by the owners of SMMEs of construction companies that help carry out their duties and comply with the region's legal rules and regulations. On the factors or statements, 87% of the respondents attested that human resources were one of the skills they possessed, while the remaining 13% did not possess proper human resources skills.

Moreover, Table 4.6 shows that over 73% of the respondents stated that they possessed moderate financial skills, one of the critical skill sets in the construction industry since cost allocation and profit determination strategies are crucial to the success of businesses. On the other hand, 26% of the respondents indicated that they did not have sufficient finance skills. These findings concur with research done by Smit and Watkins (2012), who emphasise the need and the imperativeness of financial skills in construction companies, which most SMMEs lack. Thus, it is highlighted as one of the critical areas to be addressed in compliance with the region's legal and tax authorities.

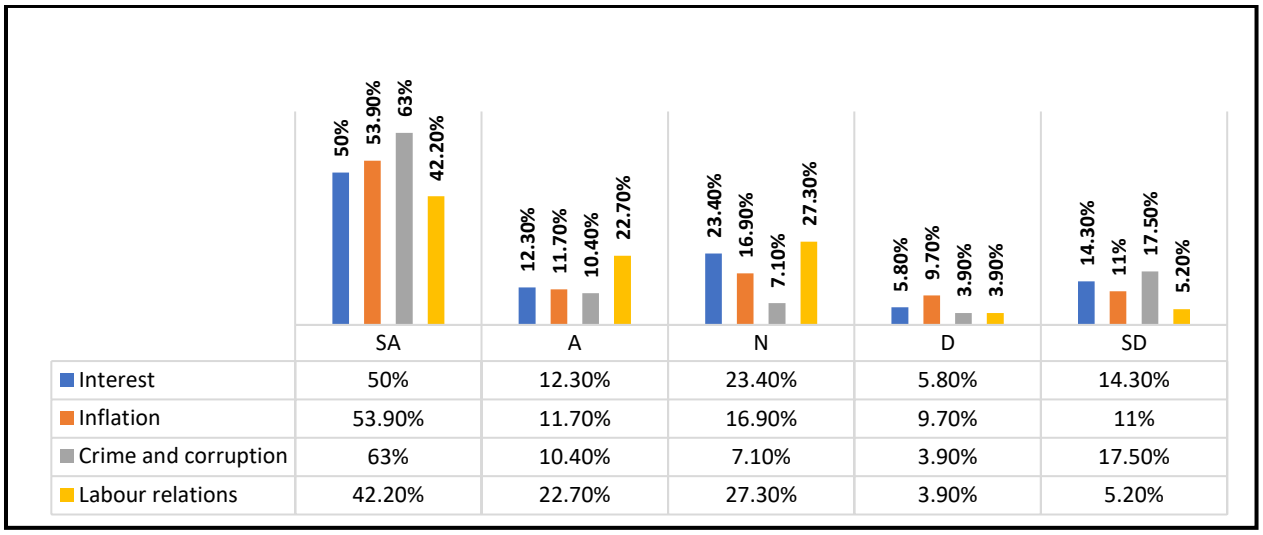
More so, 75% of the respondents possessed logistics and operations management skills, while only 25% had poor skills. Marketing skills are one of the critical skills to possess in the 21st century. 67% of the respondents possessed moderate marketing skills, while only 33% had poor skills. This research further shows that more than 77% of the respondents attested to possessing moderate skills in information technology (IT), while only 23% had poor skills. Information technology is one skill that allows small to medium businesses to reach out to a larger, broader market through digital platforms and skills, as also alluded to by various scholars (Srinivasan, 2018; Farooq & Raju, 2019; Ogunade, 2019).

The result also agrees with research by Srinivasan (2018) in which quality compliance and legal compliance skills are critical in the construction industry, with more than 90% of the respondents agreeing to possess the skills, while only 10% do not possess the skills critical in delivering construction projects. Quality is vital in the construction industry: 92% of the small to medium enterprises attest to having skills in legal compliance skills, and 7.9% possess the skills only poorly. From all factors, it can be noted that no respondent attested to possessing the suggested skills at an advanced level; subsequently, all the factors had a 0% advance in both mean and standard deviation.

The above discussion was based on skills possessed by small to medium enterprises in the region presented in Table 4.2. The discussion depicts that small to medium enterprises in the construction industry of the Mangaung Metropolitan Municipality possess minimal skills. Few do have high-quality skills to remain competitive and address challenges, bedevilling the operations of small to medium enterprises within the construction industry in the Mangaung Metropolitan Municipality. This research is essential for identifying the challenges faced by SMMEs in the Mangaung Metropolitan Municipality. Section C discusses economic factors affecting the construction industry in Free State Provinces Using a 5-point Likert Scale: **SD**-Strongly Disagree; **D**-Disagree; **N**-Neutral; **A**-Agree; **SA**-Strongly Agree.

4.3.3 Section C: Economic Factors Affecting the construction industry

Figure 4.7 shows the responses to the extent to which employees agree or disagree with the statements below on the economic factors that affect the construction industry in the Mangaung Metropolitan Municipality, Free State Province.



	SA	A	N	D	SD
Interest	50%	12.30%	23.40%	5.80%	14.30%
Inflation	53.90%	11.70%	16.90%	9.70%	11%
Crime and corruption	63%	10.40%	7.10%	3.90%	17.50%
Labour relations	42.20%	22.70%	27.30%	3.90%	5.20%

Figure 4.7: Economic Factors affecting the construction industry in Free State Province

Source: Researcher's own construction (2022)

SMMEs do not operate in isolation and, at the same time, are also susceptible to trends in a business environment that may create pleasant or unpleasant circumstances. Interest rates are among the economic factors that affect the construction industry, with 50% of the respondents strongly agreeing with the statement. Furthermore, 12% agreed, and 23.4% were neutral. However, 6% disagreed, while 14.30% strongly disagreed. However, the more significant percentage supports the statement that it affects the construction industry in the region.

On the inflation factor, 54% of the respondents strongly agreed to the notion; 12% agreed; 17% were neutral to the factor; 10% disagreed; and 11% strongly disagreed with the statement that inflation is one key factor affecting the construction industry in South Africa. This also concurs with Ajagbe's (2012) research that factors affecting SMMEs are associated with economic factors in developing countries, including South Africa.

Von Holdt (2019) suggests in his research that crime and corruption are prevalent economic factors affecting small to medium businesses in the Southern African region. 63% of the respondents strongly agreed; 10.4% agreed; 7.1% were neutral about the factor; 3.9% disagreed with the statement; and 17.5% strongly disagreed. Nevertheless, the fact that some of the respondents disagreed with the factor does not demean the existence of corruption in the construction industry in the province, as is also attested to by Nyarku and Oduro (2017) in their research.

Furthermore, on the labour factor, 42.2% of the respondents strongly agreed with the factor; 22.7% of the respondents agreed; only 27.3% were neutral; 3.9% disagreed, while the rest, 5.2%, strongly disagreed with the notion that labour is a factor affecting activities of small to medium enterprises in the Mangaung Metropolitan Municipality of Free State Province. The South African government promulgated various policies, such as the *Labour Relations Act no. 66 of 1995* (RSA, 1995) and the *Employment Equity Act, no. 55 of 1998* (RSA, 1998), among others, to ensure proper compliance in the workplace (RSA, 1995, 1998). Moreover, these policies have been established to govern and protect employees' rights in the workplace and promote fair labour practices. As Nyarku and Oduro (2017) alluded, small businesses do not comply with South Africa’s labour relations practices. Such findings can further be linked to the 5.2% of the respondents who strongly agreed with the factor; 3.9% of the respondents agreed; 27.3% were neutral; 22.7% agreed with the notion; and the majority, 42.2%, strongly disagreed with the view.

Although it is pointed out in the literature that SMMEs are susceptible to economic dwindling experienced by the economy and the whole world, the research results also support such a theoretical postulation. As shown in this study, considering the strategies currently used by SMMEs, the results show that SMMEs in the construction industry faces several challenges that must be addressed. Section D discusses economic factors employed by SMMEs in construction to minimise the impact of challenges they face in the Mangaung Metropolitan Municipality.

4.3.4 Section D: Economic factors in reducing the impact of challenges faced in the construction industry.

The following discussion hinges on the current solutions or strategies employed by SMMEs to reduce the impact of the bedevilling challenges. To bring forth the rationale and establish a balanced view in this research, discussing probable efforts made by small to medium enterprises to remain competitive or survive is critical. The mean and standard deviation are used to show the variability of the data. In statistics, the measurement of variability, known as the standard deviation (SD), is frequently used. It demonstrates how different things are from the norm (mean). While a high SD shows that the data are dispersed throughout a wide range of values, a low SD suggests that the data points tend to be near the mean.

The "*n*" represents a sample as far as this table response is concerned. In other words, the total questionnaire was distributed to *n*=154 participants, and illustrated in Table 4.7, "*n*" is the sample size of those who responded to the items. Therefore, items were asked in a manner that a scale was developed, with 1 indicating the highest impact and two the lowest impact, as illustrated in Table 4.7. To understand these categories for reporting purposes, the highest impact means that the values agree with the respondents that the items have implications for the system's functioning. In contrast, the lowest impact is understood as those factors that the respondents found do not impact the functionality of the SMMEs in the construction industry.

As explained above, regarding the development of this set of open-ended questions, the participants were asked about economic factors they used to overcome the economic challenges affecting SMMEs in the construction industry. The open-ended questions were structured because "1" was regarded as the factor with the highest impact in terms of increasing challenges faced by SMMEs. At the same time, response "2" represented the lowest impact on the SMMEs. From the participant responses, those responses were calculated, and frequency was provided, as shown in Table 4.5.

Table 4.7: Economic factors used to reduce the negative impact of challenges faced by SMMEs in the construction industry

Statement	1 - Highest%	2 - Lowest%	n	Mean	dev
Managerial skills	72%	28%	153	24.6	0.4
Skilled labour force	72%	28%	151	33.3	0.5
Embracing technology	69%	31%	147	23.2	0.4
Acquiring marketing skills	66%	34%	151	10	0.3
Access to finance	64%	36%	152	13.1	0.3
Networking and convenient location	63%	37%	150	26.3	0.4

Source: Researcher's own construction (2022)

Table 4.7 represents the responses to the factors used by SMMEs and the extent of their effectiveness in curbing challenges faced in the day-to-day operations of SMMEs. Access to finance is one of the critical factors in addressing challenges faced by SMMEs. The data in Table 4.3 show that access to finance is still a challenge, with 64% of the respondents rating this factor as having the highest impact, while only 36% rated it the lowest impact. From this data presentation, it can be argued that access to finance is still a critical issue to be addressed, as SMMEs still lack access to finance (Bushe, 2019).

In addition, 63% of the respondents rated networking and convenient location as the most significant impact, while only 37% rated them the lowest. On managerial skills, 72% of the respondents rated this issue as one of the highest-impact factors, while the remaining 28% rated managerial skills as the lowest factor. The highest-impact factor agrees with Bhorat et al. (2018) that managerial skills are critical in addressing business challenges.

Furthermore, in the skilled labour force, the construction industry generally requires a certain high level of skills to solve operational problems. On this factor, 72% of the respondents rated this as having a high impact, while 28% rated it the lowest. This data presentation corresponds with research done by Mbumbo et al. (2019), in which scholars

emphasise that skilled labour is one of the factors that can improve SMMEs' management or operational activities.

In addition, technological advancement has brought many changes in the industry. Table 4.3 shows that 69% of the respondents rated it a high impact. On the other hand, 31% of the respondents rated technology advancement as the lowest impact. It can be argued from that standpoint that although construction technologies are quite expensive, as alluded to by Afolayan and De la Harpe (2020), at the same time, having them in the business can improve and solve many problems encountered by SMMEs.

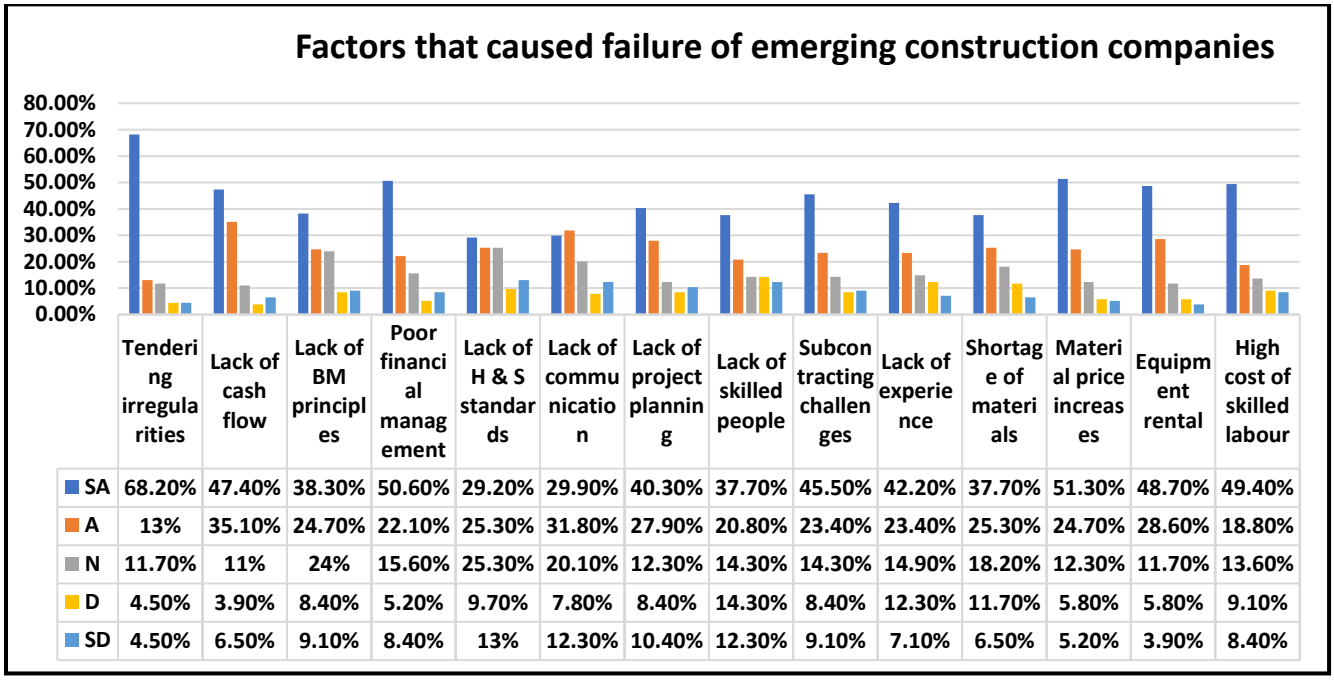
A need for marketing skills is one of the factors 66% of respondents rated the highest, while only 34% rated it the lowest. As alluded to by Afolayan and De la Harpe (2020), marketing, labour skills, and labour factors were emphasised as skills that small businesses in the construction industry need to improve operations. The above discussion shows that SMMEs have strategies to counter the effects of various factors, among the highest factors being a lack of labour and managerial skills.

From the above results presented in this section, it can be acknowledged that SMMEs still face various challenges. The results from this section show that challenges such as access to finance or funding, networking and convenient location for the business, managerial skills, skilled labour force, technology advancement, and marketing skills have a significant impact on SMMEs in the construction industry, particularly those in the Mangaung Metropolitan Municipality. Therefore, Section E discusses factors that impede the success of emerging SMMEs in the construction business, eventually leading to the failure or closure of firms.

4.3.5 Section E: Factors that cause the failure of emerging construction companies

The discussion in this section encapsulates responses on the degree to which respondents agreed on the factors affecting the failure of SMMEs in the construction industry. Failure or closure of SMMEs in the construction industry of the Mangaung

Metropolitan Municipality is a primary concern at the core of this research study. To conclude, it is significant to present the causes of SMMEs' failure in the geographical area of this research study. Figure 4.8 shows responses to statements about some of the factors that cause the failure of emerging construction companies. The following 5-point scale was used: SD-Strong Disagree; D-Disagree; N-Neutral; A-Agree; SA-Strongly Agree.



	Tendering irregularities	Lack of cash flow	Lack of BM principles	Poor financial management	Lack of H & S standards	Lack of communication	Lack of project planning	Lack of skilled people	Subcontracting challenges	Lack of experience	Shortage of materials	Material price increases	Equipment rental	High cost of skilled labour
SA	68.20%	47.40%	38.30%	50.60%	29.20%	29.90%	40.30%	37.70%	45.50%	42.20%	37.70%	51.30%	48.70%	49.40%
A	13%	35.10%	24.70%	22.10%	25.30%	31.80%	27.90%	20.80%	23.40%	23.40%	25.30%	24.70%	28.60%	18.80%
N	11.70%	11%	24%	15.60%	25.30%	20.10%	12.30%	14.30%	14.30%	14.90%	18.20%	12.30%	11.70%	13.60%
D	4.50%	3.90%	8.40%	5.20%	9.70%	7.80%	8.40%	14.30%	8.40%	12.30%	11.70%	5.80%	5.80%	9.10%
SD	4.50%	6.50%	9.10%	8.40%	13%	12.30%	10.40%	12.30%	9.10%	7.10%	6.50%	5.20%	3.90%	8.40%

Figure 4.8: Factors that cause the failure of emerging construction companies

Source: Researcher's own construction (2022)

Figure 4.8 shows responses to the factors affecting emerging SMMEs and leading to their failure. A general notion in the work of many scholars stipulates that the smallest businesses fail within the first five years of operation. Various factors contribute to this, including those in Figure 4.8. Respondents' perceptions were sought on these factors. On tendering irregularities, 68.2% strongly agreed, which is also viewed by Bowler and Dawood (2007) as one of the critical issues that require attention to mitigate the prevalent irregularities surrounding tender issues in South Africa and the entire southern region. 13% of the respondents agreed with the statement, 11.7% were neutral, 4.55 disagreed, and 4.5% strongly disagreed.

Van Scheers (2011) also emphasized the lack of cash flow in his research as one of the factors leading to SMMEs' failure. 47.4% strongly agreed with the statement; 35.1% agreed; 11% were neutral; 3.9% disagreed; and 6.5% strongly disagreed. The balanced results also agree with Smit and Watkins (2012), who view cash flow as a factor affecting the survival of small to medium enterprises.

The research also emphasised the lack of business management principles or knowledge as one of the leading factors in the failure of small to medium companies. 38.3% strongly agreed with the factor; 24.7% agreed; 24% were neutral; 8.4% disagreed; and 9.1% strongly disagreed that this factor contributes to the failure of emerging small to medium enterprises.

Furthermore, regarding the lack of financial management knowledge, 50.6% strongly agreed with the statement; 22.1% agreed; 15.6% were neutral; 5.2% disagreed; and 8.4% strongly disagreed. The results concur with Ogunade (2019), who alludes to the fact that small to medium enterprises fail due to a lack of financial knowledge and compliance with safety and health regulators, eventually leading to firms' closure by the authorities. 29.2% of the respondents strongly agreed with the statement on health and safety implementation; 25.3% agreed; 25.3% were neutral; 9.7% disagreed; and 13% strongly disagreed.

More so, on lack of communication, 29.9% of respondents strongly agreed with the statement, 31.8% agreed, and 20.1% were neutral. 7.8% disagreed, and 12.3% strongly disagreed. This also agrees with Bhorat et al. (2018) and Rankhumise and Letsoalo (2019), who further states that planning is critical in the construction industry and contributes to the success of small businesses.

40.3% of the respondents strongly agreed that lack of planning contributes to the failure of emerging businesses; 27.9% agreed; 12.3% were neutral on the factor; 8.4% disagreed; and 10.4% strongly disagreed. Furthermore, the respondents' perceptions of the lack of skilled people also contributed to the failure of emerging small- to medium-

sized enterprises. These results agree with Authors such as Geo-JaJa and Zajda (2021) also have balanced views on this factor, namely that it contributes to the failure of small to medium enterprises. 37.7% of the respondents strongly agreed with the statement; 20.8% agreed; 14.3% were neutral; 14.3% disagreed; and 12.3% strongly disagreed.

Fritsch and Wyrwich (2018) also agree with this research on the subcontracting factor, namely that it is still a challenge for many SMMEs. Subcontracting qualified small to medium businesses is one of the significant challenges. On this factor, 45.5% of the respondents strongly agreed with the statement; 23.4% agreed with the notion; 14.3% were neutral; 8.4% disagreed; and 9.1% strongly disagreed with the statement. On the lack of similar skills, 42.2% strongly agreed with this factor; 23.4% agreed; 14.9% of the respondents were neutral; 12.3% disagreed; and 7.1% strongly disagreed.

These findings also agree with the existing literature that most SMMEs in the construction industry have divergent skills that do not match to produce the desired results. More so, one of the factors that concur with Watson (2009) is the inability to provide adequate resources and materials; 37.7% of the respondents strongly agreed with this factor, 25.3% agreed; while 18.2% were neutral, 11.7% disagreed, and 6.5% strongly disagreed with the statement. Furthermore, Rust et al. (2013) state that due to inflation and unstable business circumstances, high materials costs have made it difficult for most small to medium enterprises to survive, leading to the closure of many. 51.3% of the respondents strongly agreed with this statement; 24.7% agreed; 12.3% were neutral about this; 5.8% disagreed, and 5.2% strongly disagreed with the statement.

Additionally, on the increase in lease prices of equipment factor, 48.7% of the respondents strongly agreed with the statement. 28.6% agreed, 11.7% were neutral, 5.8% disagreed, and 3.9% strongly disagreed. The results also correspond with Dang et al. (2015) that leasing is a norm for many small to medium enterprises since they cannot afford to purchase highly technical equipment. However, this has been viewed as a constraining factor towards sustainable growth, eventually leading to the closure of firms.

On another factor, 49.4% strongly agreed to the increased cost of skilled labour in the industry as a contributing factor. This is supported by Chun et al. (2015), namely that construction projects require skilled labour, which might be too expensive for small to medium enterprises to acquire. 18.8% of the respondents agreed with the statement; 13.6% were neutral, 9.1% disagreed, and 8.4% strongly disagreed.

The previous section discussed establishing a constructive argument and effectively meeting the demands of the research objectives or questions about factors affecting emerging SMMEs. The research concurs with Bowler and Dawood (2007) and Fritsch and Wyrwich (2018) on factors such as tendering irregularities and subcontracting, respectively. In this research, all primary and secondary objectives were discussed.
The following section provides a summary of the linkages between the main factors guiding this research so that a conclusion can be drawn.

4.4 LINKAGES OF FACTORS GUIDING THIS RESEARCH

4.4.1 Start-up capital

The following results presented in Section 4.1.3.2 show that 53.8% of the respondents used their own savings to open their SMMEs in the Mangaung Metropolitan Municipality construction industry. These results further correspond with the results in Table 4.5, mainly on financial support from the government. 58% of the respondents indicated that lack of access to government financial support affects their progress or growth. Again, these results correlate with the results presented in other research sections, such as Section B, Table 4.6, and Table 4.7, which cannot be disconnected from their efforts to use their own savings to invest in their SMME venture. Furthermore, Table 4.7 agrees with the previous sections in this investigation derived from the results that the accessibility to financing is a significant challenge. The suggested strategies in Table 4.5 shows that the government should increase transparency and fairness amongst SMMEs by improving CIDB assistance to SMMEs.

According to Hess and Rust (2010), access to adequate capital will afford SMMEs the necessary opportunity to invest in resources such as technology, inventory, and adequate

staff training to increase the productivity levels of their company, to focus on the critical need for human resources, and to grow the company's profits to remain sustainable. Despite the availability and functions of financial aid institutions such as Small Enterprise Development Agency (SEDA), Free State Development Cooperation (FDC), Khula Enterprise, and Small Enterprise Finance Agency (SEFA), among others which were established to address the financial needs of the SMMEs especially, still, SMMEs are still confronted with financial challenges. The development and growth of SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State are still restricted by the limited access to financial resources to satisfy various operational and investment requirements. To this, Fatoki and Smit (2011) and the World Bank (2015) further explain that 90% of SMMEs in different municipalities still faced financial access.

4.4.2 Success or failures of SMMEs

Drawing from the results presented, Figure 4.5 shows slight progress of SMMEs in the Mangaung Metropolitan Municipality with 55%, compared to 45% of those still facing growth. This challenge can be linked to some of the factors presented in this research, which sometimes create pleasant or unpleasant conditions such as inflation, crime and corruption, and labour factors. These issues are some of the contributing factors, as reported in this research, also showing the significant impact on the failure of SMMEs. The available research advocates this finding that critical issues that contribute to the failures of SMMEs are connected to issues (Von Holdt, 2019). These issues further complement the theoretical postulation that for any business to succeed and survive, there is a need for a safer working environment and low crime and corruption due to the impact these have on sales levels and investment (Senzile, 2017).

Moreover, the revised Small Business Development Strategic Plan (2020–2025) confirms that the SMMEs environment is over-regulated. Because of a regulatory climate, SMMEs are discouraged from developing new entities, which is perceived as one of the significant barriers to entry for SMMEs. The spirit of Local Economic Development (LED) led by the Department of Economic, Small Business Development, Tourism, and Environmental Affairs (DESTEA) Free State Province campaigns to create favourable environments for

informal and small-scale businesses. However, it is essential to note that regulations are significant for the long-term development of SMMEs and reducing the burden of regulations is unlikely to result in intense development of the SMME market in the short term. Figure 4.7 shows that 42% of the respondents strongly agree that labour regulations are one of the factors that negatively affect the construction industry of the Mangaung Metropolitan Municipality.

4.4.3 Training and development

Drawing from Table 4.5 on strategies the government should employ to assist SMMEs in the Mangaung Metropolitan Municipality, it can be argued from the perspective of the reported results that a frequency of 60% is about training and development. The training and development needed for the emerging SMMEs in the construction fit well in this finding that there must be accessibility to a pool or database of staff with appropriate skills 9both skilled and semi-skilled) (Senzile, 2013). Although this might contribute to greater progress, on the other hand, economic factors such as high recruitment costs for those highly qualified individuals might be a constraint for emerging SMMEs (Tubane, 2017).

However, SMME owners in the construction industry in the Mangaung Metropolitan Municipality of the Free State need to invest time and money in developing strategies to improve their own personal and employees' business understanding and skills. Thus, the role of training and skills development is deemed critical for SMMEs to learn and grow. In support of this view, Amra, Hlatswayo, and McMillan (2018) assert that a lack of managerial skills and training is the root cause of poor SMME performance in the local economy. Trends in the global economy raise the bar and essence of what has been termed "learning-led competitiveness" even higher. It is by these sentiments that it is not automatically that the most innovative, more labour absorptive, and successful SMMEs are those that skilled and knowledgeable owners and personnel lead and those with semi-skills. This study agrees with Table 4.7 on economic factors used to reduce the negative impact of challenges faced by SMMEs in the construction industry, as 72% of the respondents rated managerial skills and skilled labour force as the two highest factors that can assist in reducing challenges faced by SMMEs in the construction industry. It

further confirms that SMME owners appreciate the link between training development and business growth.

4.4 CHAPTER SUMMARY

This empirical chapter presented and discussed the research findings. Given the nature of the research focus, 154 participants were recruited to participate in this study. These participants were owners and employees of SMMEs in the construction industry in the Metropolitan Municipality of the Free State. The research followed a quantitative approach (questionnaires) with a response rate of 100%. This response rate was sufficient to draw the following conclusions. To ensure the validity and reliability of data for collection and reporting purposes, the research instrument for this study was tested using Cronbach's alpha coefficient. The alpha values for the entire questionnaire were acceptable, within the range of 0.7, which is acceptable. An acceptable Cronbach alpha is 0.70 or above.

Data collection for this study was carried out for three (3) months. The results show that most SMME owners (53,8%) in the construction industry started their business with personal savings, while the other 24% did through tendering. However, Chapters 1 and 2 of this research provided views from the literature on the construction areas in which SMMEs are involved in the construction industry and their contribution to the economy of the country. This research shows that 44.10% of SMMEs do general building, while the other 36.80% are involved in civil work.

Furthermore, this research can attest that while small businesses must be involved in various developmental programs, this research found that 83% of SSMEs were never involved in any government or municipal incubation program. Drawing from the start-up cost findings and linking that to the support SMMEs in the construction industry receive from the government, it shows that only 18% of the SMMEs admitted having received any support from the government, with 82% of these businesses being on their own.

Based on the findings of this research, a significant number of SMMEs, more than 55% of the respondents, have had substantial success in the construction industry in the province. More so, these findings are not far from the 45% of the respondents yet to make substantial progress in the industry. In this case, the success of SMMEs in the region, particularly those in the construction industry, still encounters various challenges regarding their role in job creation and economic development. These challenges can further be tied to the sustainability of SMMEs, which shows that 49% of SMMEs do not operate within the principles of sustainable development goals. This gap can be argued from the absence of sustainable policies guiding SMMEs, particularly in developing nations, including South Africa.

Lastly, while external factors were presented, concomitantly, this research study shows that the challenges affecting the operations of SMMEs in the region are also internal. Significant findings of this research show that various skills are necessary for SMMEs to operate their businesses effectively. These include human resources (87%), financial skills (73%), logistics and operations management skills (75%), information technology skills (77%), etc.

The next chapter concludes the study and provides future research recommendations based on the findings.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter examined all data gathered from study participants, highlighting challenges faced by SMMEs in the Mangaung Metropolitan Municipality construction industry in the Free State Province. Some light was shed on how these challenges can be reduced, impact the success of small businesses, and the strategies that can be used to mitigate the adverse effects of the challenges. The outcomes were offered in the form of descriptive statistics and graphs.

Furthermore, the researcher reached a conclusion and recommended strategies or methods that could help SMMEs owners and their management improve their productivity and growth. With the previous chapters outlining the aims and objectives of the study, the researcher saw the need to discuss them while focusing on the challenges faced by SMMEs in the construction industry in the selected research region.

5.2 SUMMARY OF FINDINGS

Most SMMEs in South Africa use their savings to finance a construction start-up. Very few people use government agencies as a means of financing business activities. Although there is low government support for SMMEs in construction in the province, the smallest businesses render general construction services. SMMEs in the region's construction industry has many challenges, with little government intervention. In the face of grave factors, such as tendering irregularities, firms fail. Small businesses are encouraged to employ various means, such as expansion skills in marketing, management, and technological advancement, to reduce the devastating effects of these challenges.

The research explores the challenges encountered by SMME construction in the Mangaung Metropolitan Municipality in the Free State Province. Structured interviews were utilised to collect the data as part of the study's quantitative research design. Choak (2012) acknowledges that these interviews allow the researcher to learn more about the

respondents' experiences in-depth. Only SMMEs in the Mangaung Metropolitan Municipality construction industry were included in the target population.

The researcher chose the purpose-sampling technique to communicate experiences and ideas in a vibrant, communicative, and meaningful way. A hundred and fifty-four (154) participants randomly chosen from among all the SMMEs that comprised the target population made up the sample size from which the sample for the study was taken. To ensure that the respondents and the researcher had enough time and flexibility, the researcher emailed the survey questionnaires to the participants and allowed a turnaround time of 30 days for the participants to respond. The data from the respondents were analysed using a quantitative analysis approach, and conclusions were made.

5.3 OBJECTIVES OF THE RESEARCH

To achieve the aim of this research, which investigated the challenges faced by SMMEs in the construction industry in the Mangaung Metropolitan Municipality of the Free State Province, the following secondary objectives were explored:

- Identify the challenges contributing to the failure of SMMEs in the construction industry in the Mangaung Metropolitan Municipality.

- Identify barriers contributing to the slow growth of SMMEs operating in the construction industry.

- Investigate what strategies are employed by SMMEs in the construction industry to counter the challenges they are facing.

This chapter draws its conclusion from the above three objectives for this study, and those conclusions are discussed below:

5.4 CONCLUSIONS

5.4.1 The skills level possessed by small to medium companies

Descriptive statistics were used to show the frequencies of different responses provided by the respondents. Various factors were used and suggested to the respondents for selection. The results of the factors used are discussed in detail below.

Among the skills possessed by small businesses are human resources, finance, quality, logistics, information technology, and marketing. Human resources, information technology, and operations management are skills that small to medium-enterprise personnel widely possess. This has a significant impact on their quality skills and legal compliance. Human resources were accepted as the most widely possessed skill by small to medium enterprises among the other factors, with over 86% of the respondents agreeing to this factor.

5.4.2 Economic factors that affect the construction industry

The research found that inflation, interest increment, crime, and corruption are among the factors that significantly affect the operations of small to medium businesses. Due to changes in the business environment and rising inflation rates in South Africa, small businesses find it difficult to survive. Crime and corruption were the main challenges faced by small to medium enterprises. The research also concludes that inflation and interest rate are significant challenges affecting small to medium enterprises.

5.4.3 Economic factors in reducing the impact challenges faced in the construction industry

Access to finance, improved managerial skills, networking, skilled labour force, acquiring marketing skills, and embracing new technologies can be obtained by small businesses to curb the bedevilling effects of these challenges. Managerial skills and skilled labour were the primary skills used to reduce the effects of the challenges. The construction industry generally requires a highly qualified or skilled workforce contingent. Other factors critical to combating these challenges include adopting new technologies and acquiring

marketing skills purported to increase the performance and market of small to medium enterprises, subsequently reducing the diverse effects of the challenges.

5.4.4 Factors that cause the failure of emerging construction companies

The research also found that tendering irregularities, poor financial management, and inflation, which have resulted in increased product cost, are among the factors contributing to the failure of small to medium enterprises in the province. Inflation is one of the most critical factors. The respondents suggested and agreed upon many other factors, including lack of skilled labour, shortage of materials, subcontracting challenges, lack of planning, and poor financial management. However, among these factors, the researcher concludes that irregularities, poor financial management, and cash flow management are among the significant factors affecting the growth and closure of many small to medium enterprises since the construction industry is cash-flow-based.

5.5 RECOMMENDATIONS

5.5.1 Small to Medium Enterprises

- It is the responsibility of small to medium enterprises to employ advanced technologies to improve their operations. Technologies proffer various benefits to quality and market-related problems. Technologies can improve small businesses' profitability and sustainability as well.

- To mitigate tendering irregularities, small to medium enterprises should improve the participation of municipality incubation contractor programs. These programs can contribute significantly to the success of small businesses in the construction industry.

- Research and development are factors lacking in small to medium enterprises. Research is one tool that contributes significantly towards growth and legal compliance. Gaining more insights into the market and product development forms the basis of success in most organisations.

- Small to medium enterprises can focus on improving their quality skills development for management and employees. Quality challenges will not be a huge obstacle in the face of quality skills development, which can be done through training and development schemes or by employing qualified personnel. Employing quality management skills can earn SMMEs ISO certification and improve their credibility in operations.

- In cash flow financing, it is advised that contractors create a thorough financial plan with efficient controls based on the study's findings to assure plan compliance and prevent cross-financing of several projects. A financial strategy should be created and followed to provide adequate financial management, which will then assure cash flow stability and, as a result, improve project performance. According to this report, the GCC 2015 supports paying emerging contractors up to 10% to 20% of the total contract amount to help them manage their cash flow. By integrating bidders' financial or bank rating as one of the evaluation criteria for functionality or quality in the bid document, the customer should also consider completing a financial risk assessment.

5.5.2 Government and other stakeholders

- The role in facilitating the growth and sustainability of small to medium enterprises is unquestionable. The government must construct policies and strategies to assist small to medium regional enterprises and access markets, equipment, and research and development services.

- The government and small businesses must work hand in hand with non-governmental organisations to improve sustainable development issues. Policy formulation and implementation of access to financial resources can be made easier for SMMEs through the intervention of the government and other stakeholders.

5.5.3 Local authorities

The local authority is mandated to create a conducive environment for SMMEs' growth. Increase business support and reasonably extend tender support services to SMMEs and improve sustainable development initiatives or policies.

5.6 AREAS FOR FURTHER RESEARCH

The research suggests the following areas for further research: the impact of research and developing a strategy for the growth of small to medium enterprises. The research can further expand into other municipalities in South Africa, increasing the study's richness in solving economic problems.

To guarantee that all disconnects are found and resolved, future studies can also use the systems theory method by extending the study to include all the linked and interdependent subsystems (project phases or stages) within the value chain of the projects. Furthermore, because the identified variables were viewed as functioning in several ways for this study, the systems theory method can help to provide a clearer understanding of the interdependence and interdependency of the variables. The influence of sustainable development initiatives on the growth of small to medium enterprises and the influence of quality management on the growth of small to medium enterprises can be expanded further using relevant theories.

5.7 CHAPTER SUMMARY

SMMEs play a crucial role in the mission to address challenges faced by South Africa in absorbing labour and expanding the economy by penetrating new markets through innovation and creativity. In the modern world, small businesses have become the cornerstone of success in many economies. This research was conducted in the Free State Province's Mangaung Metropolitan Municipality construction industry. Small to medium enterprises in the province are encountering various challenges hindering their activities and failing to operate sustainably. In the face of all these challenges, small businesses have the mandate to construct strategic growth and sustainable policies, as suggested by the research. In addition to small businesses' efforts to curb the challenges,

the government and other stakeholders have the opportunity, including the local authority, to facilitate small business growth in the Free State Province.

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APPENDIX A: DATA COLLECTION INSTRUMENT (SURVEY QUESTIONNAIRE)

SECTION A: DEMOGRAPHIC AND BUSINESS INFORMATION

(Please mark the appropriate box with an X or click once to check or un-check a box)

1. Please give your reason for "why" you started your business, especially in the construction field.

……
……
……

2. How did you raise your start-up capital?

Own savings	
Bank loan	
Government Agency	
Tendering	
Other	

……
……

3. How many people has your business employed?

……

4. What type of work does your company specialise in?

Civil works	
General building	
Road and earthworks	
Other (specify)	

5. What is your company's CIDB Grading (between 1 and 9)?

Grade (between 1 and 9)	

6. Does your company participate in development programmes offered by the Department of Public Works in the Province, E.g., the Contractor Incubation Program and Construction Industry Development Board programmes?

YES	**NO**

7. Do you think the government is doing enough to assist SMMEs in construction?

Yes	**No**

8. In what ways you think the government should intervene and assist the development of SMMEs in construction?

……
……
……
……

9. Do you consider your company successful?

Yes	**No**

10. Considering the present economic circumstances, do you think your company is sustainable?

Yes	**No**

11. If Yes, how did you benefit from such programmes?

……
……
……
……
……
……

SECTION B: Managerial Skill

12. How do you rate your organisation's skill level in the management of the following functions?

	Poor	**Moderate**	**Advance**
Human Resources			
Finances (budgeting, costing, pricing, and cash flow)			
Logistics (operational efficiency)			
Marketing (networking, tendering, advertising, and sales)			
IT (Computer Literacy)			
Quality (planning and control)			
Compliance (professional and regulatory)			

SECTION C: ECONOMICAL FACTORS

13. Below is the list of assessment statements about some economic factors that affect emerging construction companies. Please indicate to what degree you agree to these statements using the following 5-point scale: SD-Strongly Disagree; D-Disagree; N-Neutral; A-Agree; SA-Strongly Agree.

Assessment statement - The following economic factors affect my company:	**SD**	**D**	**N**	**A**	**SA**
Interest rates					
Inflation					
Crime and corruption					
Labour regulations					

14. Below is a suggested list of strategies emerging construction companies can employ to counter their challenges. Please rank the strategies below from highest to lowest impact on SMME sustainability (1 = highest impact and 6 = lowest impact).

Assessment statement	Ranking
Access to finance	
Networking and convenient location	
Managerial skills	
Skilled labour force	
Embracing technology	
Acquiring marketing skills	
Acquiring marketing skills	

SECTION D: Factors that cause the failure of emerging construction companies

15. Below is the list of assessment statements about some of the factors that cause the failure of emerging construction companies. Please indicate to what degree you agree with these statements using the 5-point scale. SD-Strong Disagree; D-Disagree; N-Neutral; A-Agree; SA-Strongly Agree

Assessment statement	SD	D	N	A	SA
I believe the following factors cause the failure of emerging construction companies:					
Tendering irregularities					
Lack of cash flow					
Lack of business management principles					
Lack of financial management					
Lack of implementation of health and safety standards					
Lack of communication					
Lack of project planning					
Lack of skilled people					

Subcontracting challenges (dispute and performance)					
Lack of experience in similar work					
Shortage of materials					
Material price increases					
Equipment rental rate increases					
High cost of skilled labour					

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

APPENDIX B: ETHICAL CLEARANCE LETTER FROM THE UNIVERSITY OF THE FREE STATE

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS UV

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

17-Apr-2022

Dear Miss Ntahle Khetha

Application Approved

Research Project Title:
Exploring challenges faced by SMME's in the construction industry of Mangaung Metropolitan Municipality of the Free State Province

Ethical Clearance number:
UFS-HSD2022/0105/22

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Dr Adri Du Plessis
Chairperson: General/Human Research Ethics Committee

Dr Adri du Plessis
Digitally signed by Dr Adri du Plessis
Date: 2022.04.19 12:43:32 +02'00'

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APPENDIX C: LETTER OF PERMISSION TO CONDUCT THE RESEARCH FROM CIDB

cidb
Construction Industry Development Board

DEVELOPMENT THROUGH PARTNERSHIP

Date: 6 April 2022

Ms. NSC Khetha (2006006676)
Masters of Business Administration
University of the Free State

REQUEST FOR PERMISSION TO ACCESS AND UTILISE CLASSIFIED DATABASE OF THE CONSTRUCTION COMPANIES REGISTERED WITH THE CONSTRUCTION INDUSTRY DEVELOPMENT BOARD AND TO DISTRIBUTE STRUCTURED QUESTIONNAIRES TO THE REGISTERED COMPANIES OF THE CONSTRUCTION INDUSTRY DEVELOPMENT BOARD FOR ACADEMIC AND/OR POSSIBLE PUBLICATION ONLY.

I take pleasure in informing you that the Provincial Manager cidb Free State has granted permission to access and make use of the organisation's classified database to invite participants to your study for academic and/or possible publication purposes only.

The organisation will furniture you with the confidential information requested, however I need to put strong emphasis on the importance of safeguarding the confidentiality of the information to be received.

I will also like to bring to your attention that this position of confidentiality may be violated depending on how the information is handled. And as a result this might cause the organisation irreversible image damage which might lead to legal action instituted against the organisation.

I trust that you realise the great responsibility placed on you and the significance of safeguarding the confidentiality of the information for both the organisation and the respondents. I further, rely on your positive contribution in this regard.

Yours sincerely,

Mrs G Moleleki
Provincial Manager: cidb Free State
PO Box 2107, Brooklyn Square, 0075 | Tel +27 86 100 2432
Anonymous Fraud Line 0800 11 24 52
www.cidb.org.za

Directors: Mr Khulile Nzo (Chairperson) Prof Susan Bouillon (Deputy Chairperson) | Ms Yvonne Mbano | Mr Tumelo Gopane | Mr Sibusiso Makhanya | Mr Danny Masimene | Ms Karabo Siyila | Ms Moloko Raboswana | Ms Erna Mokgatle | Ms Celeste le Roux | Ms Thuthuka Songelwa | Ms Bongekile Zulu | Mr Khuliso Kennedy Maimela | Mr Bongani Dladla (ACEO)

APPENDIX D: INFORMATION CONSENT AND INFORMATION LEAFLET

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS UV

INFORMED CONSENT AND INFORMATION LEAFLET

Dear *Director (Business owner)*

I am doing research and would like to request permission for your participation in the research.

DATE
22 May 2022

Date of research project

TITLE OF THE RESEARCH PROJECT
Exploring challenges faced by SMME's in the construction industry of Mangaung Metropolitan Municipality of the Free State Province.

PRINCIPLE INVESTIGATOR / RESEARCHER(S) NAME(S) AND CONTACT NUMBER(S):

Snowey Khetha *2006006676* *067 276 5422*

FACULTY AND DEPARTMENT:

Name of Faculty: Economic and Management Science
Name of Department: Business studies

STUDYLEADER(S) NAME AND CONTACT NUMBER:

: Mr Gideon Barnard (0730861)
+27823772410

WHAT IS THE AIM / PURPOSE OF THE STUDY?
This research will be conducted in fulfilment of my Master degree in Business Administration. In this research, I intend to explore experiences, perceptions and expectations of the research participants on various issues pertaining these research objectives: (i) To identify challenges that contribute to the failure of SMMEs in the construction industry in the Mangaung Metropolitan Municipality; (ii) To identify barriers contributing to slow growth of the SMMEs operating in the construction industry; (iii) To investigate what strategies are employed by the SMMEs in the construction industry in countering challenges they are facing; (iv) To formulate recommendations based on literature and empirical studies to mitigate challenges faced by SMMEs companies in the construction industry in Mangaung Metropolitan Municipality in the Free State Province.

WHO IS DOING THE RESEARCH?

My name is Ntahle Snowhite Charlotte Khetha. I am a MBA student at the University of the Free State, faculty of Economic and Management Sciences, Business School. I previously work for the bank in the SMME space and was alarmed by the high level of business closure rate of the SMME company in the construction industry in the Free State. In my past experience this SMMEs could not survive to enter the business maturity phase but rather collapse on the entry phase. Thus the interest to explore and ascertain factors contributing to the failure of SMMEs companies in the construction industry of the Mangaung Metropolitan Municipality.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

Yes.

Approval number: UFS-HSD2022/0105/22

WHY ARE YOUR INSTITUTION/ORGANISATION/COMPANY INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

The Construction Industry Development (CID) Regulations of 2004, as amended, bind public sector clients to only award construction contracts to CIDB registered contractors. Therefore, you are considered a possible participant for this research based on your designated position as an owner of the SMME in construction. The assumption is that your level of experience in in running your company will help me better understand the experiences, perceptions, and expectations regarding the challenges you faced as an SMME owner.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

The participant's participation in this research is voluntary. All the participants will be required to complete a standard questionnaire. In cases where the participants do not have access to email, the researcher will telephonically contact the participants and make use of audio recording, the researcher will then complete the questionnaire on behalf of the participants according to the recorded response from the participant. It is estimated that the questionnaire at the most will take about 10-15 minutes to complete

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

There are no direct individual or personal benefits that the participants will get by participating in this study. However, the study will enhance our knowledge on the subject and the findings may be used to formulate recommendations based on literature and empirical studies to mitigate challenges faced by SMMEs companies in the construction industry in Mangaung Metropolitan Municipality in the Free State Province.

WHAT IS THE POTENTIAL RISKS TAKING PART IN THIS STUDY?

There are no risks that are anticipated from your participation in the study. However, when you feel uncomfortable to respond during the completion of the self-administered questionnaire, you have a right to pass on. In that case, at any time you may notify the researcher that you would like to stop your participation in the study. There is no penalty for discontinuing. Since this research will be conducted during office hours, the researcher in advance will request permission from the company owner, to ensure that this self-administered questionnaire data collection does not interfere with the employer's time, an appointment (if needed since the process is self-administered survey) will be requested with the participant(s) in advance so that the respective official(s) is aware and acceptance of the appointment will be communicated with the respective participants' for record keeping purposes.

WILL THE INFORMATION BE KEPT CONFIDENTIAL?

All the participant's name's will not be recorded anywhere on the questionnaires and no one will be able to connect the participants to answers given. All the participants will sign a confidentiality agreement. The participant's answers will only be reviewed by the people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. However, the participant's anonymous data may be used for other purposes, e.g. research report, journal articles, conference presentation, etc. Participation is voluntary and no participants will be forced to take part.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

The researcher will store the electronic information collected through the questionnaire survey on a password-protected computer and a backup gadget to which only the researcher has access for five years for future research or academic purposes. The information will be double protected by a combination of a password-protected folder and a file-specific password generated on Windows Explorer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. After five years' hard copies will be shredded and electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software program.

WILL THERE BE PAYMENT OR ANY INCENTIVES FOR PARTICPATING IN THIS STUDY?

As mentioned that the participation in this study is voluntary, there will be no remuneration or incentive for participating in this research. The cost to the participants will be the cost to printing the questionnaire. There are no potential risks of harm for the participants as no personal information of the participants is not needed for the completion of the questionnaire.

HOW WILL THE INSTITUTION / ORGANISATION / COMPANY BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?

If you would like to be informed of the final research findings, please contact Snowey Khetha on 067 276 5422 or email address: snowey.khetha@gmail.com. The findings are accessible for a period of five years. Should you require any further information or want to contact the researcher about any aspect of this study, please contact, Snowey Khetha on 067 276 5422, email: snowey.khetha@gmail.com. Should you have concerns about the way in which the research has been conducted, you may contact my study supervisor Mr Deon Barnard on 082 377 2410 email: barnardgp@ufs.ac.za, 051 401 3183.. There are no risks that are anticipated from your participation in the study. However, if there is a question on the questionnaire that the participants do not feel comfortable to answer, the participant have the right not to respond to the question. In that case, at any time the participant may notify the researcher that they would like to stop the interview and your participation in the study. There is no penalty for discontinuing.

Yours sincerely

Ntahle Snowhite Charlotte Khetha

CONSENT TO PARTICIPATE IN THIS STUDY

I, the undersigned,

_____ *(participant's full names to be included), (the "Participant")*

confirm that I voluntarily agree to participate in the research study referred to as the

_____ *(the "Study") in relation to*

_____

_____

and which Study is being conducted by

_____

(insert the name of the researcher), (the "Researcher").

I, the undersigned Participant, further confirm that–

1. *the Researcher has explained the nature, procedure, potential benefits and anticipated inconvenience of my participation in the Study;*
2. *I have read (or had explained to me) and understood the Study as explained in the attached information sheet;*
3. *I have had sufficient opportunity to ask questions and am prepared to participate in the Study;*
4. *I understand that my participation in the Study is entirely voluntary and that I am free to withdraw at any time without penalty (if applicable);*
5. *I voluntarily provide the UFS and the Researcher with my personal information and consent to the UFS and the Researcher collecting, disclosing and processing my personal information in order to conduct the Study and any related activities in relation thereto;*

6. I hereby acknowledge and confirm that I understand the purpose for which the UFS and the Researcher may collect, store, use, delete, destroy, outsource, transfer or otherwise process, as the context and circumstances may require and as contemplated in terms of POPIA, my personal information as set out herein;

7. I am aware that the findings of the Study will be anonymously processed into a research report, journal publications and/or conference proceedings and that my personal information will be aggregated and de-identified at such stage;

8. I also give the UFS permission to share, without notification, the collected data with other researchers at the UFS or other Higher Education Institutions. This permission is dependent on the same principles of ethical research practices, anonymity/confidentiality, safekeeping of information, and other issues listed above applying.

I, the Participant, agree to the recording of the self-administered questionnaire.

Full Name of Participant: _____

Signature of Participant: _____ *Date:* _____

Full Name(s) of Researcher(s): _____

Signature of Researcher: _____ *Date:* _____

APPENDIX E: LANGUAGE EDITOR DECLARATION LETTER

CORNELIA GELDENHUYS

✆083 2877088
corrieg@mweb.co.za

6 November 2022

TO WHOM IT MAY CONCERN

Herewith I, Cornelia Geldenhuys (ID 521114 0083 088) declare that I am a qualified, accredited language practitioner and that I have edited the following MBA dissertation:

EXPLORING CHALLENGES FACED BY SMMEs IN THE CONSTRUCTION INDUSTRY IN MANGAUNG METROPOLITAN MUNICIPALITY OF THE FREE STATE PROVINCE

by

Ntahle Snowhite Charlotte Khetha

All changes were indicated by track changes and comments for the author to verify, clarify aspects that are unclear, make the necessary adjustments and finalise. The editor takes no responsibility in the instance of this not being done. The document remains the final responsibility of the author.

.....
C GELDENHUYS
MA (Lin) cum laude, MA (Mus), HOD, HDL, UOLM

Accredited member/Geakkrediteerde lid, SATI, Membership/Lidmaatskap: 1001474 (A/E·E/A)
Full member/Volle lid, Professional Editors Guild (PEG, Membership GEL001)
Mediterranean Editors and Translators (MET: Membership 02393)
European Association of Scientific Editors (EASE: Membership 5523)