

**NELSON MANDELA**  
UNIVERSITY

**Business School**

**THE SCALABILITY OF SMALL AND MEDIUM ENTERPRISES IN  
SOUTH AFRICA**

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# DECLARATION

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## **ABSTRACT**

It has long been recognised that small and medium enterprises (SMEs) account for an overwhelming part of businesses worldwide and that they contribute considerably to private sector Gross Domestic Product (GDP), growth and are the source for most new employment opportunities. It may therefore be postulated that scaling and growing SMEs are of notable importance to the economic wealth of the country and to this extent it eliminates economic stagnation.

This treatise argues the significant impact that entrepreneurship exerts on the South African economy. This would allow the role players to identify the strategic interventions necessary to grow and scale SMEs. A literature review was conducted to develop insights on the factors that affect the scalability of SMEs. The aforementioned section expounds on the concept of SMEs. Secondly, the emergence of SMEs across developed and emerging economies is discussed by exploring the United States of America, Europe and the BRICS economies respectively. Thirdly, SMEs in the South African context are explored. Fourthly, the requirements and challenges of SMEs in the South African economy are highlighted.

The primary data for this study were collected from the sample by means of an online questionnaire and through fieldworkers who were deployed to collect responses from the sample group. A representative sample of  $n = 295$  responses were received. Descriptive statistics were used to summarise the data in a way to simplify the interpretation of the data. Inferential statistics were used to authenticate conclusions made from the data. The model was developed and identified the following factors as exerting influence on the scalability of SMEs: Access to Finance, Access to Markets and Access to Human Capital, Entrepreneurial Intention, Regulatory Framework, Business Support and Networks. The average mean values of the factors were then used to establish their position or ranking as determined from the responses received. All factors ranked above a mean value of 3 which indicates that SMEs have a neutral to positive opinion of the factors identified in the model. According to a one-tailed t-test from the sample of SMEs it was shown that two of the nine factors had a large effect size in the factors of Human Capital and Entrepreneurial Intention. The

Scalability of SMEs' model developed in this study specified the factors that influence the growth of SMEs.

**Keywords:** Challenges, Employment, Growth, Scalability, SME, South Africa.

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## LIST OF ABBREVIATIONS

Black Economic Empowerment	BEE
Brazil, Russia, India and China	BRIC
Brazil, Russia, India China and South Africa	BRICS
Broad Based Black Economic Empowerment	B-BBEE
Department of Trade and Industry	DTI
Eastern Cape	EC
European Union	EU
Free State	FS
Gauteng	GP
Gross Domestic Product	GDP
India, Brazil and South Africa	IBSA
Kwazulu Natal	KZN
Limpopo	LP
Micro, small and medium enterprises	MSMEs
Mpumalanga	MP
Multinational enterprises	MNEs
Nelson Mandela University	NMU
North West	NW
Northern Cape	NC
Organisation for Economic Co-operation and Development	OECD
Quarter 2	Q2
Registered	reg.
Research Objectives	RO
Research Questions	RQ
Small business social responsibility	SBSR
Small Enterprise Development Agency	SEDA
Small and Medium Enterprises	SMEs
South African Institute of Chartered Accountants	SAICA
The National Development Plan	NDP

United States of America

USA

Universal Resource Link

URL

Western Cape

WC

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# **1 CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT**

## **1.1 Introduction**

The twenty-first century economic development agenda dictates the critical role that entrepreneurship plays in economic growth, job creation and poverty alleviation (Roundy, 2017). The World Bank (2015) asserts that SMEs are predicted to create 600 million jobs to absorb the increasing labour force. Governments in developing countries have produced extensive support programmes, financial assistance schemes and innovation hubs as an antecedent to promote entrepreneurship. However, these support programmes take an extensive amount of time, in fact more than 20 years, to measurably impact on entrepreneurship.

Notably, small and medium enterprises (SMEs) employ roughly 50% of the total labour force specifically in developing economies (The World Bank, 2015; SEDA, 2012; National Credit Regulator, 2011). SMEs contribute approximately 90% of businesses globally, 45% of total employment and 33% of the GDP in emerging economies (Global Reporting Initiative, n.d.).

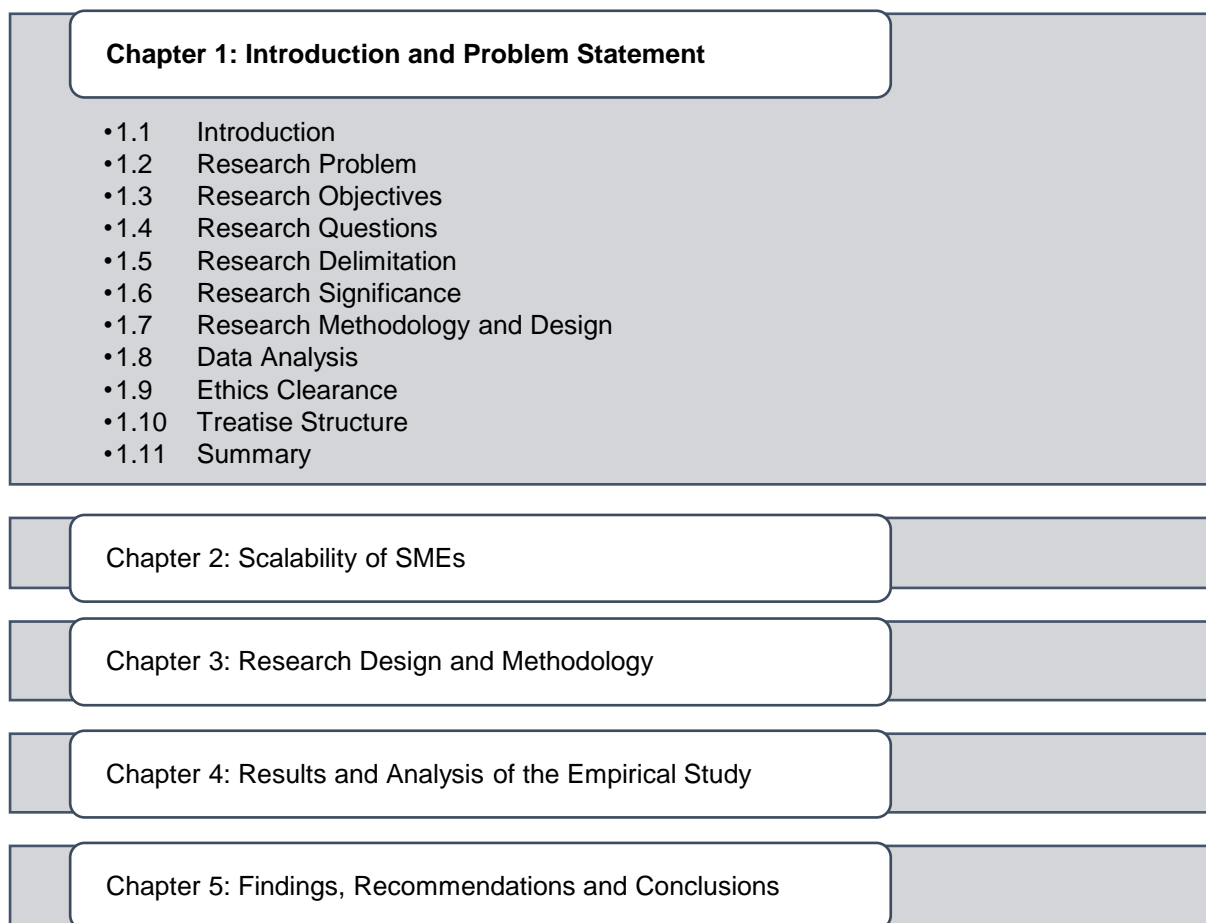
The important contribution of the SME sector to induce economic growth is underpinned by the increase of active entrepreneurs in society. The development and growth of SMEs thus induces the national income by reducing inequality and promoting social cohesion. The significance of SMEs may be located by their ability to promote Gross Domestic Product (GDP), economic development, economic value, employment, innovation, employ local resources, social mobility, skills development and resilience in crisis periods (Kunene, 2008).

The accelerated rate of globalisation has spurred the need to scale and grow SMEs. Arguably, the development of strategic interventions for SME growth is explicated by the understanding of policy-makers. Appropriate policies at a national level may create productive entrepreneurship across varying levels and stresses the importance of the regulatory framework and policy makers understanding to encourage entrepreneurship.

This treatise argues the significant impact that entrepreneurship exerts on the South African economy. This would allow the role players to identify the strategic intervention

necessary to grow and scale SMEs. Evaluating the factors that contribute to SME performance is important to South Africa with unemployment and poverty pressures.

The following sections present the problem statement. This is followed by the definition of the research objectives and questions. The research delimitation and significance are provided. Thereafter, the research methodology and design are introduced followed by the data analysis and ethics. The chapter concludes with an overview of the treatise structure. The framework of Chapter 1 is presented in Figure 1.1.



*Figure 1.1 - Overview of Chapter 1*

## **1.2 Research Problem**

SMEs employ nearly 50% of the total workforce in developing countries (SEDA, 2016; The World Bank 2015; National Credit Regulator, 2011) and are predicted to create 600 million jobs (The World Bank, 2015) to absorb the increasing workforce worldwide.

In South Africa, SMEs contribute between 51% and 57% to national income and employ 60% of the workforce (Cant & Wiid, 2013; Fin24, 2010; Kongolo, 2010).

Literature exposed SMEs as pivotal to economic growth, job creation, poverty alleviation and innovation (Harrington, 2017; Roundy, 2017; Stam & Spigel, 2017; Bureau for Economic Research, 2016). Therefore, the development and growth of SMEs induces the national income and is explicated to reduce inequality and promote social cohesion. The South African National Development Plan (NDP) 2030 aims to eradicate poverty and inequality and entrepreneurship offers the vehicle to promote inclusive economic growth (NDP 2030, 2017).

South Africa currently sits with a youth unemployment rate of roughly 50%, an unemployment rate of 27.7% and slow GDP growth of 1% per annum in real per-capita terms over the past 25 years (Rhodes Business School, 2017). This may indicate that promoting entrepreneurial activity is vital for economic growth. Literature exposed that governments in developing countries have produced support programmes, financial assistance schemes and innovation hubs, which tend to be dormant. Mason and Brown (2014) echo the supposition and assert that these support programmes lack exposure to markets with poor commercial application.

SMEs within the South African context are characterised by various challenges to grow organically. Literature exposed the significant challenges inherent to scale and growth of SMEs, namely:

- Access to Finance (Jones, 2016; Makina, Fanta, Mutsonziwa, Khumalo & Maposa, 2015; SEDA, 2012, Mbonyane & Ladzani, 2011);
- Human Capital (Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016);
- Infrastructure (Bowen, et al., 2009; Anesta, et al., 2004; Ejembi & Ogiji, 2007);
- Access to markets (Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Rogerson, 2000);
- Black Economic Empowerment (BEE) (SAICA, 2015; SEDA, 2012); and
- Entrepreneurial competencies (Sajilan, Tehseen & Adeyinka-Ojo, 2016; Gabrielsson, Tell & Politis, 2009; Colombo & Grilli, 2005).

It may therefore be postulated that scaling and growing SMEs are of notable importance to the economic wealth of the country (Jones, 2016; Cant & Wiid, 2013) to the extent that it eliminates economic stagnation. Moreover, the Bureau for Economic Research (2016) indicates that SMEs contribute 14% to the percentage of total employment in South Africa. This results in the problem statement addressed in this study.

**Problem statement:** No measurable approach exists to evaluate the challenges that limit the scalability of SMEs in South Africa.

### 1.3 Research Objectives

The main research objective (ROM) of this study is as follows:

- **ROM:** To evaluate the factors influencing the scalability of SMEs in South Africa and identify areas for improvement.

In order to achieve the ROM the following secondary objectives need to be achieved:

- **RO1:** To conduct a literature review to develop insights on the factors that affect the scalability of SMEs;
- **RO2:** Justify and explain the research methodology that is used for this study;
- **RO3:** Evaluate the proposed model of Scalability of SMEs in South Africa;
- **RO4:** Establish which factors have a greater effect on the Scalability of SMEs in South Africa (RO4); and
- **RO5:** Establish which factors have a significant effect on the Scalability of SMEs.

### 1.4 Research Questions

The main research question (RQM) was formulated based on the ROM and is stated as follows:

- **RQM:** What are the factors influencing the scalability of SMEs in South Africa?

The following research questions, based on the secondary research objectives need to be answered:

- **RQ1:** What are the factors that affect the scalability of SMEs?
- **RQ2:** How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?
- **RQ3:** What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?
- **RQ4:** What factors in the proposed model for Scalability of SMEs have a higher influence on the Scalability of SMEs?
- **RQ5:** What is the significance of the factors influencing the scalability of SMEs?

Research Question	Research Objective	Chapter Output
<b>RQ<sub>1</sub>:</b> What are the factors that affect the scalability of SMEs?	<b>RO<sub>1</sub>:</b> To conduct a literature review to develop insights of the factors that affects the scalability of SMEs.	CHAPTER 2: SCALABILITY OF SMEs
<b>RQ<sub>2</sub>:</b> How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?	<b>RO<sub>2</sub>:</b> Justify and explain the research methodology that is used for this study.	CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY
<b>RQ<sub>3</sub>:</b> What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?	<b>RO<sub>3</sub>:</b> Evaluate the proposed model of Scalability of SMEs in South Africa	CHAPTER 4: RESULTS AND ANALYSIS OF THE EMPIRICAL STUDY
<b>RQ<sub>4</sub>:</b> What factors in the proposed model for Scalability of SMEs have a higher influence on the Scalability of SMEs?	<b>RO<sub>4</sub>:</b> Establish which factors have a greater effect on the Scalability of SMEs in South Africa (RO <sub>4</sub> )	CHAPTER 4: RESULTS AND ANALYSIS OF THE EMPIRICAL STUDY
<b>RQ<sub>5</sub>:</b> What is the significance of the factors influencing the scalability of SMEs?	<b>RO<sub>5</sub>:</b> Establish which factors have a significant effect on the scalability of SMEs.	CHAPTER 4: RESULTS AND ANALYSIS OF THE EMPIRICAL STUDY

<b>RQ<sub>M</sub>:</b> What are the factors influencing the scalability of SMEs in South Africa?	<b>RO<sub>M</sub>:</b> To evaluate the factors influencing the scalability of SMEs in South Africa and identify areas for improvement.	CHAPTER 5: FINDINGS, RECOMMENDATIONS AND CONCLUSIONS
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*Table 1.1 – Overview of RQs, ROs and Chapter Output*

## 1.5 Research Delimitation

This research study is delineated to SMEs located in South Africa with the goal of understanding the factors that promote and/or hinder their scalability and growth. SMEs may be classified as small and medium enterprises. These classifications may vary across sectors (Longenecker, Petty, Palich, Hoy, Radipere & Phillips, 2017: 6). SMEs are characterised as follows:

- Size in relation to the number of employees;
- Include all businesses across sectors;
- Employs less than 200 employees except for the agriculture sector (minimum of 100 employees);
- SMEs differ in respect of growth potential; and
- SMEs with high growth potential include high-potential ventures and gazelles (Longenecker, et al., 2017: 6).

The scope of the study is focused on the primary data collected from these respondents through survey questionnaires. The key assumption made in this research study is that the literature coupled with the results from the statistical analysis of the primary data will provide relevant and reliable information to address the research questions and accompanying research objectives.

## 1.6 Research Significance

This research attempts to develop insights on the factors that affect the scalability of SMEs in South Africa. Equally, the research will also identify the individual factors that are ranked more significantly to entrepreneurial development and growth within South Africa.

## **1.7 Research Methodology and Design**

This section provides an exposition of the research approach and data collection method for this study.

### **1.7.1 Research Approach**

This study is located in the positivistic paradigm and is based on quantitative techniques (Collis & Hussey, 2014). Quantitative research is a method of collecting data in a numerical format and thereafter analysed using inferential and descriptive statistics. This technique affords the researcher to make logical inferences (Leedy & Omrod, 2010) from the identified sample.

#### **1.7.1.1 Literature Study**

The literature review guided the researcher on the trajectory of ideologies inherent to the research topic (Leedy & Omrod, 2010). Collis and Hussey (2009) assert that it is important for the researcher to gain insight into the research topic in order to offer a credible critique. This critique is characterised by the ability of the researcher to identify plausible gaps and deficiencies in the knowledge developed by the existing body of knowledge (Babbie, 2010).

#### **1.7.1.2 Data Collection**

The primary data were collected from the sample by means of an online questionnaire (Appendix A) and through fieldworkers who were deployed to collect responses from the sample group. An email containing a Universal Resource Link (URL) to the questionnaire was sent to organisations, namely The Business Place and The NMB Business Chamber databases.

The fieldworkers deployed were trained to undertake the facilitation with the SME respondents. The hard copy survey questionnaires that were collected by the fieldworkers were captured on the Nelson Mandela University online software survey platform (QuestionPro).

The questionnaires were distributed by an accompanying covering letter that explained the objective of the study and that respondent participation was voluntary.

A representative sample of  $n = 295$  responses were received. Equally, potential respondents from the organisations mentioned were reminded four times to respond.

### **1.7.1.3 Population and Response Rate**

The sampling method employed in this treatise involved a non-probability sampling technique and comprises the purposive and snowball sampling methods. The sampling frame includes SMEs from South Africa. A representative sample of  $n = 295$  respondents from the population responded.

## **1.8 Data Analysis**

Primary data were analysed by employing univariate analysis (descriptive statistics) and multivariate analysis (inferential statistics) on the hypothesised model for scalability of SMEs model. The descriptive statistics included measures of central tendency including the mean, median and the mode and inferential statistics in the form of t-tests and Cohen's  $d$  analysis. The computer software application, namely STATISTICA was used to perform the statistical analysis on the data.

## **1.9 Ethics Clearance**

The researcher followed the ethical protocol established by Bryman and Bell (2007) throughout the interviews and a few principles include: (1) explaining the purpose of the research study, (2) obtaining informed consent through the NMU ethics committee, and (3) explaining the privacy, confidentiality and anonymity of the respondents. The aforementioned principles have been discussed with the researcher's supervisor.

Ethics Clearance approval documentation (Appendix B – Form E) was submitted to the NMU Business School.

## **1.10 Treatise Structure**

This section provides an overview of the treatise chapters, the research objectives and questions.

### **1.10.1 Chapter 1: Introduction and Problem Statement**

Chapter 1 sets the context of the overall research study by highlighting the problem statement, research problem, research questions and research objectives. This



chapter presents the research methodology. The research delimitations and the significance of the research topic are discussed. Thereafter the proposed chapter headings of this treatise are provided.

### **1.10.2 Chapter 2: Scalability of SMEs**

Research Question RQ<sub>1</sub>, which states; “What are the factors that affect the scalability of SMEs?” is addressed in Chapter 2, which achieves the research objectives of performing a literature review in order to develop insights of the factors that affect the scalability of SMEs (RO<sub>1</sub>).

### **1.10.3 Chapter 3: Research Design and Methodology**

Research Question RQ<sub>2</sub>, “How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?” is addressed in Chapter 3. The chapter addresses the research objective RO<sub>2</sub>, “Justify and explain the research methodology that is used for this study”.

### **1.10.4 Chapter 4: Results and Analysis of the Empirical Study**

Chapter 4 addresses RQ<sub>3</sub>: “What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?”, RQ<sub>4</sub>: “What factors in the proposed model for Scalability of SMEs have a higher influence to the Scalability of SMEs?” and RQ<sub>5</sub>: “What is the significance of the factors influencing the scalability of SMEs?” The aim of Chapter 4 is to; evaluate the proposed model of Scalability of SMEs in South Africa (RO<sub>3</sub>); to establish which factors have a greater effect on the Scalability of SMEs in South Africa (RO<sub>4</sub>) and to determine which factors have a significant effect on the scalability of SMEs (RO<sub>5</sub>).

### **1.10.5 Chapter 5: Findings, Recommendations and Conclusion**

Chapter 5 presents a summary of the findings of this treatise by discussing every research question and research objective. The chapter presents a summary for the opportunities for future research and includes the limitations to this study. Practical recommendations and actionable insights are made to grow and scale SMEs in South Africa.

## 1.11 Summary

Chapter 1 provided the background of the treatise and the need for the research study. It includes the research questions and accompanying research objectives. An overview of the method of research and approach is discussed, following a summary of the data collection method and data analysis conducted.

Chapter 2 reports on the research question, RQ<sub>1</sub>, "*What are the factors that affect the scalability of SMEs?*" The chapter achieves the research objectives of performing a literature review in order to establish the factors that affect the scalability of SMEs (RO<sub>1</sub>).

## 2 CHAPTER 2: SCALABILITY OF SMEs

### 2.1 Introduction

Chapter 1 provided an explanation of the problem statement entrenched in this study. The purpose of this section is to investigate literature associated to small and medium enterprises (SMEs) to explore their relevance globally and within the South African context. Moreover, this chapter undertakes to explain the key factors that affect entrepreneurial development.

This section reports on the research question, RQ<sub>1</sub>, “*What are the factors that affect the scalability of SMEs?*” The results address the research objective RO<sub>1</sub>, “*To conduct a literature review to develop insights on the factors that affect the scalability of SMEs*”. The following section expounds on the notion of SMEs. Secondly, the emergence of SMEs across developed and emerging economies is discussed by exploring the United States of America, Europe and the BRICS economies respectively. Thirdly, SMEs in the South African context are explored. Fourthly, the requirements and challenges of SMEs in the South African economy are highlighted and finally the key findings are explained in the summary. A layout of Chapter 2 is illustrated in Figure 2.1.

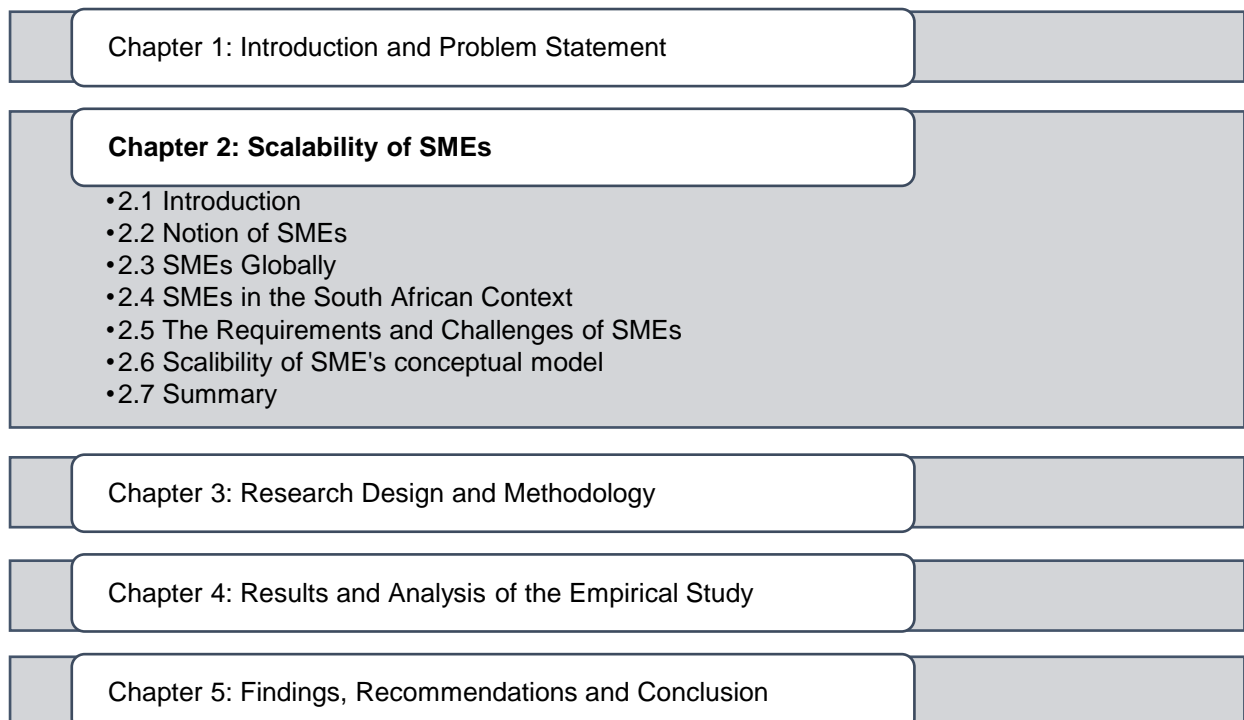


Figure 2.1 - Overview of Chapter 2

## **2.2 Notion of SMEs**

Small and medium enterprises (SMEs) employ approximately 50% of the total workforce specifically in emerging countries (SEDA, 2016; The World Bank, 2015; National Credit Regulator, 2011). Equally, SMEs contribute approximately 90% of businesses globally, 45% of total employment and 33% of the GDP in emerging economies (Global Reporting Initiative, n.d.). The World Bank (2015) asserts that SMEs are predicted to create 600 million jobs to absorb the increasing workforce worldwide.

The important contribution of the SME sector to induce economic growth is underpinned by the increase in active entrepreneurs in society. The development and growth of SMEs thus induces the national income by reducing inequality and promoting social cohesion. The significance of SMEs may be located in their ability to promote Gross Domestic Product (GDP), economic development, economic value, employment, innovation, employ local resources, social mobility, skills development and resilience in crisis periods (Kunene, 2008).

Significant disparities exist amongst SMEs in comparison to macro enterprises as a result of challenges inherent to the accessibility of finance (The World Bank, 2016; National Credit Regulator, 2011). Mrwebi and Evbuomwan (2016) and SiMODiSA Start-Up (2015) assert that the development of an ecosystem to induce growth in SMEs to become scalable and promote economic sustainability will promote socio-economic gains and social cohesion. Moreover, the scalability of informal enterprises to formal enterprises may unlock better access to credit and government services, which may induce a positive economic multiplier effect on tax revenues and regulations (The World Bank, 2015). The assertion to create an ecosystem conducive to SMEs, whilst directing policies towards entrepreneurial developed is anchored by governments, bilateral and multilateral agencies and non-government institutions globally (Kunene, 2008).

The following subsections discuss the definition of SMEs, notwithstanding, the South African definition of SMEs. Next, the economic impact is explained. This is followed by an explanation of the key factors affecting SMEs, namely: access to finance and the

role of government institutions. The final subsection explains the role of SMEs in sustainable economic growth.

### 2.2.1 What are SMEs?

Globally SMEs are non-subsidary, independent firms which employ less than a given number of employees. The number of employees varies across countries. In the European Union, the most recurrent upper limit describing an SME is 250 employees. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees (Fabien, 2015; Firoozmand, Haxel, Jung & Suominen, 2015; Kushnir, Mirmulstein & Ramalho, 2010; Organisation for Economic Co-operation and Development (OECD, 2005, 2000). Small firms are generally those with fewer than 50 employees, while micro-enterprises have at most 10, or in some cases 5 workers (Fabien, 2015; Katua, 2014: 77; Edinburgh Group, 2013; OECD, 2005, 2000).

Financial assets are furthermore used to define SMEs. In the European Union, a new definition came into force on 1 January 2005 applying to all Community acts. The new definition provides for an increase in the financial upper limit: the turnover of medium-sized enterprises (50-249 employees) should not exceed EUR 50 million; that of small enterprises (10-49 employees) should not exceed EUR 10 million while that of micro firms (less than 10 employees) should not exceed EUR 2 million. Alternatively, balance sheets for medium, small and micro enterprises should not exceed EUR 43 million, EUR 10 million and EUR 2 million, respectively (Fabien, 2015; Katua, 2014; OECD, 2005, 2000) as indicated in Table 2.1 below.

Company category	Employees	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Table 2.1 – Categories of SMEs European Union

Source: Fabien (2015:1)

SMEs are increasing in the economy as larger firms are downsizing and outsourcing more functions. In addition, productivity, growth and consequently economic growth are strongly influenced by the competition through the entry and exit of smaller firms. This process involves high job turnover rates and agitated labour markets, which is an imperative part of the competitive process and structural change (Robu, 2013; OECD, 2000). Less than one-half of small start-ups survive for more than five years and only a fraction of them develop into high performance firms, which drive performance and industrial innovation (Robu, 2013; OECD, 2000).

According to Kushnir et al. (2010) there are an estimated 125 million formal SMEs in the world, including 89 million in emerging markets. A study conducted by The World Bank (2015) states that there are between 365-445 million micro, small and medium enterprises (MSMEs) in emerging markets. 25-30 million are formal SMEs; 55-70 million are formal micro enterprises and 285-345 million are informal enterprises. Shifting informal SMEs into the formal sector can have substantial advantages for the SME (for example, better access to credit and government services) and to the overall economy (for example, higher tax revenues, better regulation). Furthermore, improving SMEs access to finance and finding solutions to unlock sources of capital is crucial to enable this potentially crucial sector to grow and provide the needed jobs (The World Bank, 2015). Figure 2.2 illustrates MSMEs per 1,000 people across the world.

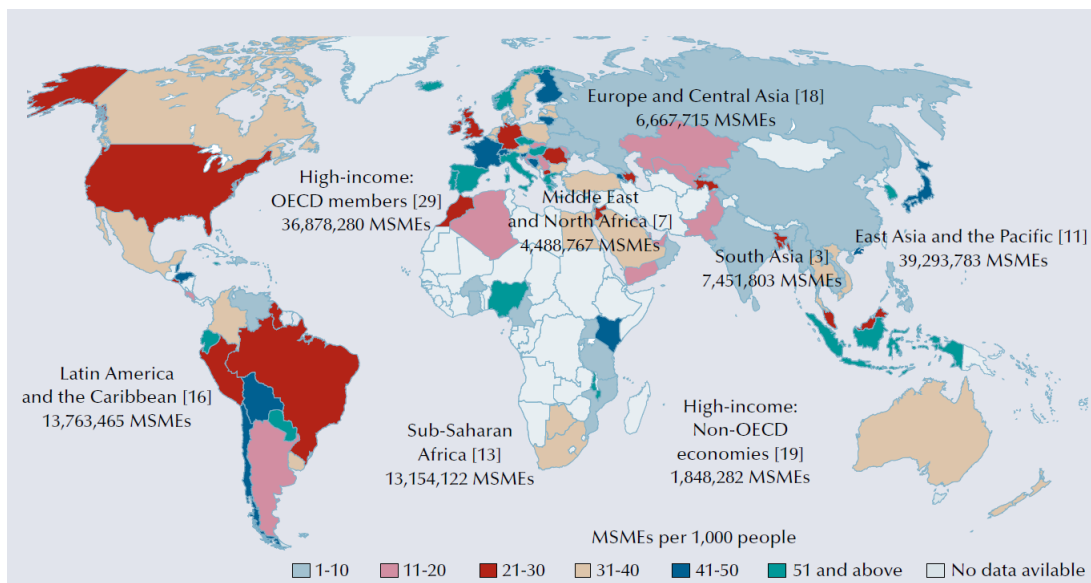


Figure 2.2 - MSMEs per 1000 people across the world

Source: Kushnir, Mirmulstein & Ramalho (2010:3)

## 2.2.2 South Africa's Definition of a SME

In South Africa, there is no consensus amongst government agencies regarding the definition of a SME. The National Small Enterprise Act (Act No 102 of 1996), The National Development Plan (NDP) and the Income Tax (Act No. 58 of 1962) have their own definitions (Davis Tax Committee, 2014).

The NDP defines three categories within the SME sector:

- **Survivalist** – A home established business or one that transacts as a vendor on the street or an informal solitary service provider such as taxi operator or building contractor. Classically a cash-based business, with little to no growth aspirations;
- **Lifestyle** – A home established middle or upper-class business or run from a single office. Typically, a tradesman or broker; and
- **Entrepreneurial** – Businesses concerned with growth aspirations, interested to establish a brand and increase market share.

The National Small Enterprises Act classifies SMEs into its constituent categories of micro, very small, small and medium primarily based on full-time equivalent employment, turnover and gross asset value (SEDA, 2016) as illustrated in Table 2.2.

Sector or sub-sectors in accordance with the Standard Industrial Classification	Size or class	Total full-time equivalent of paid employees	Total annual turnover	Total gross asset value (fixed property excluded)
		<i>Less than:</i>	<i>Less than:</i>	<i>Less than:</i>
<b>Agriculture</b>	Medium	100	R 4.00 m	R 4.00 m
	Small	50	R 2.00 m	R 2.00 m
	Very small	10	R 0.40 m	R 0.40 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Mining and Quarrying</b>	Medium	200	R30.00 m	R18.00 m
	Small	50	R 7.50 m	R 4.50 m
	Very small	20	R 3.00 m	R 1.80 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Manufacturing</b>	Medium	200	R40.00 m	R15.00 m
	Small	50	R10.00 m	R 3.75 m
	Very small	20	R 4.00 m	R 1.50 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Electricity, Gas and Water</b>	Medium	200	R40.00 m	R15.00 m
	Small	50	R10.00 m	R 3.75 m
	Very small	20	R 4.00 m	R 1.50 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Construction</b>	Medium	200	R20.00 m	R 4.00 m
	Small	50	R 5.00 m	R 1.00 m
	Very small	20	R 2.00 m	R 0.40 m
	Micro	5	R 0.15 m	R 0.10 m

<b>Retail and Motor Trade and Repair Services</b>	Medium	100	R30.00 m	R 5.00 m
	Small	50	R15.00 m	R 2.50 m
	Very small	10	R 3.00 m	R 0.50 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Wholesale Trade,</b>	Medium	100	R50.00 m	R 8.00 m
<b>Commercial Agents and Allied Services</b>	Small	50	R25.00 m	R 4.00 m
	Very small	10	R 5.00 m	R 0.50 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Catering, Accommodation and other Trade</b>	Medium	100	R10.00 m	R 2.00 m
	Small	50	R 5.00 m	R 1.00 m
	Very small	10	R 1.00 m	R 0.20 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Transport, Storage and Communications</b>	Medium	100	R20.00 m	R 5.00 m
	Small	50	R10.00 m	R 2.50 m
	Very small	10	R 2.00 m	R 0.50 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Finance and Business Services</b>	Medium	100	R20.00 m	R 4.00 m
	Small	50	R10.00 m	R 2.00 m
	Very small	10	R 2.00 m	R 0.40 m
	Micro	5	R 0.15 m	R 0.10 m
<b>Community, Social and Personal Services</b>	Medium	100	R10.00 m	R 5.00 m
	Small	50	R 5.00 m	R 2.50 m
	Very small	10	R 1.00 m	R 0.50 m
	Micro	5	R 0.15 m	R 0.10 m

Table 2.2 –Small Business Definition source

Source: SEDA (2016)

### 2.2.3 The Economic Impact and Importance of SMEs

It has long been recognised that SMEs account for an overwhelming part of businesses worldwide and that they contribute considerably to private sector GDP, growth and are the source for most new jobs. Over 95% of OECD enterprises are SMEs, which account for 60%-70% of employment in most OECD countries (OECD, 2000). On 14 December 1960, 20 countries originally signed the Convention on the OECD. Since then, 15 countries have become members of the Organisation. Below is a list of the current Member countries of the Organisation: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States (OECD, 2016).

Most SME employment opportunities are in the service sector and represent two thirds of economic movement and employment in OECD countries. Smaller firms are found particularly in wholesale and retail trade, the hotel and restaurant business,



communications and business services and construction. SMEs also account for a high percentage of manufacturing firms in many OECD countries and provide at least half the employment opportunities in the manufacturing sector (OECD, 2005, 2000). Figure 2.3 displays the growth rate of SMEs globally that grew at a rate of 6% between the year 2000 and 2009 and indicate the global growth rate baseline (Accountants for Business, 2010; Kushnir, et al., 2010).

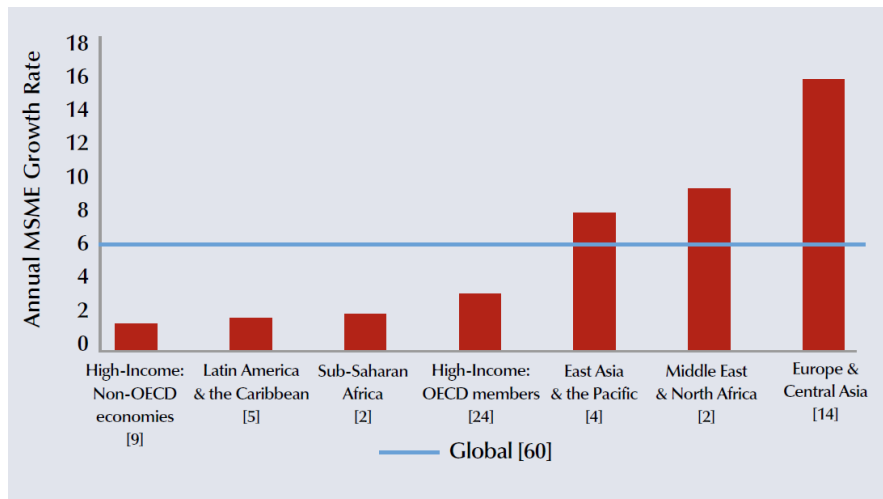


Figure 2.3 - Micro, Small and Medium Size Enterprises growth by Region between 2000 -2009

Source: Kushnir, et al. (2010:4)

Additionally, literature has noted that SME growth rate is three times lower in high-income economies compared to low-income economies (Kushnir, et al., 2010). Figure 2.4 displays the assertion made by Kushnir, et al. (2010).

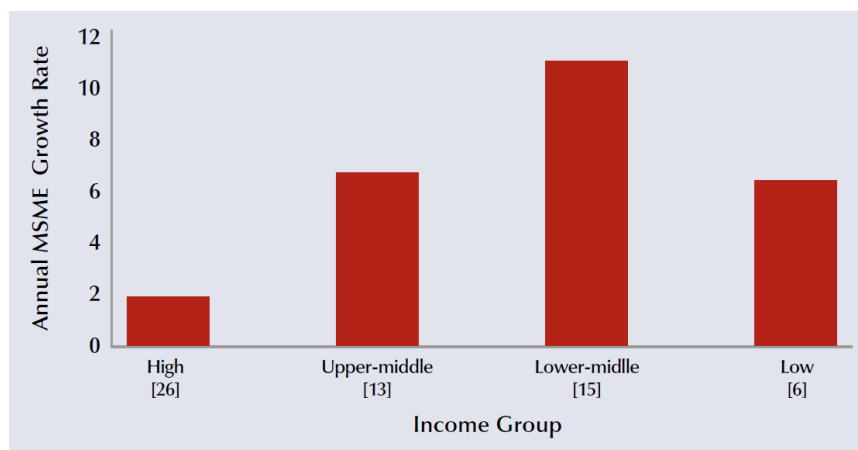


Figure 2.4 - Micro, Small and Medium Size Enterprises growth by Income between 2000-2009

Source: Kushnir, et al. (2010:4)

The contribution of SMEs to GDP however varies substantially across countries from 16% of GDP in low-income countries (where the sector is typically large but informal) to 51% of GDP in high-income countries (Edinburgh Group, 2013; Accountants for business, 2010). Figure 2.5 displays the contribution of SMEs (the informal and formal sector) to the GDP.

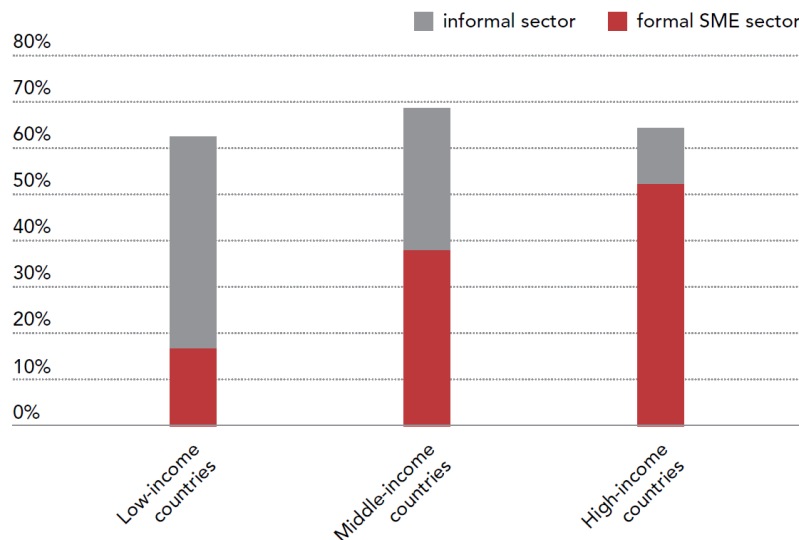


Figure 2.5 - Contribution of SMEs to GDP (Median Values)

Source: Edinburgh Group (2013:8)

#### 2.2.4 The Access to Finance

Access to finance in particular can be a major complication to growth for SMEs because both the needs and the risk profile of a business vary through its life cycle as indicated in Figure 2.6 (Accountants for business, 2010; Kushnir, et al. 2010; OECD, 2005). The widespread inconsistency in the profitability, survival and growth of SMEs compared to larger firms brings unique financing problems. SME owners and managers often lack commercial experience and/or a track record as entrepreneurs. Early stages of growth are marked by uncertainty both in production and marketing. Smaller, innovative firms operate in environments of high complexity and rapid change and depend heavily on intangible assets. SMEs often have trouble obtaining financing because banks and traditional lending institutions are unfavourable to risky ventures (Accountants for Business, 2010; Kushnir et al., 2010; OECD, 2005).

Venture capitalists have been prominent in the private equity market but there are considerable differences across countries. Venture capitalists provide more than

capital to SMEs as they also offer management assistance, performance monitoring and the life cycle staged injection of additional risk capital as the enterprise develops. Venture capital can be supplied by particular funds which raise money from a range of sources: private individuals, corporations, government agencies, pension funds, banks and insurance companies, endowments and foundations (The World Bank, 2015; Accountants for Business, 2010; Kushnir, et al., 2010; OECD, 2005).

A well-functioning venture capital market is not only about financing. It is also about high-quality management of the information and agency problems that arise when innovators, entrepreneurs and financiers try to understand each other and co-operate in the launching of risky ventures. Fostering an adequate flow of financing for small firms is a crucial step in enhancing entrepreneurship and creating a vibrant economy (The World Bank, 2015; Accountants for Business, 2010; Kushnir, et al., 2010; OECD, 2005).

The World Bank (2015) highlights that 50% of formal SMEs do not have access to formal credit and approximately 70% of all SMEs in emerging markets lack access to credit. Significantly, a gap exists between regions with reference to access to finance. This gap is particularly larger in Africa and Asia (The World Bank, 2015).

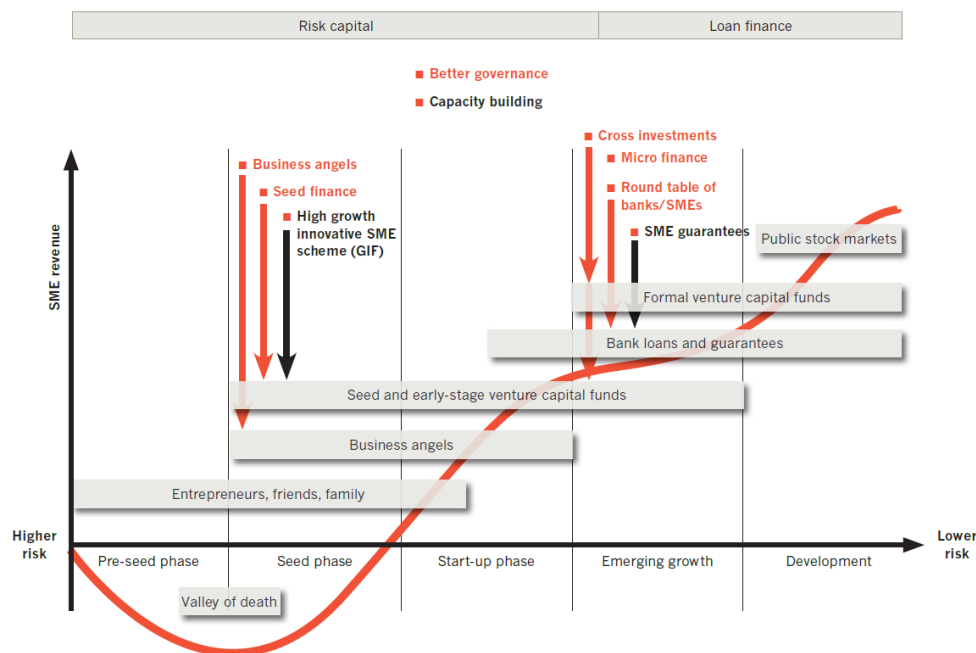


Figure 2.6 - Funding Needs, Suppliers and Policies across the Business Life Cycle  
Source: Accountants for business (2010:15)

### **2.2.5 The role of Government**

The challenge of government is to create an ecosystem that promotes SMEs. The Conversation (2014) underlines the need for government to create growth-orientated policies to induce SME development through local, national and national government programmes. The South African Institute of Chartered Accountants (SAICA) (2015), The Conversation (2014) and OECD (2000) indicate that government should create a conducive regulatory environment underscored by small business development policies for SMEs to flourish.

The Conversation (2014) and OECD (2000) claim that the absence of supportive institutions and state partner networks create low stakeholder participation. This highlights that effective government policy and legislation is required to promote the implementation levels of SMEs (Ashley, 2009; Wittig, 1999). Moreover, Labour Market Intelligence Partnership (2016) and SAICA (2015) advocate that government need to reduce regulatory burdens, notwithstanding, reducing restrictive labour laws making it difficult for SMEs to operate efficiently. The OECD (2000) suggests that government should reduce high compliance expenses, the extensive and complex paperwork and regulations that create a burden for SMEs to conduct business.

In addition, it is essential that government implement initiatives to enhance the physical infrastructure to decrease the cost of undertaking business and therefore induce SME growth (Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004). Infrastructure is characterised by the provision of roads, water and sewerage, electricity supply, information and communication technology and telecommunications (Bureau for Economic Research, 2016).

Additionally, government programmes to increase ICT and drive innovation are rendered important (OECD, 2000). Jones (2016) and SAICA (2015) assert that programmes to increase innovation among SMEs include tax incentives and financial grants. A further driver to enhance SMEs is the ability of government to create an ecosystem entrenched in skills development (The Conversation, 2014; OECD, 2000). This supposition is echoed by the Labour Market Intelligence Partnership (2016), Mrwebi and Evbuomwan (2016), Mboniyane and Ladzani (2010), Olawale and Garwe (2010), Kamper (2008) and Van der Berg (2008) and highlights that skills planning is

an activity that cannot occur in isolation from economic growth and employment trajectories.

In understanding of the role of SMEs in economic restructuring, government has the responsibility of promoting entrepreneurship (OECD, 2000). Failure rates of SMEs are primarily contributed to a lack of finance that leads to poor cash flow (Jones, 2016; SAICA, 2015; Mboniyane & Ladzani, 2011). The lack of finance creates growth stagnation among SMEs. To this extent government has to improve access to venture capital, facilitate start-up and development and other forms of funding opportunities. Equally, SAICA (2015) advocate that government can promote SME growth through technical assistance, introducing risk capital, subsidies, tax breaks and rewards for SMEs that illustrate growth and employment, easier value-added tax registrations and reducing the turnaround of payments to SMEs.

Government is eluded to have a significant challenge of enhancing the conditions of SMEs' competitiveness and transcends the politics of creating policies. The provision of an appropriate regulatory, legal and financial framework aligned to SME start-up and development is characterised by a group of institutions at all levels of government.

### **2.2.6 The Role of SMEs in Sustainable Development**

OECD (2000) underscores the extent of environmental performance across sectors through policies that reduce their carbon footprint and promote energy efficiency. However, The Guardian (2012) and OECD (2000) indicate that large businesses dominate the sustainability discourse. Equally, SMEs tend to have less awareness of the environmental externalities and the legislation central to it. The Global Reporting Initiative (n.d.) asserts that the impact of a group of SMEs behaving in a sustainable manner achieves a multiplier effect on environmental and social impact.

Lepoutre and Heene (2006: 29) define small business social responsibility (SBSR) through the following dimensions, namely:

“treats customers, business partners and competitors with fairness and honesty; cares about the health, safety and general well-being of employees and customers; motivates his workforce by offering training and development

opportunities; acts as a good citizen in the local community; and is respectful of natural resources and the environment”.

The Guardian (2012) highlights that SMEs make a small positive contribution towards sustainability and the OECD (2000) asserts that SMEs have fewer resources to invest in environmental enhancements to develop sustainable operations. Similarly, Lepoutre and Heene (2006) support the assertion made by the OECD (2000) to the extent that SMEs are imposed by firm size barriers that constrain their ability to be socially responsible. The Guardian (2012) provides an example of an organisation that improved their key performance indicators by focusing on their environmental footprint. The organisation improved from 0% to 90% in recycling waste and saved £21,000 in year 1 which indicates an impact of £325,000 in sales revenue.

The Guardian (2012) and Global Reporting Initiative (n.d.) argue that SMEs can involve their staff in environmental and social impact. Moreover, SMEs can delegate responsibilities to mobilise recycling, increase efficiency and create a culture that espouses social responsibility. The methodology of continuous improvement may act as a tool to motivate employees to become innovative to create sustainable solutions (The Guardian, 2012). Responsible business practices reinforce sustainable solutions and as SMEs are the backbone of economies and global supply chains it is essential to advocate conscious business leadership. The importance of this is underscored by the impact (90%) of SMEs on all businesses and its contribution (45%) to total employment. Notably, SMEs contribute approximately 33% to the GDP of emerging economies (Global Reporting Initiative, n.d.).

### **2.3 SMEs Globally**

It may be evident that SMEs play a vital role in all economies and are a large contributor towards the country's national income, economic growth and employment. The emergence of SMEs is important as the majority of employment will come from SMEs in the near and far future (Ayyagari, Beck & Demirgüç-Kunt, 2005). The following subsections discuss the emergence of SMEs in developed (the United States of America and Europe) and developing (Brazil, Russia, India, China and South Africa (BRICS)) economies respectively.

### **2.3.1 SMEs in the United States of America (USA)**

The USA has 28 million SMEs which make up 99 % of all firms (Firoozmand, et al., 2015). It is also estimated that SMEs contribute over 60% towards employment, 40-60% towards the GDP and 30-60% towards exports (The Standard, 2011).

The challenges afforded to SMEs in the USA are characterised by the lack of accessibility to free cash flow and credit (Firoozmand, et al., 2015). Equally, SMEs consistently report higher financing challenges than large enterprises given their small size, limited assets and general inability to raise funds (Firoozmand, et al., 2015). This supposition has a direct link with the potential of SMEs in the USA to grow and contribute to the economy and trade.

Firoozmand et al. (2015) also indicate that SMEs tend to have higher volatility in earnings and growth than larger companies, therefore seen as riskier investments, and thus subject to higher cost of capital. In addition, with inadequate staff and time, SMEs have high opportunity costs to foster relationships with lenders and investors and further growth challenges, namely:

- Lack of capital (Lemmon, 2013);
- Insufficient technical skills (Lemmon, 2013);
- Inadequate risk sharing and mitigation (Lemmon, 2013);
- Lack of access to export markets (Lemmon, 2013);
- Underdeveloped networks (Lemmon, 2013);
- Interregional trade (Malaret, 2014);
- Management education (Malaret, 2014);
- Bureaucracy (Malaret, 2014); and
- Fear of failure (Malaret, 2014).

This subsection highlighted the impact of SMEs on the USA economy. In the next subsection, SMEs in the European Union (EU) are explored.

### **2.3.2 SMEs in the EU**

The EU consists of over 22.3 million SMEs, which may indicate that they are the powerhouse of the European economy. Moreover, SMEs are reported to have a

significant effect on job creation. European SMEs are further described by their innovation differential (EC Eurostat, 2010; Lopriore, 2009). The innovative efforts conducted by SMEs contribute greatly to the economic growth because they induce a positive effect on productivity, which in turn is vital for competing in a globalised world (Häner, 2011). SMEs are advocated to be the backbone of the European economy and represent 99% of all businesses in the EU whilst producing 85% of new jobs in the past 5 years (European Commission, 2017; Eurostat, 2015; Häner, 2011; Lopriore, 2009). According to the European Commission, in the year 2008, European SMEs accounted for more than 58% of the European GDP (EC Eurostat, 2010).

The key challenges faced by European SMEs are as follows:

- Sourcing of customers (Euronews, 2015; Letovanec, 2015);
- Accessibility to finance (Euronews, 2015; Letovanec, 2015);
- Regulatory framework (Euronews, 2015; Letovanec, 2015);
- Cost of production and labour (Euronews, 2015; Letovanec, 2015); and
- Competition (Euronews, 2015; Letovanec, 2015).

This section highlighted the impact of SMEs on the EU economies. In the next subsection, SMEs in emerging markets are explored.

### **2.3.3 SMEs in Emerging Markets**

The acronym BRICS indicate five emerging markets which consist of Brazil, Russia, India, China and South Africa (Richburg, 2011:1). The four main emerging economies of the world were known as BRIC, which stands for Brazil, Russia, India and China. South Africa officially became part of the main emerging economies on 24 December 2010, and the “S” was further added to BRIC to form BRICS (Mondal, 2015; Koba, 2011; Smith, 2011).

The BRICS does not represent a political coalition such as the European Union, but it has the potential to develop into a dominant economic unit in the future. The five emerging economies have not yet entered into any formal agreements; however, there have been agreements between some of the BRICS. These agreements consist of the Shanghai Cooperation Organisation between Russia and China. Another agreement



is the India, Brazil and South Africa (IBSA) Trilateral Forum in which Brazil, India and South Africa participate. The BRICS countries have had numerous meetings in Russia, Brazil and China that indicate that they are trying to essentially organise themselves as a unit (Koba, 2011).

BRICS consist of the two countries with the two largest populations on earth, namely, China and India (Infoplease, 2016; De Almeida, 2009). Collectively, the BRICS countries represent 41.55% of the world's population. The five BRICS countries represent over 3.6 billion people, which constitutes half of the world's population (Infoplease, 2016).

Literature explicates that the countries work together, however, challenges do exist. For example, India and Brazil are concerned that China's undervalued Yen is hurting their exports. China is however criticising Russia's high prices for oil and commodities since they are their main importer (Richburg, 2011: 2). Significantly, the BRICS have had a huge growth in trade. The growth of 28% per annum is reflected between 2001 to 2010 (Liena, Yunfei & Qiaomei, 2011: 4).

China dominates trade in the BRICS and was the largest trading partner of South Africa in 2010. China was also one of largest trading partners of India and Russia. In 2010, trade between China and the other four BRICS countries mounted at more than \$180 billion, which is an increase of 40% from 2009 (Liena, et al., 2011).

According to research, Brazil is labelled the global source for raw materials, such as soybean and iron ore. Russia is renowned for its abundant oil and gas resources. China is labelled the factory of the world due to its powerful manufacturing sector. India is considered as the world's office and is organised with highly professional employees in IT and service sectors. This may indicate an exceptional foundation to work from as Brazil and Russia may provide the raw materials to China and India while China and India may provide goods and services to the former two. South Africa, the biggest economy in Africa, is the new member of BRICS and functions as a gateway to the African continent (Liena, et al., 2011).

The five countries have a combined nominal GDP of US\$16.6 trillion, equal to roughly 22% of the gross world product, combined GDP (PPP) of around US\$37 trillion and an estimated US\$4 trillion in combined foreign reserves (World Economic Outlook, 2013; Marquand, 2011). It is estimated that the BRICS economies will likely outstrip the American economy by 2020 (Richburg, 2011: 2). According to EM Equity (2016) BRICS are forecasted to expand to 4.6% in 2016, from a projected growth of 3.9% in 2015. The World Bank anticipates BRICS growth to increase to 5.3% in 2017. Figure 2.7 displays the growth of the BRICS economy between 2005 and 2014.

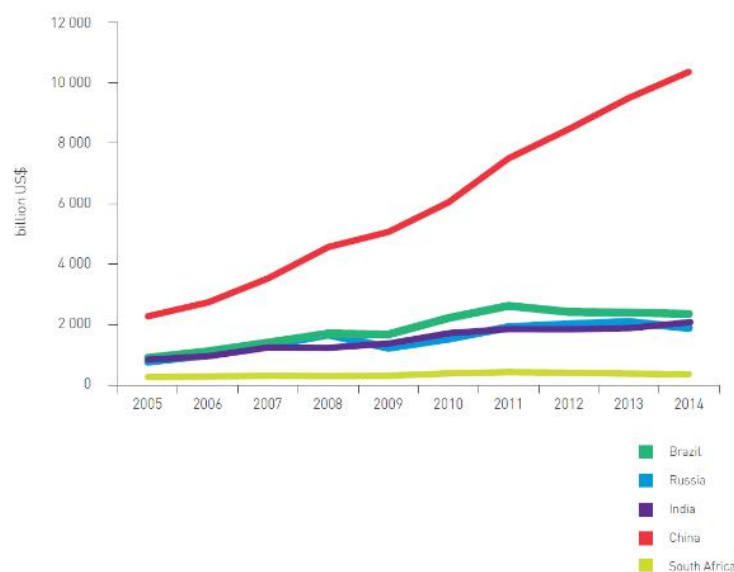


Figure 2.7 - BRICS GDP between 2005 -2014; billions of US\$

Source: Rosstat (2015:49)

### 2.3.4 SMEs in Brazil

SMEs in Brazil are mainly dedicated to produce and sell products in the domestic market. This may be since high domestic consumption supported Brazil's economic growth when the demand for exports was less than optimal in the crisis period (Polaski, et al., 2009). Equally, the country has about 6.3 million SMEs who represent 99% of Brazilian businesses. The SMEs are responsible for 20% of GDP and provide jobs to 52% of the population (The Brazil Business, 2016; Leme, 2014; Papalardo, Meirelles, Sacomano, De Aranha Machado & Small, 2014). The challenges that SME's face in Brazil is as follows:

- Corruption (TMF Group, 2016);
- Access to finance (TMF Group, 2016);

- Developing nation (TMF Group, 2016);
- Poor infrastructure (TMF Group, 2016; Oriaku, 2012);
- Technology (TMF Group, 2016);
- Human Capital (TMF Group, 2016);
- Barriers to import/export (TMF Group, 2016; Novais, 2013);
- Tax changes (TMF Group, 2016; Novais, 2013; Oriaku, 2012; Häner, 2011);
- High bureaucracy (TMF Group, 2016; Novais, 2013; Oriaku, 2012; Häner, 2011);
- Delays of getting a patent (Novais, 2013);
- Globalisation (Novais, 2013; Häner, 2011);
- Lack of government support (Oriaku, 2012);
- Business management (Häner, 2011);
- Informal business (Häner, 2011); and
- The multiplier effect of the economic crisis of 2008 and 2009 (Oriaku, 2012; Häner, 2011).

This section highlighted the impact of SMEs on the BRICS economies. In the next subsection, SMEs in Russia are explored.

### **2.3.5 SMEs in Russia**

SMEs in Russia have become one of most dynamically developed sectors of economic activity (Chernukha, 2009). “As revenues from commodity exports fall, a growing number of small- and medium-sized businesses in Russia are expanding their scope by exporting their products – including electronics, household goods and even ice cream” (Neklyuyev, 2016: 1).

In 2015, the total number of officially registered SMEs mounted to 4.5 million of which SMEs account for 25% of total employment (Russian SME Resource Center, 2017). In recent years, SMEs have shown a growth rate of 19% per annum and will remain double digit growth for the mid-term outlook (Safonov, 2014). SMEs generate 25% of GDP in Russia, providing employment to approximately 18 million people (Leguyenko, 2015; Safonov, 2014). The challenges that SMEs face in Russia are as follows:

- Corruption (Furtuna & Ruvinskaya, 2013; Albertini, Auffray & Aziz, 2011);
- Social challenges (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011);

- Political conditions (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011);
- Economic conditions (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011);
- High bureaucracy (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011; Bolotinsky & Jiang, 2008);
- Legal conditions (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011);
- Entry into markets (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011; Bolotinsky & Jiang, 2008); and
- Export (Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011).

It is advocated that Russia will suffer longer after the economic crisis of 2008. The country experienced the greatest impact compared to other industrialised countries due to the rigid state structures (Mankoff, 2010: 3). The SME segment was significantly affected by the crisis and is on a sluggish recovery path. The banks perceive SMEs in Russia as high-risk debtors, which is a further setback (World Bank, 2011).

This subsection highlighted the impact of SMEs on Russia's economy. In the next subsection, SMEs in India are explored.

### **2.3.6 SMEs in India**

The economic liberation in the early 1990s made Indian SMEs vulnerable since they were being exposed to highly competitive markets domestically and internationally. Nevertheless, the SMEs that did survive the early 1990s have emerged as large competitive forces internationally (Venkataramanaiah & Parashar, 2007).

SMEs in India have seen aggressive growth over the last decade. According to the latest reports by the SME Chamber of Commerce and the Ministry of Micro, Small and Medium Enterprises, India currently has more than 48 million SMEs (Greyhound Knowledge Group, 2014).

SMEs are the employment powerhouse of India as they employ 40% of the country's workforce. However, India faces the immense challenge of obsolete labour laws. This leaves many SMEs struggling with glitches of culture and scalability whereby not being able to meet their workforce demands (Greyhound Knowledge Group, 2014). SMEs

contribute more than 37.5% towards the country's GDP which signifies how important SMEs are for the economy (Mishra, 2015). The challenges that SMEs face in India are as follows:

- Dearth of easy finance and credit instruments (MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014);
- Limiting regulatory policies (MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014);
- Unavailability of modern, affordable technology (MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014);
- Lack of basic infrastructure facilities (MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014);
- Absence of exclusive marketing platforms and distribution networks (MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014);
- Inflexible labour laws and availability of affordable skilled labour (MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014); and
- Non-availability of skilled labour at affordable costs (CIMSME, 2011).

This subsection highlighted the impact of SMEs on India's economy. In the next subsection, SMEs in China are explored.

### **2.3.7 SMEs in China**

In 2010, the Chinese government introduced tightening measures for SMEs to operate and thus making it tougher for SMEs to get bank loans which negatively affected SMEs growth (Jia, 2011). However, in 2016, China's declared backing for SMEs may open doors to foreign investors (UHY, 2016). SMEs in China contribute up to 60% to the country's GDP and accounted for 8% of job growth in 2014 (UHY, 2016; Leguyenko, 2015). SMEs play a vital role within the Chinese economy by employing 80% of the country's workforce (UHY, 2016).

SMEs in China are more advanced than SMEs in Europe and the USA. Chinese SMEs are roughly more than five times as internationalised as European SMEs and more than twice as internationalised as USA SMEs (Hall, 2007: 30). "The Chinese

government has helped SMEs with finance and technology to exploit international markets” (Banga, 2011: 1). The challenges that SMEs in China face are as follows:

- Lack of entrepreneurial zeal, capacity and know-how (Yoshino & Taghizadeh-Hesary, 2016);
- Lack of economies of scale and scope (Yoshino & Taghizadeh-Hesary, 2016);
- Lack of resources (finance, technology, skilled labour, market access and market information) (Yoshino & Taghizadeh-Hesary, 2016);
- Increased market competition and concentration from large multinational enterprises caused by globalisation and economic integration (Yoshino & Taghizadeh-Hesary, 2016);
- Higher transaction costs relative to large enterprises (Yoshino & Taghizadeh-Hesary, 2016);
- Inability to compete against larger firms in terms of R&D expenditure and innovation (product, process, and organisation) (Yoshino & Taghizadeh-Hesary, 2016);
- Economic Policy (EU SME Centre, 2015; Stratfor, 2011);
- Language and culture differences (EU SME Centre, 2015; Harris, 2011; Cao, Hartung, Forrest & Shen, 2011);
- Logistics; and
- Access to finance (EU SME Centre, 2015; UPS, 2010).

This subsection highlighted the impact of SMEs on China’s economy. In the next subsection, SMEs in South Africa are explored.

### **2.3.8 SMEs in South Africa**

SMEs play an important role in the South African economy as they are key drivers of economic growth, innovation and job creation. In South Africa, a Ministry of Small Business Development was established in early 2014 signifying the importance of SMEs within the country (Bureau for Economic Research, 2016). The aim of the Ministry is to facilitate the promotion and development of SMEs. In 1997, South Africa had around 58,900 small enterprises and 11,322 medium enterprises (Falkena, et al., 2001: 38). According to the Bureau for Economic Research (2016), there were approximately 2.3 million SMEs from 2.18 million in 2008. Table 2.3 highlights the key

indicators of SMMEs in 2015 for quarter 2 (Q2). The growth demonstrated is significantly less than the 14% growth in GDP over the same period. SMEs contribute an estimate of 51% to 57% towards the country's GDP (Groepe, 2015; Cant & Wiid, 2013; Habberton & Notcutt, 2013; Fin24, 2010; Kongolo, 2010).

KEY INDICATORS	2015Q2
Number of SMMEs	2 251 821
Number of formal SMMEs	667 433
Number of informal SMMEs	1 497 860
SMME owners as % of total employment	14%
% operating in trade & accommodation	43%
% operating in community services	14%
% operating in construction	13%
% operating in fin. & business services	12%
% contribution to GDP	42%
% black owned formal SMMEs	34%
% operated by income group < R30k pa	7%

*Table 2.3 - Key indicators of SMMEs in 2015Q2*

*Source: Bureau for Economic Research (2016:1)*

SMEs within the country contribute 60% towards the workforce (Groepe, 2015; Cant & Wiid, 2013; Fin24, 2010 & Kongolo, 2010). According to the 2015 SAICA (2015) and Groepe (2015) 90% of new jobs will be created by SMEs by 2030 through the NDP (SAICA, 2015).

Main challenges that SMEs face in South Africa are as follows:

- Access to Finance (Jones, 2016; Makina, et al., 2015; SEDA, 2012, Mbonyane & Ladzani, 2011);
- Human Capital (Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016);
- Infrastructure (Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004);
- Access to markets (Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Rogerson, 2000);
- Black Economic Empowerment (BEE) (SAICA, 2015; SEDA, 2012); and
- Entrepreneurial competencies (Sajilan, et al., 2016; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).

This subsection highlighted the impact of SMEs on the South African economy. In the next subsection, SMEs in the South African context are explored.

#### **2.4 SMEs in the South African Context**

Jones (2016) and Cant and Wiid (2013) assert that SMEs are of notable importance to the economic wealth of the country to the extent that they eliminate economic stagnation. Cant and Wiid (2013), Fin24 (2010) and Kongolo (2010) further advocate that SMEs contribute between 51% and 57% to the GDP and equally employ 60% of the employable population of South Africa. The assertion made by Jones (2016), Cant and Wiid (2013), Fin24 (2010) and Kongolo (2010) underscore the importance of SMEs to the extent that they support socio-economic gains and own foremost multiplier effects to the South African economy. The aforementioned therefore underlines that a robust multiplier effect is inherent between a decline in SME activity and the South African economic growth.

SMEs play a fundamental role in the South African economy, accounting for roughly 91% of the formal business enterprises. According to Fin24 (2010) many small enterprises within South Africa do not make it past the second year of trading with failure rates as high as 63%. The central business problems of potential growth-oriented SMEs, particularly in cities, relate to a complex range of issues surrounding lack of access to markets, lack of access to finance and shortcomings in the support environment (Jones, 2016; Ocloo, Akaba, & Worwui-Brown, 2014; Ligthelm, 2012).

According to SAICA (2015) and Kessides (2007) and Rogerson (1997) there are limited prospects for job creation in the wider private sector, government or parastatal enterprises and therefore the focus of policy attention has progressively shifted in many countries to the prospects of employment creation by SMEs. Additionally, Mrwebi and Evbuomwan (2016), Jones (2016), Small Business Development (2016), Ocloo, et al. (2014), Rogerson (2013), Ashley (2009) and Wittig (1999) advocate that the factors undermining SME growth are the government controls, rigid labour regulations, access to finance, skills development and procurement.

The NDP 2030 Vision established a goal to decrease unemployment by creating 90% new job opportunities through SMEs (Jones, 2016; SAICA, 2015). However, SAICA



(2015) indicates that in order for SMEs to deliver the strategic imperative outlined in the NDP 2030, SMEs need to create a minimum of R2 million in turnover to induce significant employment benefits. SAICA (2015) has determined that government policy has to focus its attention to the following to meet the average requirement to deliver employment opportunities. The attention areas are split as follows:

- Encourage SME start-ups and financial access; and
- To promote scalability.

Jones (2016) and SAICA (2015) assert that SMEs access to finance and scalability promote employment and South Africa’s national income. Jones (2016) asserts that SMEs play a major role in the evolution of society and can be displayed by SAICA’s (2015) investigation of the longevity versus turnover and longevity versus employment statistics. Figure 2.8 and Figure 2.9 present the assertion made by Jones (2016) and SAICA (2015).

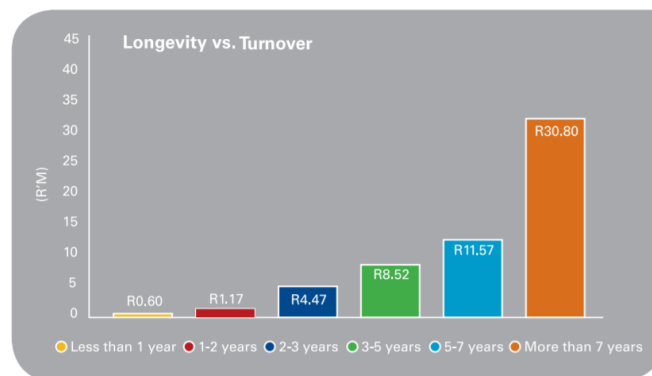


Figure 2.8 - Longevity vs. Turnover

Source: SAICA (2015:7)

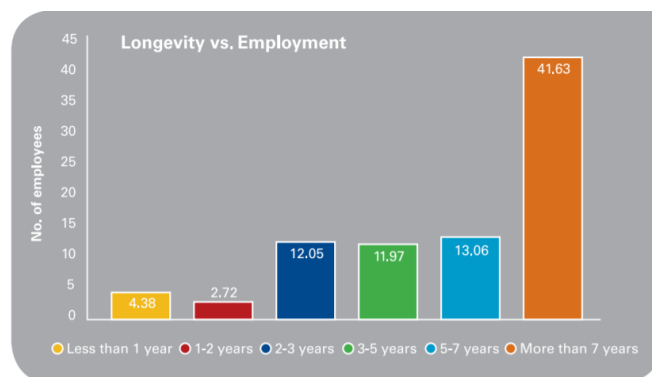


Figure 2.9 - Longevity vs. Employment

Source: SAICA (2015:7)

SAICA (2015) highlights that the relationship between longevity, economic value and employment echoes the assertion made by Cant and Wiid (2013), Fin24 (2010) and Kongolo (2010) who advocate that SMEs contribute between 51% and 57% to the GDP and employ 60% of the employable population of South Africa. SAICA (2015) advocate that certain levers may be mobilised to promote SME growth, namely: technical assistance, introducing risk capital, subsidies, tax breaks and rewards to SMEs that illustrate growth and employment, reducing rigid labour laws, easier value-added tax registrations, reducing the turnaround of payments to SMEs where government is the client and incentives for large business who pay timeously and entrench BEE protocols.

Mobilising SME growth is associated with the assertions made by Mrwebi and Evbuomwan (2016), Jones (2016), Small Business Development (2016), Ocloo, et al. (2014), Rogerson (2013), Ashley (2009), Wittig (1999) to the extent that it reduces the factors undermining SME growth. Furthermore, this affirmation may induce the claim that SMEs in South Africa employ 60% of the workforce and contribute to approximately 51% to 57% of the national income. The following section highlights the requirements and challenges of SMEs and hinges off Section 2.4.

## **2.5 The Requirements and Challenges to Scale SMEs**

Sections 2.3 and 2.4 highlighted the role of SMEs across various economies and the South African economy respectively. Section 2.5 sets out to explore the requirements and challenges of SMEs to scale upwards to achieve growth in national income, economic growth and employment. The following subsection starts by investigating the extent of financial accessibility for SMEs.

### **2.5.1 Access to Finance**

SMEs are of extreme importance to South Africa to promote social cohesion through their contribution to employment and the promotion of skills development (Jones, 2016; Fatoki & Odeyemi, 2010). However, the failure rate of approximately 75% is characterised as one of the highest globally. The major contribution to the failure rate is the lack of finance which leads to poor cash flow (Jones, 2016; SAICA, 2015; Mboniyane & Ladzani, 2011). This lack of finance creates growth stagnation. Equally,

Fatoki and Odeyemi (2010) argue that the South African economy cannot be sustained without developing sustainable SMEs.

The South African economy lags behind other developing economies in its ability to scale and sustain SMEs and is characterised by the highest failure rate of start-ups (Makina, et al., 2015). Jones (2016), Makina, et al. (2015), SAICA (2015), Dauda and Nyarko (2014) and SEDA (2012) assert that the lack of financing is a chronic challenge for SME survival in South Africa and highlighted among the top three barriers to economic growth. Makina, et al. (2015) underline that the access to formal and informal credit by all SMEs compared to registered (reg.) SMEs highlighted in Figures 2.10 and 2.11 respectively.

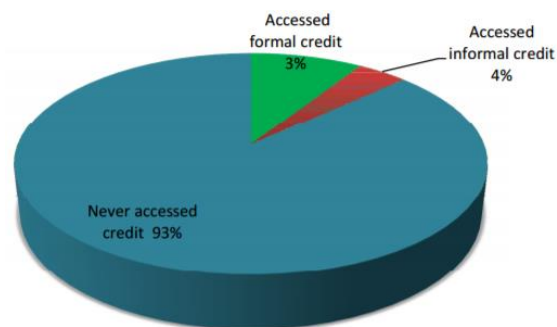


Figure 2.10 - Access to credit by all SMEs

Source: Makina, et al. (2015:5)

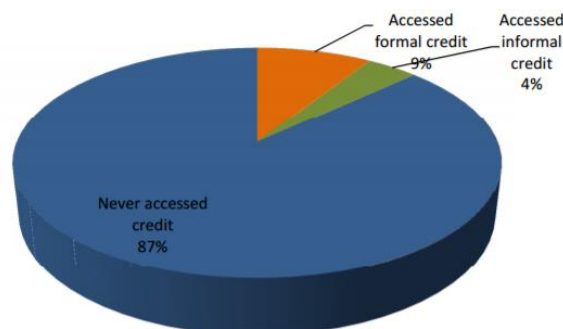


Figure 2.11 - Access to credit by reg. SMEs

Source: Makina, et al. (2015:6)

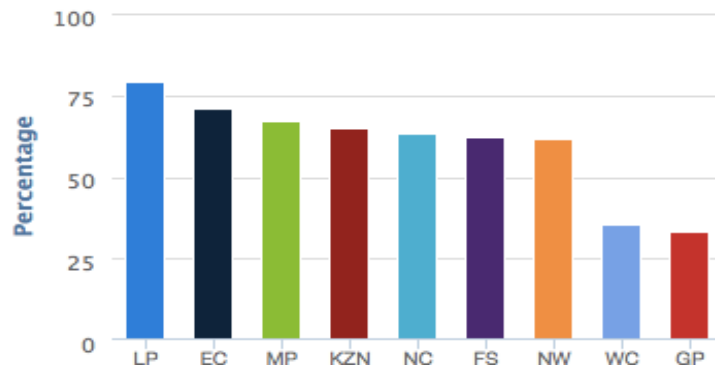
This trend is echoed by registered enterprises as depicted in Figure 2.10, although the percentage of accessed formal credit has increased from 3% to 9%. The limited access to credit of registered enterprises in South Africa correlates with the slow

growth of the economy and the weak contribution to employment (Makina, et al., 2015; Rogerson, 2004). Olawale and Garwe (2010) underline that 75% of SMEs applying for formal credit are rejected, which echoes the claim made by Makina, et al. (2015), Dauda and Nyarko (2014) and SEDA (2012) on the inability of SMEs to survive and grow. Aggravating the issue of finance is the lack of transparency and co-ordination between financial and non-financial support programmes to support and educate the SME market (Mrwebi & Evbuomwan, 2016).

### **2.5.2 Human Capital**

The challenge to acquire skilled labour in South African SMEs is described as difficult and expensive and further aggravated by the Labour and Minimum Wage Regulations. Furthermore, Labour Market Intelligence Partnership (2016: 31) underline the 'structural mismatch between labour demand and supply'. Equally, the dysfunctional South African education system influences the youth employment prospects (Mrwebi & Evbuomwan, 2016; Olawale & Garwe, 2010).

The state of South African education may imply foremost multiplier effects on the South African economy and indicate a negative tendency towards the labour market and thus economic growth (Statistics South Africa, 2015; Kamper, 2008; Van der Berg, 2008). This negative tendency in the labour market and in economic growth as mentioned by van der Berg (2008) can be further reinforced by analysing Figure 2.12, which reflects the current poverty levels in South Africa by province with Limpopo (LP) at 78.9%, Eastern Cape (EC) at 70.6%, Mpumalanga (MP) at 67.1%, Kwazulu Natal (KZN) at 65%, Northern Cape (NC) at 63%, Free State (FS) at 61.9%, North West (NW) at 61.4%, Western Cape (WC) 35.4% and Gauteng (GP) at 33% (Statistics South Africa, 2015).



*Figure 2.12 - Poverty Levels by Province in South Africa*

*Source: Statistics South Africa (2015:1)*

The supposition made by Mrwebi and Evbuomwan (2016), Olawale and Garwe (2010), Kamper (2008) and Van der Berg (2008) is echoed by Labour Market Intelligence Partnership's (2016) investigation into the growing levels of unemployment among the youth. The Labour Market Intelligence Partnership (2016) indicates the following statistics:

- 15 million South African are employed while 7.5 million are unemployed;
- 87% of the unemployed population are from the African population;
- 60% of the unemployed population have less than a matric certificate; and
- 45% of the unemployed population range between the ages of 15 and 34 years.

Similarly, the spatial location of the unemployed and employed underline the variability among different provinces in South Africa. Figure 2.13 displays the variability and the share of the unemployed to employed across provinces. Moreover, the figure may indicate the extent of the challenge of creating new jobs to absorb the share of the unemployed (Labour Market Intelligence Partnership, 2016).



Figure 2.13 - Provincial GDP, employment and unemployment, 2014

Source: Labour Market Intelligence Partnership (2016:23)

The main implication from the assertion made by Labour Market Intelligence Partnership (2016), Mrwebi and Evbuomwan (2016), Mbonyane and Ladzani (2011), Olawale and Garwe (2010), Kamper (2008) and Van der Berg (2008) is that labour skill's planning is an activity that cannot occur in isolation from economic growth and employment trajectories. South Africa is characterised by high and low-skilled labour, and this challenge may indicate that the South African economy respond with the supply of high and low-skilled jobs and simultaneously promote productivity and economic growth.

The fragmented educational levels and labour market inherent to South Africa may underscore the need to encourage differentiated skills policies and programmes to enhance the disparity (Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016). The proposition made to encourage skills policies and programmes may indicate a correlation between growing the labour market and the share of tertiary workers. The Department of Trade and Industry (DTI) has expounded on the claims through the strategic imperatives of improving 'quantity and quality of youth entrepreneurship and technical knowledge, reduce poverty and unemployment among young people' (Mrwebi & Evbuomwan, 2016: 2). The following subsection highlights the infrastructure challenges faced by SMEs.

### **2.5.3 Infrastructure**

Infrastructure is noted as an enabler for SME development. The lack of infrastructure is noted in literature to exert influence on the growth of SMEs, where poor infrastructure directly reduces SME growth. The lack of infrastructure further increases the cost of undertaking business (Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004). Infrastructure is characterised by the provision of roads, water and sewerage, electricity supply, information and communication technology and telecommunications (Bureau for Economic Research, 2016). Furthermore, a deficit of information and communication technology impacts the customer experience and correlates with customer retention (Chong, 2008; Jones & Tilley, 2003).

The Global Entrepreneurship Monitor (2014) report highlights the commercial and professional services as a concept of infrastructure. These services include commercial, legal and accounting services and account for promoting the sustainability of existing and emerging SMEs (Bureau for Economic Research, 2016). According to Finmark Trust (2010), SMEs in Gauteng experience challenges accessing physical space to conduct business, while SMEs in the North West highlighted challenges associated to electricity supply. Equally, Mpumalanga and the Northern Cape experienced challenges associated to physical space and services.

### **2.5.4 Access to Markets**

Mrwebi and Evbuomwan (2016), Jones (2016) and Rogerson (2000) assert that SMEs struggle to access markets. According to Small Business Development (2016), the potential causes of a decline or lack of SME access to markets comprises of various factors within the SMEs internal and external environment. First, a lack of competitive strategies in this context may infer that SMEs experience poor value chain capabilities and competencies (Cant & Wiid, 2013). This postulation may infer that poor competitive strategies reduce the access to corporate supply chains. Second, poor business case development within a marketing context, a strategic function, increases long term operational risks and thus induces the claim that most businesses fail within the first two years of operation.

Third, there is an absence of effective supportive institutions and state partner networks. This indicates that a lack of stakeholder participation exists, in the form of

ineffective government policy and legislation, with a low implementation rate across SMEs (Ashley, 2009; Wittig, 1999). Fourth, globalisation has created business incentives in Multinational enterprises (MNEs) in an opposite direction. This direction is indicative of increased cost-cutting pressures through supply chains. Equally, these business incentives have induced a movement away from SMEs that produce quality, global best practice products at higher costs to low cost SMEs (Small Business Development, 2016).

Moreover, the appetite of MNEs to invest in SME partnerships has reduced, however, the SMEs are still used at lower profit margins thus putting strain on SMEs. Fifth, poor internal change in the form of supply chain reforms; internal systems and procedures, in the context of MNE integration is a major obstacle among South African SMEs (Small Business Development, 2016; Ocloo, et al., 2014; Rogerson, 2013). Enabling the involvement of SMEs in MNEs supply chains to the extent that it develops arguments surrounding competitive strategy, partner networks and its multiplier effects on economic growth and broader socio-economic gains contribute to building sustainable small business.

### **2.5.5 Black Economic Empowerment (BEE)**

BEE is a method designed to promote the growth of SMEs and integrate the disenfranchised and marginalised people of South Africa (SAICA, 2015). Equally, the Broad Based Black Economic Empowerment (B-BBEE) codes demonstrate that SMEs may position themselves better by using the legislation to create partnerships with large businesses and earning a Level 1 (black owned) status inducing the appetite of organisations to create partner networks (Jones, 2016; SAICA, 2015). Jones (2016) further highlights the advantages of BEE Compliance as follows:

- Allows participation in the formal South African economy;
- Improved access to markets especially for companies that procure at least 50% of annual procurement from companies with B-BBEE certificates;
- Skills development which form a 40% compliant in terms of B-BBEE codes;
- Able to bid for government tenders, apply for licences, get permits and are favourably considered for procurement by the public sector and all BEE (B-BBEE) verified enterprises;



- The ability to be rewarded with tax incentives and financial grants;
- Access to finance through enterprise and supplier development; and
- Streamlining the tendering process.

SAICA (2015) highlights key findings from research conducted on SMEs in South Africa regarding responses to the current B-BBEE levels under the new codes. The findings illustrated in Figure 2.14 indicate that 73% of SMEs do not engage in business activities with government, 40% of SMEs do not have B-BBEE ratings or are unaware of it, and 24% do not engage in business activities with large businesses. Equally, the investigation into B-BBEE under the new codes highlighted that SMEs were less informed, 51% were unaware of the new ratings or felt there was no reason for the changes, 16% are non-compliant and 67% are not engaged.



Figure 2.14 - Perceptions of B-BEE Levels currently and under new codes

Source: SAICA (2015:11)

The advantage of being BEE compliant highlights an economy that underpins civic duty and reduces inequalities for the disenfranchised and marginalised society (Jones, 2016). Equally, the Amended Codes of Good Practise further echo the importance of SMEs in South Africa and the effect of it on the chronic unemployment burden.

### 2.5.6 Entrepreneurial Competencies

Entrepreneurial issues among SMEs are the lack of experienced and trained leaders in businesses. These issues create poor planning, leading, organising and control of

the business and fosters a dysfunctional business (Gabrielsson, et al., 2009). This leads to slower growth for SMEs and may indicate that the business will not meet future societal needs. Rogerson (2000) argues that successful entrepreneurs have industry experience and a basic level of education with technical knowledge. Sajilan, et al. (2016), and Colombo and Grilli (2005) assert that an entrepreneur's competency is characterised by the actions taken to deliver business growth and sustainability. Equally, entrepreneurial competencies are underscored by the ability to acquire, develop and mobilise resources to achieve the business vision and mission (Mitchelmore & Rowley, 2010; Colombo & Grilli, 2005; Grant, 1991; Barney, 1991).

The key competencies to deliver business growth and sustainability are as follows:

- The ability to seek new opportunities;
- Managerial skills to formulate strategies while planning and controlling the execution of the strategies;
- Risk taker;
- Innovative and creative;
- Leadership style; and
- Analytical and operational.

The key competencies highlighted are postulated to evolve as the business grows to adapt to the internal and external environment. Equally, an entrepreneur naturally builds on best industry practices by leveraging off training and education platforms to ensure that all levels of business activities develop at the same rate. The effect of management development as a driver for change is highlighted to realise economic value (Sajilan, et al., 2016). Thus, management development programmes should be implemented in the small business sector to enhance the firm's ability to compete successfully in the market place to create greater economic value. Managerial competencies are the skills managers should have, while the leadership and entrepreneurial competencies pertain to the behaviour and methods of adapting behaviour.

### **2.5.7 Entrepreneurial Intention**

Entrepreneurial intention indicates a person's commitment to open a new business (Zapkau, Schwens, Steinmetz & Kabst, 2015; Mueller, Zapkau & Schwens, 2014; Krueger, 1993). There are two core models of entrepreneurial intention; these are the Entrepreneurial Event Model and the Theory of Planned Behaviour (Van Gelderen, Kautonen & Fink, 2015; Mueller et al., 2014; Piperopoulos & Dimov, 2014). The Entrepreneurial Event Model indicates that the perceived desirability and feasibility of becoming an entrepreneur is the influential factor of entrepreneurial intention. On the other hand, the Theory of Planned Behaviour, indicates that a person's attitude toward perceived social norms, behaviour and perceived behavioural control is the determinant of entrepreneurial intention (Piperopoulos & Dimov, 2014: 971).

This section expounds on the predominant factors influencing the characteristics and traits that induce entrepreneurial intention. The main factors explored by the researcher include; self-efficacy, entrepreneurial alertness, innovation and risk tolerance and will conclude by underscoring these factors as a lever to drive entrepreneurial intention.

#### **2.5.7.1 Self-efficacy**

One of the key factors of entrepreneurial intention is self-efficacy, which is the power or capacity to produce a desired effect (Liñán, Rodríguez-Cohard & Ruenda-Cantuche, 2011; Guerrero, Rialp & Urbano, 2008). Sánchez (2011) states that self-efficacy is a vital determinant of successful entrepreneurial behaviour. Noble, Jung and Ehrlich (1999) measure self-efficacy by six factors as follows; risk and uncertainty management skills, innovation and product development skills, interpersonal and networking management skills, opportunity recognition, procurement and allocation of critical resources and the development and maintenance of an innovative environment. McGee, Peterson, Mueller and Sequeira (2009) extend on Noble et al.'s (1999) supposition of self-efficacy by developing five dimensions, namely: searching, planning, marshalling, implementing people and implementing finance. These dimensions decompose self-efficacy into the actions required to expedite a new business venture.

### **2.5.7.2 Entrepreneurial Alertness**

According to Samo and Hashim (2016) entrepreneurial alertness is the trait whereby an individual has the ability to identify gaps in the market that have been overlooked by others. The ability to identify and exploit an opportunity is manifested through self-efficacy (Samo & Hashim, 2016). This characteristic is entrenched in the factor, entrepreneurial alertness and influence entrepreneurial intention (Karabulut, 2016; Fu-Lai Yu, 1999; Busenitz, 1996). The aforementioned stimulates an individual to develop new ideas, products, and services in reaction to the gap analysis conducted (Karabulut, 2016; Fu-Lai Yu, 1999).

### **2.5.7.3 Innovativeness**

Innovativeness is argued as a factor that induces entrepreneurial intention (Ozaralli & Rivenburgh, 2015; Chen, 2007; Gupta, MacMillan & Surie, 2004). First, innovation in processes includes the progress in methods and change. Second, innovation in products and services promotes investment and employment. Third, innovation in management and work organisation encourage creativity, accountability and an effective organisational climate. Ozaralli and Rivenburgh (2015) and Hisrich, Peters and Shepard (2008) expound on innovativeness as a process that encourages an entrepreneur to be alert to market opportunities and convert that into a sustainable business with marketable concepts (Okpara, 2007).

### **2.5.7.4 Risk Tolerance**

Risk taking is the inclination of an individual to take risks (Dohse & Walter, 2012). Karabulut (2016) asserts that risk taking is a factor influencing entrepreneurial intention. The higher the tolerance towards uncertainty and risk indicates a positive bias when an individual assesses the environment (Karabulut, 2016; Ozaralli & Rivenburgh, 2015; Remeikiene, Startiene & Dumciuviene, 2013; Dohse & Walter, 2012). Noticeably, Noble, et al. (1999) echoed the notion of risk tolerance as a measurement of self-efficacy and may explicate this factor as a core trait to start a new business.

### **2.5.8 Networks and Networking Activities**

Networks may occur through incubators, accelerators, industry networks and professional services, which form part of the attributes necessary to interact with the

active stakeholders (Stam & Spigel, 2017). Stam and Spigel (2017) assert that networks occur through developing a high network density, connecting events and through big businesses that engage with SMEs. Notably, civic leaders promote networks to achieve a positive networking environment.

Networking activities on the other hand may align to the notion of entrepreneurial intention (EI). As EI is the predictor of the behavior of an individual to initiate entrepreneurial action and part of this action is their ability to network. This behaviour is entrenched in the factor, entrepreneurial alertness and influence EI (Karabulut, 2016; Fu-Lai Yu, 1999; Busenitz, 1996). Networking stimulates SMEs to foster relationships, access markets and access finance. Equally, networking promotes opportunities to develop new ideas, products and services through their entrepreneurial alertness (Karabulut, 2016; Fu-Lai Yu, 1999).

## 2.6 Scalability of SME's conceptual model

The conceptualised model for the scalability of SMEs has been formulated based on the literature reviewed in this chapter. This model is depicted in Figure 2.15.

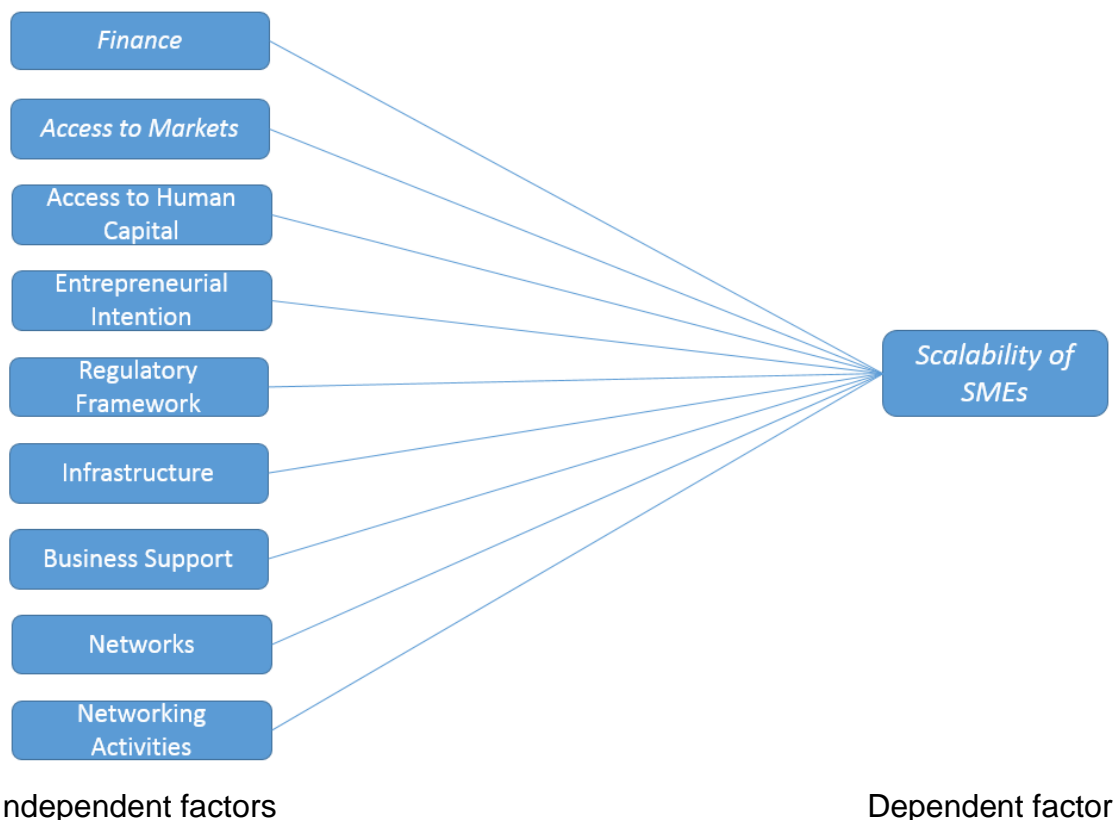


Figure 2.15 - Scalability of SMEs Conceptual Model

## 2.7 Summary

This chapter addressed RQ<sub>1</sub> which states; “What are the factors that affect the scalability of SMEs?” The chapter achieved the research objectives of performing a literature review to develop insights of the key factors that affect the scalability of SMEs (RO<sub>1</sub>). The factors influencing the Scalability of SMEs were used to develop the conceptual model as seen in Figure 2.15.

The concepts of SMEs were addressed in the first section of the chapter. The economic impact and importance of SMEs were highlighted. Access to finance and the role of government for entrepreneurial development were discussed. The section continued to discuss the role of SMEs in sustainable development.

The following section succinctly described SMEs on a global level. The description was decomposed to SMEs from developed and developing economies. Developed economies included the USA and EU. Followed by a discussion into developing economies that form part of the BRICS. This section focused primarily on SMEs contribution to a country’s national income, economic growth and employment.

Thereafter, SMEs in the South African context were highlighted by showing the importance of and understanding the value of SMEs. Literature explicates that SMEs contribute between 51% and 57% to the GDP and employ 60% of the employable population of South Africa. Additionally, this section established key levers to mobilise SMEs and are related to the key requirements and challenges in Section 2.5.

The last section discussed the requirements and challenges to scale SMEs. The section was subdivided into access to finance, human capital, infrastructure, access to markets, BEE, entrepreneurial competencies, entrepreneurial intention, networks and networking activities. Each subsection was identified as key factors to scale SMEs. The extent of the key factors was justified by delivering statistics on the current situation of SMEs within South Africa. Notably, the value of achieving a favourable situation against each factor was emphasised.

In the final section of this chapter, the proposed model was shown and the factors that influence Scalability of SMEs: Access to Finance, Growth, Access to Markets, Access

to Human Capital, Entrepreneurial Intention, Regulatory Framework, Infrastructure, Business Support, Networks and Networking Activities. Chapter 3 addresses RQ<sub>2</sub> that states; “How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?” The chapter achieves the research objective of justifying and explaining the research methodology that is used for this treatise with acceptable detail for future studies (RO<sub>2</sub>).

### **3 CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY**

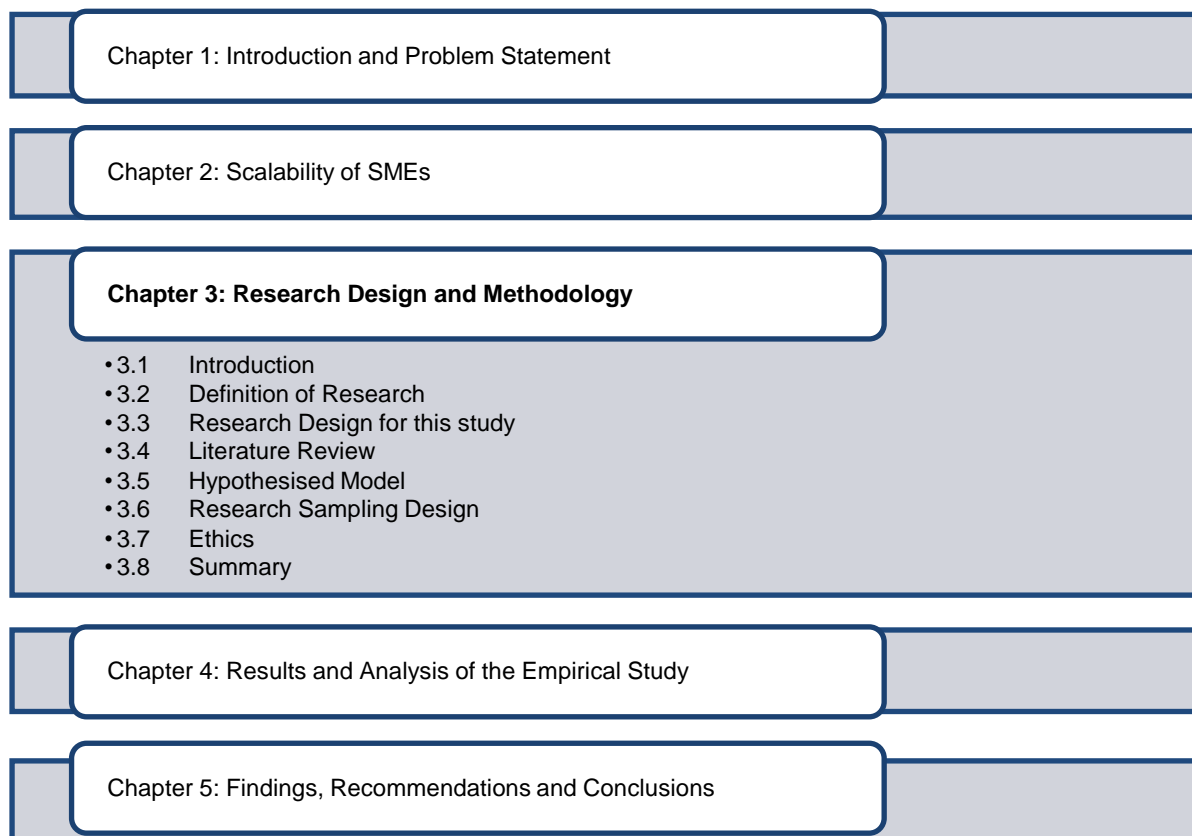
#### **3.1 Introduction**

The previous chapter explored the literature associated with SMEs by discussing their importance and the factors that either promote and/or hinder growth. Chapter 2 explained the following factors, namely: *Access to Finance, Growth, Access to Markets, Access to Human Capital, Entrepreneurial Intention, Regulatory Framework, Infrastructure, Business Support, Networks and Networking Activities* with the aim of fostering an alignment to the theories of social capital, social network theory and stakeholder theory. In light of this, the key factors were extrapolated from the literature to develop the proposed model of Scalability of SMEs in South Africa.

This section reports on the research question, RQ<sub>2</sub>, “How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?” The chapter addresses the research objective RO<sub>2</sub>, “Justify and explain the research methodology that is used for this study”.

In order to deliver the research objective (RO<sub>2</sub>), each subsection expounds on the following subjects with an overview of the chapter in Figure 3.1. Section 3.1 offers an introduction to Chapter 3 including the research questions and objectives that are addressed. Section 3.2 defines the research. Section 3.3 offers the research design for this study. In Section 3.4, the literature review is defined. The hypotheses developed and the proposed model are discussed in Section 3.5. The sampling methods, data collection, data analysis and the extent of reliability and validity are explained in Section 3.6. Section 3.7 discusses the topic of ethics and its application within this research study. Section 3.8 provides a summary of this chapter.





*Figure 3.1 - Overview of Chapter 3*

### **3.2 Definition of Research**

The research methodology refers to the systematic process that outlines the strategy used to undertake a research study (Collis & Hussey, 2009). Moreover, Collis and Hussey (2009) underline that the research process includes the theoretical groundwork for the data collection and analysis. Research is further defined as a logical process of collecting, analysing and interpreting data with the objective of making inferences, conclusions and recommendations (Collis & Hussey, 2009; Saunders, Lewis & Thornhill, 2009; Leedy & Ormrod, 2005). Kothari (2006) defines research as a scientific and systematic method that promotes significant insight on a particular topic.

In light of this, the research process relates to a process of inquiry and investigation for new facts to develop insights and increase knowledge (Collis & Hussey, 2009; Kothari, 2006). The research process is thus identified as a sequence of steps, which starts by identifying the research problem, followed by the formulation of the research objectives. This sequential process leads to the hypotheses. Collis and Hussey (2009:

4) describe the hypotheses as “a proposition that can be tested for association or causality against empirical evidence”. The following section explains the research design for this study.

### 3.3 Research Design for this Study

According to Blumberg, Cooper and Schindler (2008) the research design acts as a roadmap that satisfies the research objectives and questions whilst focusing on the research process (Collis & Hussey, 2009). Moreover, the objective is to ensure the validity of the research findings. In light of this, it is essential for a researcher to follow several steps to ensure that the study remains focused and within the parameters of the desired research objectives. Blumberg, et al. (2008) indicate that the research may be carried out independently to the extent that the data collection and analysis imperatives are achieved.

Saunders, et al. (2009) characterised the research design through the ideology of a ‘research onion’, which establishes a progressive method to undertake research. The ‘research onion’ acts as a guiding framework that underlines the methodology for the selection and definition of the research design. In light of this, the guiding framework provides the researcher with a scope and boundaries to delineate the data collection methods and analysis necessary. The research process, inherent to the layers of the ‘research onion’ are examined and described within the context of this study. The ‘research onion’ is illustrated in Figure 3.2.

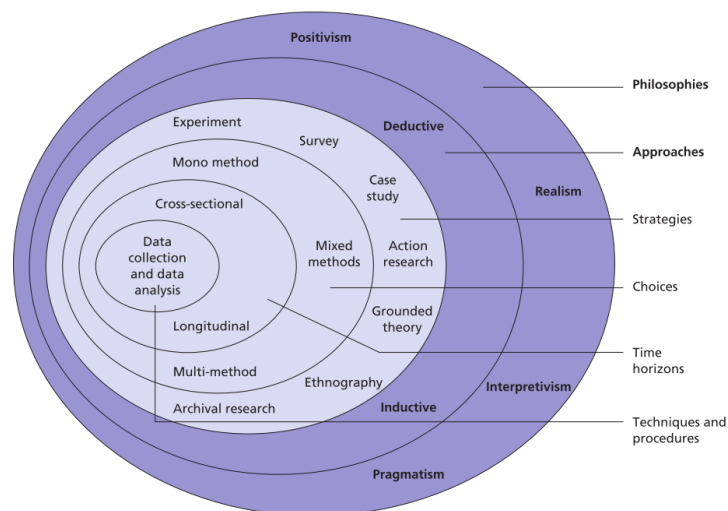


Figure 3.2 - The Research Onion

Source: Saunders, et al (2009: 108).

### **3.3.1 Research Philosophies**

The way in which data about a research project should be gathered, analysed and used, is the research philosophy. According to Saunders, et al. (2009) choosing this philosophical framework is the initial step in the research process, which comprises the first and outer-most layer of the Research Onion. Equally, the research philosophy guides the development of new knowledge (Saunders, et al., 2009). Collis and Hussey (2009) echo the assertion by Saunders, et al. (2009) and highlight that both the reality and nature of knowledge evolves over time.

Two major research philosophies have been identified in the Western tradition of science, namely: positivism and interpretivism (Collis & Hussey, 2009; Lehaney & Vinten, 1994). Each philosophy is dependent on the aim of the study, which leads to the choice between qualitative and quantitative approaches. The aforementioned indicates that the applied research philosophy is different in nature, in both the research techniques and assumptions exhausted to support the formulated objectives. A research philosophy is further defined as a frame of reference that a researcher employs to manage observations and logic entrenched in the study (Babbie, 2010).

A summary of each research philosophy is provided. Thereafter, the research philosophy for this study is discussed and a justification for the appropriateness of the methodology is explained.

#### **3.3.1.1 Positivism**

Positivistic research is grounded on information obtained through empirical observations and by the belief that reality is independent and objective (Collis & Hussey, 2009). In this research philosophy the source of knowledge is based on positive information. To explain the cause and effect relationships between variables is the goal of the research whether social or natural phenomena are being studied. Quantitative analysis methods are associated with positivistic research, as variables are believed to be measurable (Collis & Hussey, 2009).

#### **3.3.1.2 Interpretivism**

Interpretivist research 'rests on the assumption that social reality is in our minds and is subjective and multiple' (Collis & Hussey, 2009: 44). This research approach

focuses on studying the intricacy of social phenomena to interpret, understand and explain the observations. The researcher is involved in the study and the research is shaped around perceptions (Collis & Hussey, 2009; Cooper & Schindler, 2006). This form of study is described as interpretive research where the findings are not as a result of statistical analysis of quantitative data (Collis & Hussey, 2009) and presented using verbal and illustrative explanations (Cooper & Schindler, 2006).

### **3.3.1.3 Research Paradigm for this Study**

This sub-section discusses the research methodology to be applied in this study while justifying the reasons for the research methodology selected. The research study to determine the scalability of SMEs in South Africa falls within the positivistic research philosophy and the objective of the research is to explain the cause and effect relationships between the following:

- The dependent factor: Scalability of SMEs; and
- The independent factors: Regulatory Framework, Infrastructure, Entrepreneurial Intention, Access to Finance, Growth, Business Support, Access to Human Capital, Networks and Networking Activities.

### **3.3.2 Research Approach**

The research design examines the next phase of the 'research onion', namely the research approach. The research approach can be either inductive or deductive which is determined by the intent of the research study (Saunders, et al., 2009).

The deductive approach is a research study that develops a hypothesised model that will be statistically tested. Equally, deductive research is extrapolated into specific instances from general inferences (Collis & Hussey, 2009). Inductive research, on the other hand, is characterised as a study where a theory is formulated from an 'empirical reality' and general inferences are extrapolated from specific instances (Collis & Hussey, 2009: 7). Noticeably, the inductive research approach is the opposite of the deductive method as it extrapolates inferences from specific instances to overall patterns.

In Chapter 2, a conceptual model was developed based on reviewed literature. The conceptual model was used to establish relationships between the dependent and independent factors. In order to confirm the validity of the conceptual model a hypothesis test will be conducted. Noticeably, the statistical analysis will test the hypotheses developed in this research study and aims to prove causality between the indicated factors. In light of this, the research study follows a deductive approach as the researcher wishes to extrapolate specific instances from a general pattern.

### **3.3.3 Research Strategy**

The research design examines the next phase of the 'research onion', namely the research strategy. This phase of the onion underlines the various types of strategies that can be undertaken and used in explorative, descriptive and explanatory research. Moreover, strategies are extensively applied to inductive or deductive approaches to research.

Notably, a chosen research strategy subscribes to the formulated research objectives, questions and existing literature. In light of this, the research strategy followed aims to organise the research process due to the time and cost constraints and researcher orientation. The 'research onion' underlines the research strategies available. These include: experiments, surveys, action research, case studies, ethnography and grounded theory (Saunders, et al., 2009).

Researchers have to consider various constraints and elements before selecting a research strategy. First, the existing body of knowledge within the context of the research being undertaken is examined. Second, the extent of the time and resources available are measured. Third, the formulated research objectives and questions govern the process of adopting a specific strategy, in other words it must suit the study. As previously stated, this research study aims to determine the factors influencing scalability of SMEs in South Africa. The survey strategy is employed to collect the quantitative data. The collected data will thereafter be analysed to determine reliability and validity. Subsequently, causality will be tested between the identified factors within the conceptual model.

### **3.3.4 Methodological Choices**

Research choices refer to the method (quantitative, qualitative or a qualitative/quantitative combination) of data collection and statistical analysis procedures available to the researcher. This is a significant choice when designing research. Researchers may therefore choose between the mono-method, multi-method and mixed-methods. The following subsections elaborate on each method available.

#### **3.3.4.1 Mono-method**

Mono method adopts a single data collection and statistical analysis procedure. Saunders and Tosey (2013) describe the mono method as either a quantitative design (survey, analysed statistically) or a qualitative design (in depth interview, analysed as narratives) with related statistical analysis procedures.

#### **3.3.4.2 Multi-method**

A multi-method approach adopts more than one method within the boundaries of utilising either quantitative or qualitative research approaches (Saunders, et al., 2009) with the related statistical procedures. Notably, within the quantitative paradigm the researcher may employ a survey and structured observation. Designing the research within the qualitative paradigm the researcher may choose to employ in-depth interviews and diary accounts (Saunders & Tosey, 2013).

#### **3.3.4.3 Mixed-method**

The mixed-method strategies of inquiry are pragmatic in nature and involve collecting data sequentially or concurrently to comprehend the research problem. Both numeric and text information is collected to represent a combination of quantitative and qualitative information. The researcher grounds the inquiry on the assumption an integration of datasets guides an understanding of the research problem. The trajectory of this strategy begins with a survey to generalise results to a population followed by a detailed qualitative, open-ended interview to obtain perceptions and attitudes of respondents.

#### **3.3.4.4 Methodological choice for this research study**

The mono-method is the methodological choice for this research study. The researcher has undertaken to develop an analytical survey grounded in the quantitative design, to be analysed statistically. A combination of descriptive and inferential statistics will be conducted to answer the research questions of this study.

#### **3.3.5 Time Horizons**

Peeling away the methodological choices reveals the subsequent layer of the 'research onion': time horizon (Saunders & Tosey, 2013). The time horizon in the context of research may be either cross-sectional or longitudinal. The type of time horizon addresses the research problem and fosters the strategy for data collection and statistical procedures used. In the case of cross-sectional studies either the survey or case study strategies are employed. Moreover, cross-sectional studies collect data at a point in time.

Longitudinal studies, on the other hand, monitor data over a length of time. Longitudinal studies are characterised by their use of experimental, action research, grounded theory and archival research strategies.

This research study is fundamentally interested in determining the factors that influence the scalability of SMEs in South Africa. In light of this, a cross-sectional study is conducted to understand the impact of the factors at a point in time.

#### **3.3.6 Research Methodology applied in this Study**

This subsection examines and attempts to justify the research design used for this study. In Chapter 2, a literature review was undertaken to extract critical factors or measures to scale or grow SMEs.

The main research question RQM of this study is "What are the factors influencing the scalability of SMEs in South Africa?" in order to achieve ROM: "To evaluate the factors influencing the scalability of SMEs in South Africa and identify areas for improvement". In order to determine RQM and ROM an empirical analysis of the hypothesised relationships are statistically tested. Section 3.5 of this chapter details the hypothesised model to determine the objectives of this study. Figure 3.3 outlines the

research design process followed in this study and highlights that quantitative data were collected by way of an analytical survey. The sampling and data collection method are discussed in Section 3.6.2 and 3.6.3 respectively. The information collected was then statistically analysed.

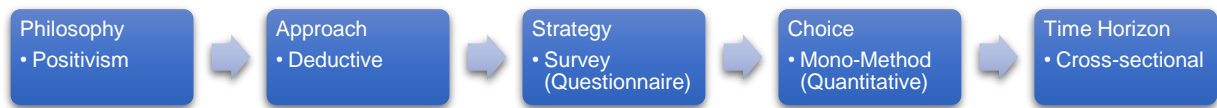


Figure 3.3 - Research Design Process

### 3.4 Literature Review

A literature review was undertaken to determine the methodologies employed by the existing body of knowledge (Collis & Hussey, 2009). The existing body of knowledge allowed the researcher to glean insights into the research topic. Equally, the literature review guided the researcher on the trajectory of ideologies inherent to the research topic (Leedy & Ormrod, 2010). Collis and Hussey (2009) assert that it is important for the researcher to gain insight into the research topic in order to offer a credible critique. This critique is characterised by the ability of the researcher to identify plausible gaps and deficiencies in the knowledge that id developed by the existing body of knowledge (Babbie, 2010).

### 3.5 Hypothesised Model

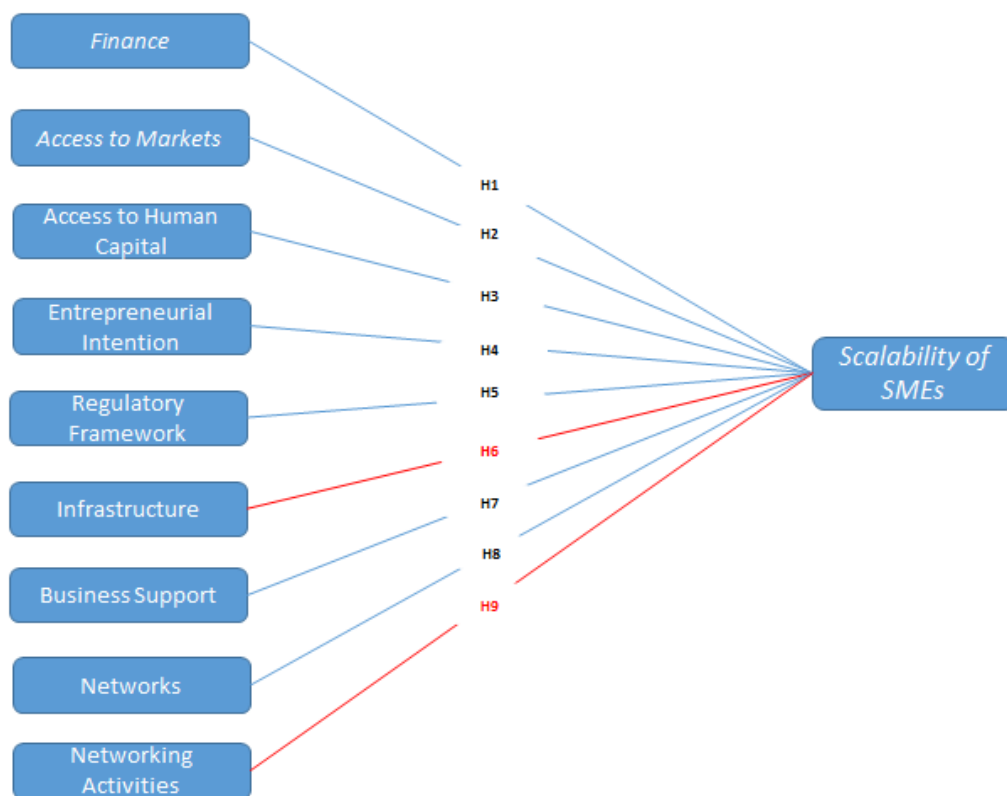
A conceptual model was constructed based on the literature review undertaken. Effectively, the conceptual model was used to establish the hypothesised model to measure the relationships between the dependent factors: *Scalability of SMEs* and the independent factors: *Finance, Growth, Access to Markets, Access to Human Capital, Entrepreneurial Intention, Regulatory Framework, Infrastructure, Business Support, Networks, and Networking Activities*.

The hypotheses developed in this research study will be statistically analysed with the aim to either accept or reject the proposed relationships. The hypothesised model is illustrated in Figure 3.4. The following hypotheses (Table 3.1) have been formulated:



Hypothesis
H1 = "Access to Finance is significantly related to Scalability of SMEs"
H2 = "Access to Markets is significantly related to Scalability of SMEs"
H3 = "Access to Human Capital is significantly related to Scalability of SMEs"
H4 = "Entrepreneurial Intention is significantly related to Scalability of SMEs"
H5 = "Regulatory Framework is significantly related to Scalability of SMEs"
H6 = "Infrastructure is significantly related to Scalability of SMEs"
H7 = "Business Support is significantly related to Scalability of SMEs"
H8 = "Networks is significantly related to Scalability of SMEs"
H9 = "Networking Activities is significantly related to Scalability of SMEs"

Table 3.1 – Hypotheses



Independent Factors

Dependent Factor

Figure 3.4 - Hypothesised Scalability of SMEs Model

### **3.6 Research Sampling Design**

This section explains the research sampling design for this study. First, the notion of sampling is explained. Second, the sampling methods are discussed. Third, the decision inherent to establishing a sampling frame is discussed. Fourth, the decisions to determine the sample size are examined. Fifth, the appropriate technique for sampling, from various sampling methods is determined.

#### **3.6.1 The Notion of Sampling**

Selecting an appropriate sample is an important component when undertaking a research study. Equally, a survey of the entire population is impractical and suffers from time and resource constraints (Saunders, et al., 2009; Neuman, 2006). More significantly, the sampling technique chosen determines the group from the population (Collis & Hussey, 2009) under study required to answer the research problem being investigated.

Cooper and Schindler (2008: 228) provide an exposition into the concept of sampling: “the basic idea of sampling is that by selecting some of the elements in a population, we may draw conclusions about the entire population”. Collis and Hussey (2009) further define a sample as an unbiased subset that is statistically representative of the entire population. The goal of the researcher is to ultimately generalise the findings from the sample to the entire population.

#### **3.6.2 Sampling Methods**

A key starting point in defining the sampling design is to decide between the two categories of sampling, namely:

- Probability sampling; and
- Non-probability sampling.

The following subsections explain the types, nature and characteristics of probability and non-probability sampling respectively.

### **3.6.2.1 Probability Sampling**

Probability sampling or random sampling refers to an objective subset of a representative population where every respondent has an equal chance of being chosen (Collis & Hussey, 2009: 197). This form of sampling is generally compared to the analytical survey method (Saunders, et al., 2009). Additionally, probability sampling is comprised of simple random sampling and systematic random sampling. The nature of each sampling method is as follows:

- Simple random sampling – the sample of the population are selected randomly; and
- Systematic random sampling – the subset of the population that is selected in a systematic random style. This sampling method includes: convenience sampling, stratified random sampling, cluster sampling, random walk sampling, staged sampling and snowball sampling.

### **3.6.2.2 Non-probability Sampling**

Non-probability sampling is a technique that selects a sample based on subjective judgement (Saunders, et al., 2009). Members of the population therefore have an equal chance of being selected for the sample (Collis & Hussey, 2009). Saunders, et al. (2009) assert that in the exploratory phase of certain research studies, the non-probability sampling techniques are appropriate due to their practical nature. The only limitation of this is that the research problem may not determine the extent of the problem.

Alternatively, non-probability sampling may be the choice to determine research objectives and research strategy. This may dictate to undertake in-depth studies that use small cases for specific purposes (Saunders, et al., 2009: 233).

Non-probability sampling techniques include: Quota sampling (larger populations), Purposive sampling, Snowball sampling, Self-selection sampling and Convenience sampling (Saunders, et al., 2009).

### **3.6.2.3 The Sampling Method and Sampling Frame for this Research Study**

The purposive and snowball sampling methods are employed in this research study. The sampling methods used form part of the non-probability sampling technique.

Purposive sampling is a sampling method where respondents with specific characteristics that are aligned to the objective of the study are chosen to participate in a study. Snowball sampling is a technique used where samples are employed through referrals or directly recruited. The sampling frame therefore included SMEs in South Africa. A representative sample of  $n = 295$  respondents from this population was chosen.

### **3.6.3 Sampling Data Collection**

This subsection briefly provides an exposition into the concept of data collection followed by explaining the data collection method used for this study. Thereafter, the measuring instrument used to collect data is discussed.

#### **3.6.3.1 The Concept of Data Collection and the Method used for this Study**

Wegner (2012), Saunders, et al. (2009) and Sekaran (2006) classify the sources of data into primary and secondary data. Primary data refers to new or original data, while secondary refers to existing data. Primary data collection methods include questionnaires, interviews, action research, case studies, ethnographic research and longitudinal studies (Collis & Hussey, 2009). Secondary data, on the other hand, are collected from publications, databases and internal records (Collis & Hussey, 2009: 59). Section 3.3.3 underlines the research strategy undertaken by the researcher. This layer of the research onion further identifies the data collection technique to be used. This layer of the research onion reveals the importance of the type of data collection method chosen to address the research question (Saunders & Tovey, 2013). This choice is directed by various factors, namely pursuing data integrity, the cost constraints, the desired response rate and the length of time to collect the data (Sekaran, 2006).

Primary data are used for this research study, where a non-probability sampling technique was employed and comprises the purposive and snowball sampling methods. The sampling frame includes SMEs from South Africa.

The primary data were collected from the sample by means of) an on-line questionnaire (Appendix A) and through fieldworkers who were deployed to collect responses from the sample group. An email containing a Universal Resource Link

(URL) to the questionnaire was sent to organisations, namely The Business Place and The NMB Business Chamber databases.

The fieldworkers deployed were trained to undertake the facilitation with the SME respondents. The hard copy survey questionnaires that were collected by the fieldworkers were captured on the Nelson Mandela University Online Software Platform (QuestionPro).

The questionnaires were distributed by an accompanying covering letter that explained the objective of the study and that respondent participation was voluntary. A representative sample of  $n = 295$  responses were received. Equally, potential respondents from the organisations mentioned were reminded four times to respond.

### **3.6.3.2 The Measuring Instrument**

Measurement refers to the process of allocating numbers to empirical events in accordance to a set of rules (Blumberg, et al., 2008). In Section 3.6.3.1 the various methods of data collection were described. Collis and Hussey (2009) further explain that the tools commonly used by researchers are structured interviews and questionnaires.

For this research study, a questionnaire was developed as a method of collecting new data from the sampling frame described in Section 3.6.2.3. Questionnaires are characterised as a list of self-constructed items sourced from the literature review undertaken by the researcher. This literature review is developed from the existing body of knowledge. Collis and Hussey (2009) express that researchers adhere to the following specifications when designing the questionnaire, namely: the question design, the representative sample, the distribution channel for data collection and undertaking a pilot study to test the validity of the questionnaire.

The questionnaire was divided into eleven (11) sections. Section 1 of the questionnaire (Appendix A) captured the biographical information of the respondents. The biographical information captured is as follows:

Gender	Contract vs. Permanent Employees
Age	Number of Women Employed
Province	Female Representation in management
City or Town	Profitability over the past 3 years
Race	Social Media used
Level of Education	Social media influence
SME Ownership	Top ranking social media
Marital Status	VAT registration
Personal Monthly Income	Legal Entity
Business Sector	B-BBEE Level
Years of Operation	Black Ownership %
Number of Employees	Source of Start-Up Capital
Founding Year	Funding Accessed

*Table 3.2 - Section 1 of the questionnaire*

The items in the questionnaire were operationalised from previous research studies and the literature reviewed. Equally, the items in the questionnaire were selected to address the factors in the conceptual model that affect the scalability of SMEs.

### **3.6.3.3 Operationalisation of the factors**

The operationalised factors pertaining to: “Access to Finance”, “Growth”, “Access to Markets”, “Human Capital”, “Entrepreneurial Intention”, “Regulatory Framework”, “Infrastructure”, “Business Support Services”, “Networks” and “Networking Activities in SMEs” are indicated in the following tables. The constructs identified in the tables (Table 3.3 - Table 3.13) below form part of the sections following the biographical information highlighted in Table 3.2 (Section 3.6.3.2). Equally, each construct outlined is accompanied by its items and literature source.

- **Dependent variable:** *Scalability of SMEs*

Please indicate your level of agreement with the following statements:

This question pertains to Scalability of SMEs:

Construct	Literature support
1. Government policies make it difficult for the business to grow	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
2. Interest rates are favourable for growth	(TMF Group, 2016)
3. Exchange rates are favourable for growth	(Jones, 2016; Makina, et al., 2015; SEDA, 2012; Mbonyane & Ladzani, 2011)
4. It is easy to substitute my products & services	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Rogerson, 2000)
5. Tax incentives will stimulate growth	(Euronews, 2015; Letovanec, 2015)
6. Labour laws are favourable for the business to grow	(Euronews, 2015; Letovanec, 2015)
7. The business' clients will not switch to another competitor	(Lepoutre & Heene, 2006)
8. The current political environment is stable and therefore stimulates growth	(Euronews, 2015; Letovanec, 2015; Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011)
9. Crime, theft and disorder affect business growth	(NDP 2030, 2017; Kunene, 2008)
10. Corruption stagnates economic growth	(TMF Group, 2016; Furtuna, & Ruvinskaya, 2013; Albertini, et al., 2011)

Table 3.3 – Scalability of SMEs (Growth)

- **Independent variable:** *Access to Finance*

To what degree are the following elements of Finance an obstacle to current operations of this firm?

Construct	Literature support
11. Access to Debt Finance	(TMF Group, 2016; Jones, 2016; Makina, et al., 2015; Lemmon, 2013; SEDA, 2012; Mbonyane & Ladzani, 2011)
12. Access to Equity Finance	(TMF Group, 2016; Jones, 2016; Makina, et al., 2015; Lemmon, 2013; SEDA, 2012; Mbonyane & Ladzani, 2011)

13. Access to Grants	(TMF Group, 2016; Jones, 2016; Makina, et al., 2015; Lemmon, 2013; SEDA, 2012; Mbonyane & Ladzani, 2011)
14. Access to Soft Loans, i.e. non-interest-bearing loans	(TMF Group, 2016; Jones, 2016; Makina, et al., 2015; Lemmon, 2013; SEDA, 2012; Mbonyane & Ladzani, 2011)
15. Access to government agencies	(TMF Group, 2016; Jones, 2016; Makina, et al., 2015; Lemmon, 2013; SEDA, 2012; Mbonyane & Ladzani, 2011)

Table 3.4 – Access to Finance

- **Independent variable:** *Access to Finance*

Please indicate your level of agreement with the following statements:

This question pertains to Access to finance:

Construct	Literature support
16. Access to finance can stimulate growth for the business	(TMF Group, 2016; Jones, 2016; Euronews, 2015; Letovanec, 2015; Makina, et al., 2015; SEDA, 2012; Mbonyane & Ladzani, 2011)
17. Access to finance can help the business' cash flow	(TMF Group, 2016; Jones, 2016; Euronews, 2015; Letovanec, 2015; Makina, et al., 2015; SEDA, 2012; Mbonyane & Ladzani, 2011)
18. Many SMEs are aware of government agencies	(TMF Group, 2016; Euronews, 2015; Letovanec, 2015)
19. It is easy to acquire finance from government agencies	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
20. Financial support from government agencies impacts the success of SMEs	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
21. The commercial banks are willing to finance SMEs	(Euronews, 2015; Letovanec, 2015)
22. Lack of financial support from banks impacts the success of SMEs	(Euronews, 2015; Letovanec, 2015)
23. It is easy to access finance as registered business	(Jones, 2016; TMF Group, 2016; Euronews, 2015; Letovanec, 2015; Makina, et al., 2015; SEDA, 2012; Mbonyane & Ladzani, 2011)
24. The business has accessed formal finance. e.g. banks	(Jones, 2016; TMF Group, 2016; Euronews, 2015; Letovanec, 2015; Makina, et al., 2015; SEDA, 2012; Mbonyane & Ladzani, 2011)



25. The business has accessed informal finance. e.g. family and friends	(TMF Group, 2016; Euronews, 2015; Letovanec, 2015)
26. It is easy to access finance from venture capitalists	(Jones, 2016; TMF Group, 2016; Euronews, 2015; Letovanec, 2015; Makina, et al., 2015; SEDA, 2012; Mboniyane & Ladzani, 2011)

Table 3.5 - Access to Finance

- **Independent variable: Access to Markets**

Please indicate your level of agreement with the following statements:

This question pertains to Access to Markets:

Construct	Literature support
27. It is easy to access International Markets	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Furtuna & Ruvinskaya, 2013; Cant & Wiid, 2013; Albertini, et al., 2011; Rogerson, 2000)
28. It is easy to access national Markets	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Furtuna & Ruvinskaya, 2013; Cant & Wiid, 2013; Albertini, et al., 2011; Rogerson, 2000)
29. It is easy to access markets where my business is situated in	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011; Rogerson, 2000)
30. Market Information for the sector that the business operates in is readily available	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011; Rogerson, 2000)
31. Supply chain requirements of corporates are complex	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Rogerson, 2000)
32. BEE supply chain requirements are a challenge for the business	(SAICA, 2015; Oriaku, 2012; SEDA, 2012)
33. There is a demand for the business' products & services	(Oriaku, 2012)
34. The business has a strong internal supply chain	(Oriaku, 2012)

Table 3.6 - Access to Markets

- **Independent variable:** *Human Capital*

Please indicate your level of agreement with the following statements:

This question pertains to Human Capital:

Construct	Literature support
35. The business has a pool of sufficient skilled labour	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
36. It is easy to acquire skilled labour	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
37. Skilled labour is expensive	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; Euronews, 2015; Letovanec, 2015; CIMSME, 2011)
38. There is an abundance of skilled labour in our region	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
39. The minimum paid labour rate is a constraint	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
40. Management in the business has the appropriate knowledge	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; Häner, 2011; CIMSME, 2011)
41. Management in the business has the appropriate capabilities	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; Häner, 2011; CIMSME, 2011)
42. The business employs a high percentage of skilled labour	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
43. The business employs a high percentage of unskilled labour	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)

44. The business adheres to the Employment Equity Act, i.e the distribution of Black, White, Indian, Coloured, and Asian staff	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
45. The young staff and graduates within the business are adequately skilled	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
46. The youth/graduates applying for positions in the business have the right skills and competencies	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)
47. The skilled labour within the business makes the business more competitive	(Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016; TMF Group, 2016; CIMSME, 2011)

Table 3.7 - Human Capital

- **Independent variable:** *Entrepreneurial Intention*

Please indicate your level of agreement with the following statements:

This question pertains to Entrepreneurial Intention:

Construct	Literature support
48. The owner of the business is proactive	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson & Tell, 2009; Colombo & Grilli, 2005).
49. The owner of the business perceives himself/herself as a risk taker	(Sajilan, et al., 2016; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
50. The owner of the business sees himself/herself as being innovative	(Sajilan, et al., 2016; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
51. The owner of the business has a fear of failure	(Sajilan, et al., 2016; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
52. The owner has strong leadership skills	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
53. The owner has the ability to seek new opportunities	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
54. The owner can formulate and execute strategies	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
55. The owner has analytical and operational skills	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).

56. The business owner's intention is to stimulate job creation	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
57. Entrepreneurs add value to the economy	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson., 2009; Colombo & Grilli, 2005).
58. The business owner is able to create new business opportunities through networking skills	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
59. The business owner is happy	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).
60. The business owner would finance other entrepreneurs i.e. be an investor who either provides capital to start-up ventures or supports small companies	(Sajilan, et al., 2016; Häner, 2011; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).

Table 3.8 - Entrepreneurial Intention

- **Independent variable: Regulatory Framework**

To what degree are the following elements of the Regulatory Framework an obstacle to current operations of this business?

Construct	Literature support
61. Government-generated red tape	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
62. B-BBEE codes	(SAICA, 2015; SEDA, 2012)
63. Labour Laws	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
64. Raising growth finance	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
65. Dealing with SARS	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
66. Procedure to open a business	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)
67. Dealing with the local municipality	(Euronews, 2015; Letovanec, 2015; Oriaku, 2012)

Table 3.9 - Regulatory Framework

- **Independent variable: Infrastructure**

To what degree are the following elements of Infrastructure an obstacle to operations of this firm?

Construct	Literature support
68. Roads	(TMF Group, 2016; MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014; Oriaku, 2012; Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004)
69. Water and sewerage	(TMF Group, 2016; MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014; Oriaku, 2012; Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004)
70. Electricity supply	(TMF Group, 2016; MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014; Oriaku, 2012; Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004)
71. Information and communication technology	(TMF Group, 2016; MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014; Oriaku, 2012; Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004)
72. Transport	(TMF Group, 2016; MBA Rendezvous, 2015; Greyhound Knowledge Group, 2014; Oriaku, 2012; Bowen, et al., 2009; Ejembi & Ogiji, 2007; Anesta, et al., 2004)

Table 3.10 – Infrastructure

- **Independent variable: Business Support**

How satisfied are you with the following?

This question pertains to Business Support services:

Construct	Literature support
73. Access to Legal Services	(Oriaku, 2012)
74. Access to Tax Services	(TMF Group, 2016; Novais, 2013; Oriaku, 2012; Häner, 2011)
75. Access to Incubators/Accelerators	(Oriaku, 2012)
76. Access to Consultants/Advisors	(Oriaku, 2012)
77. Access to Education & Training	(Oriaku, 2012)

Table 3.11 - Business Support

- **Independent variable: Networks**

Please indicate your level of agreement with the following statements:

This question pertains to Networks:

Construct	Literature support
78. There are Research & Development collaboration opportunities between businesses and university researchers	(Yoshino & Taghizadeh-Hesary, 2016; Lemmon, 2013)
79. There is support from successful business people within the region	(Yoshino & Taghizadeh-Hesary, 2016)
80. The business has collaborated with other businesses. e.g. projects, joint ventures etc.	(Yoshino & Taghizadeh-Hesary, 2016)
81. There are available networks to access black business stakeholders. e.g. Clients, suppliers etc.	(SAICA, 2015; SEDA, 2012)
82. There are available networks to access eligible black business partners	(SAICA, 2015; SEDA, 2012)
83. The business offers a unique value proposition to clients. e.g. price, quality, distribution etc.	(Yoshino & Taghizadeh-Hesary, 2016)
84. The business' management has a deep understanding of the capabilities and resources within the business.	(Malaret, 2014; Häner, 2011)
85. The business operates in an enabling entrepreneurial eco-system	(Yoshino & Taghizadeh-Hesary, 2016)
86. Bribery and corruption hinder the growth of the business	(TMF Group, 2016; Furtuna & Ruvinskaya, 2013; Albertini, et al., 2011)

Table 3.12 - Networks

- **Independent variable:** *Networking activities*

Please indicate your agreement with the following.

This question pertains to Networking Activities:

Construct	Literature support
87. The business has accessed new markets/customers through business networking events	(Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Lemmon, 2013; Rogerson, 2000)
88. The business owners/managers are able to create new business opportunities through networking skills	(Lemmon, 2013)
89. The business leadership would attend organised events e.g. Entrepreneurial Trade Shows/Business Events	(Lemmon, 2013)
90. The business leadership is selective of the types of business networking events attended	(Lemmon, 2013)
91. The business promotes itself through business networking events	(Lemmon, 2013)
92. The business has developed partnerships/alliances through business networking events	(Lemmon, 2013)
93. In-person business networking events are a good platform to form relationships with other businesses	(Lemmon, 2013)
94. Networking leads to business growth	(Lemmon, 2013)

*Table 3.13 - Networking Activities*

The items in the questionnaire were anchored on a five-point Likert scale measuring instrument. The STATISTICA computer software application was employed to undertake statistical analysis in this research study.

### **3.6.4 Data Analysis**

#### **3.6.4.1 The Concept of Data Analysis**

Data analysis is referred to as a process undertaken by the researcher to employ analytical and logical reasoning to the data collected within a research study (Wegner, 2012). In order to ensure data integrity, the data undertakes a process of cleansing and validation (Wegner, 2012). Thereafter, the data analysis techniques used to analyse data (Collis & Hussey, 2009: 336-337) are identified by the following:

- Establishing the research philosophy, that is, whether the study is designed in the positivist or interpretivist paradigm;
- If the study is designed in the positivist paradigm the research data will be in a numerical format to undertake statistical procedures for analysis;
- If the study is designed in the positivist paradigm an exploratory analysis of the data using descriptive statistics, and in a postgraduate course, the researcher will further conduct inferential statistics; and
- If the study is designed in the interpretivist paradigm the researcher may use quantifying or non-quantifying methods to analyse the data.

In light of this, the positivist paradigm data is expressed in numerical format. The statistical procedures that can be employed are central tendency, measures of variability, correlation analysis, regression analysis and hypothesis testing (Collis & Hussey, 2009).

In the interpretivist paradigm, the researcher uses quantifying or non-quantifying methods to analyse data. The statistical procedures used for this form of data are: ethnographic analysis, narrative analysis, phenomenological analysis, interpretative analysis and grounded theory analysis (Collis & Hussey, 2009).

#### **3.6.4.2 Data Analysis Techniques used in this Research Study**

Statistical methods using both descriptive and inferential statistics are employed. Descriptive statistics are employed on the biographical information. Additional descriptive statistics on the data include the ANOVA and MANOVA procedures.



Inferential statistics conducted on the data to confirm or negate conclusions (Kumar, 2011) were a Correlation Analysis. Correlation can be defined as relationships among variables or the measure of linear association between two variables. A relationship between variables, if a correlation exists, is when one variable increases, another variable either increases (positive correlation) or decreases (negative correlation). This correlation behaves in a predictable fashion (Fox & Bayat, 2010; Leedy & Ormrod, 2010; Collis & Hussey, 2009).

The correlation coefficient measures the strength of such correlation (Fox & Bayat, 2010). The coefficient ( $r$ ) can range from -1 (perfectly negative correlation) to +1 (perfectly positive correlation). Table 3.14 illustrates the strengths of the correlations.

Correlation Coefficient	Interpretation
+1.00	Perfect positive linear association
+0.90 to +0.99	Very high positive correlation
+0.70 to +0.89	High positive correlation;
+0.40 to +0.69	Medium positive correlation
+0.01 to +0.39	Low positive correlation
0	No linear association
-0.01 to -0.39	Low negative correlation
-0.40 to -0.69	Medium negative correlation
-0.70 to -0.89	High negative correlation
-0.90 to -0.99	Very high negative correlation
-1.00	Perfect negative linear association

*Table 3.14 - Strengths of Correlation*

*Source: Collis & Hussey (2009)*

A qualified statistician organised the numerical data by using the software package, STATISTICA to execute the quantitative statistical analysis.

### **3.6.5 Reliability and Validity**

Collis and Hussey (2009) coin the terms of reliability and validity as the statistical measures that expose the integrity of the research findings. Reliability of a measuring instrument is strongly correlated to its validity (Tavakol & Dennick, 2011: 53). In light of this, it is asserted that a measuring instrument cannot be valid except if it is reliable, however, the two are concurrent in ensuring the integrity of results (Tavakol & Dennick,

2011). Notably, reliability and validity are the cornerstone to ensure the credibility of a research study. The following subsections explain each concept independently.

### 3.6.5.1 Reliability

Reliability is a method used to determine whether a specific technique, if applied repeatedly, will yield consistent results (Babbie, 2010). Two forms of reliability tests exist, namely: test and retest reliability. Test reliability measures internal consistency and retest reliability measures consistent results (Ihantola & Kihn, 2011). Collis and Hussey (2009) assert that it is possible to calculate a high reliability with low validity, as it may be measuring incorrectly (Leedy & Ormrod, 2010).

Researchers employ the Cronbach Alpha to measure internal consistency of the measuring instrument. This statistical procedure develops insight into the reliability of the predetermined variables (Tavakol & Dennick, 2011). The Cronbach Alpha coefficient measures internal consistency and ranges from 0 to 1 to determine overall reliability. This means that a low coefficient value indicates a low internal consistency and the opposite applies. Table 3.15 display the guidelines for the reliability coefficient. Nunnally (1978) advocates that a Cronbach Alpha value between 0.50 and 0.69 is acceptable for new and experimental research (Collis & Hussey, 2009).

Reliability Coefficient	Interpretation
Cronbach Alpha $\geq$ 0.90	high reliability
Cronbach Alpha $\geq$ 0.80	moderate reliability
Cronbach Alpha $\geq$ 0.70	low reliability
Cronbach Alpha $<$ 0.70	unacceptable reliability

*Table 3.15 - Cronbach Alpha Coefficient*

*Source: Collis & Hussey (2009)*

### 3.6.5.2 Validity

Validity is an important component of a measuring instrument due to its perceived credibility and its goal of ensuring that the research method measures what it is suppose measure (Lancaster, 2005; Leedy & Ormrod, 2005). Therefore, validity is concerned with the effectives of the measuring instrument.

Collis and Hussey (2009) refer to validity as the extent that research findings represent what truly happens in a setting. In a study undertaken by Neuman (2006) validity is described as a degree to which an instrument measures what it is supposed to measure and four different methods of assessing validity are listed, namely logical validity, construct validity, content validity and criterion validity.

Logical or face validity refers to measures employed by the researcher to actually measure or test what is supposed to be measured or test. Construct validity, according to Thomas, Nelson & Silverman (2010), links to the hypothetical constructs that cannot be directly observed, but only through their expressions, thus ensuring that the researcher's observations can be justified by the hypothetical construct. Content validity focuses on whether the entire content of a definition is being measured or only a portion thereof. Criterion validity measures the validity of a definition using a standard or a principle that the researcher is comfortable with and has confidence in.

### **3.6.6 Statistical generalisability**

Statistical generalisability refers to the extent that the research findings can be applied to future studies (Collis & Hussey, 2009). In order to achieve statistical generalisability the requirements inherent to reliability and validity need to be satisfied. Collis and Hussey (2009) assert that generalisability is achievable if the researcher has accurately 'captured the interactions and characteristics' (Collis & Hussey, 2009: 54) of the phenomena under study.

The sampling frame included SMEs from South Africa. A representative sample of  $n = 295$  respondents from the population responded. The following undertakes to discuss the ethical commitments undertaken by the researcher.

### **3.7 Ethics**

The researcher follows the ethical protocol established by Bryman and Bell (2007) throughout the interviews, and a few principles include: (1) explaining the purpose of the research study, (2) obtaining informed consent through the NMU ethics committee, and (3) explaining the privacy, confidentiality and anonymity of the respondents. The aforementioned principles have been discussed with the researcher's supervisor. This

highlights that certain acceptable standards are essential and this is the reason for obtaining ethical clearance (Cooper & Schindler, 2008).

Ethics Clearance approval documentation (Appendix B) was submitted to the NMU Business School.

### **3.8 Summary**

This chapter addressed RQ<sub>2</sub>, “How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?”. This chapter achieved the research objective of justifying and explaining the research methodology that is used for this study for future reproduction.

Section 3.1 provided an introduction to Chapter 3 including the research questions and objectives that were addressed. Section 3.2 explicated the definition of research. Section 3.3 underlined the research philosophy, approach, strategy, methodological choices and time horizons for the study. The process and purpose of the literature review undertaken was discussed in Section 3.4. The hypotheses developed and the proposed model was discussed in Section 3.5. The sampling method, data collection procedure, data analysis, reliability and validity, and generalisability were explained in Section 3.6. Section 3.7 discussed the ethical considerations and its application within this research study.

Chapter 4 addresses RQ<sub>3</sub>: “What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?”, RQ<sub>4</sub>: “What factors in the proposed model for Scalability of SMEs have a higher influence to the Scalability of SMEs?” and RQ<sub>5</sub>: “What is the significance of the factors influencing the scalability of SMEs?” The aim of Chapter 4 is to: evaluate the proposed model of Scalability of SMEs in South Africa (RO<sub>3</sub>); to establish which factors have a greater effect on the Scalability of SMEs in South Africa (RO<sub>4</sub>) and to establish which factors have a significant effect on the scalability of SMEs (RO<sub>5</sub>).

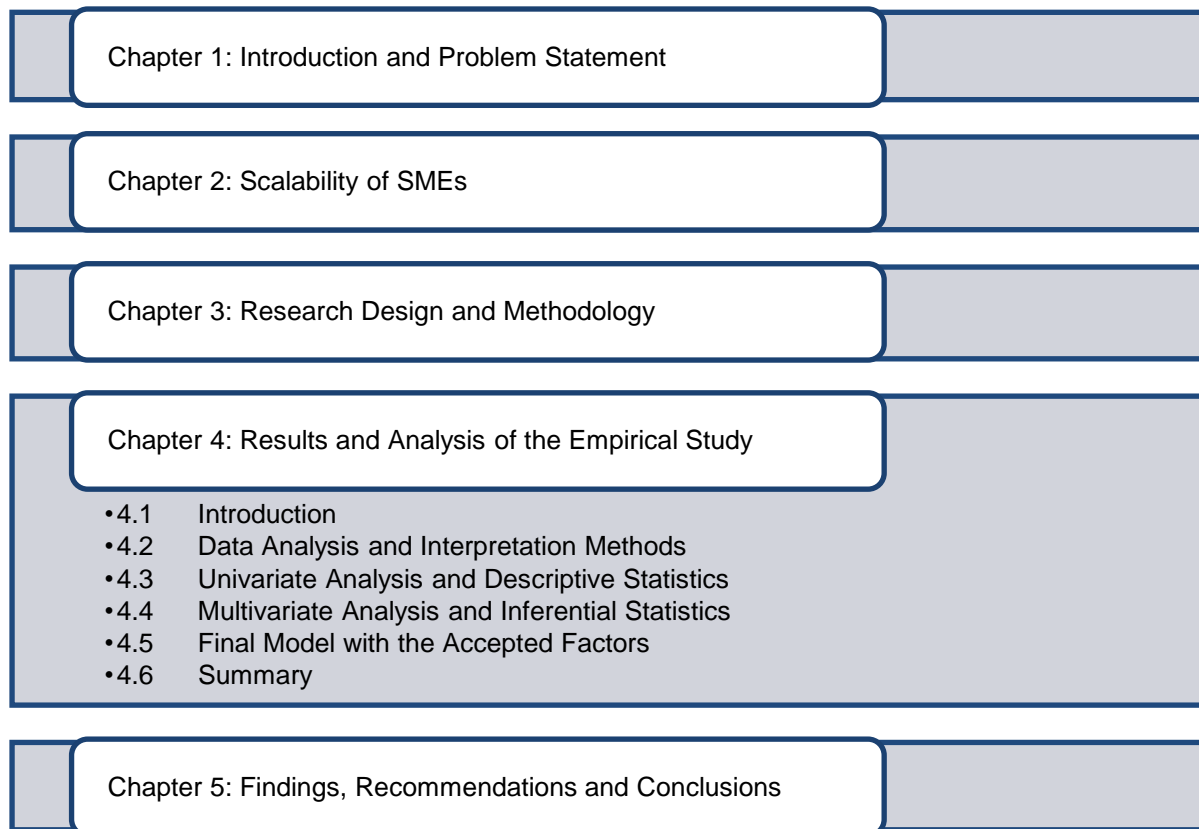
## **4 CHAPTER 4: RESULTS AND ANALYSIS OF THE EMPIRICAL STUDY**

### **4.1 Introduction**

Chapter 3 discussed the research methodology applied in this treatise, the data collection methods and the concepts of research, research methodology, research paradigms, sample design and measuring instruments were explained. The chapter answered RQ<sub>2</sub> that states; “How can a comprehensive description of the research methodology is delivered in order to replicate this study in the future?” and accomplished RO<sub>2</sub> which states: “Justify and explain the research methodology that is used for this study”.

Chapter 4 addresses RQ<sub>3</sub>: “What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?”, RQ<sub>4</sub>: “What factors in the proposed model for Scalability of SMEs have a higher influence on the Scalability of SMEs?” and RQ<sub>5</sub>: “What is the significance of the factors influencing the scalability of SMEs?” and The aim of Chapter 4 is to; evaluate the proposed model of Scalability of SMEs in South Africa (RO<sub>3</sub>); to establish which factors have a greater effect on the Scalability of SMEs in South Africa (RO<sub>4</sub>) and to establish which factors have a significant effect on the scalability of SMEs (RO<sub>5</sub>).

An overview of the RQs and ROs of this chapter can be seen in Figure 4.1.



*Figure 4.1 - Overview of Chapter 4*

## **4.2 Data Analysis and Interpretation Methods**

Chapter 3 described the research approach, strategy and how the data collection method. This section describes the univariate and multivariate data analysis methods employed in this study.

### **4.2.1 Univariate Analysis**

Descriptive statistics are used to analyse the individual variables without examining their relationships with other variables. The statistical data are presented by categorical frequency tables, pie charts and bar charts.

#### **4.2.1.1 Frequency Distribution**

A frequency distribution is a graphical or tabular representation that counts the number of occurrences within a particular group or interval. This study uses frequency tables, pie charts and bar charts to present the frequency distribution of the biographical section.

## 4.2.2 Multivariate Analysis

Inferential statistics are used to infer and analyse the significance of relationships between two or more variables. The statistical methods employed in this study include the frequency distribution, measures of central tendency and measures of association.

### 4.2.2.1 Pearson's Correlation

Inferential statistics conducted on the data to confirm or negate conclusions (Kumar, 2011) was a Correlation Analysis. Correlation can be defined as relationships among variables or the measure of linear association between two variables. A relationship between variables, if a correlation exists, is when one variable increases, another variable either increases (positive correlation) or decreases (negative correlation). This correlation behaves in a predictable fashion (Fox & Bayat, 2010; Leedy & Ormrod, 2010; Collis & Hussey, 2009).

The correlation coefficient measures the strength of such correlation (Fox & Bayat, 2010). The coefficient ( $r$ ) can range from -1 (perfectly negative correlation) to +1 (perfectly positive correlation). The correlation strengths are presented in Table 3.14, Section 3.6.4.

### 4.2.2.2 Cohen's d

Cohen's  $d$  is a statistical measure that indicates the standardised difference between two mean values and indicates an effect size (Magnusson, 2014). The Cohen's  $d$  value is generally complemented by an ANOVA and  $t$ -test. Table 4.1 presents the interpretation intervals for Cohen's  $d$ .

Cohen's d	Interpretation
<0.20	Not significant
0.20 – 0.49	Small significance
0.50- 0.79	Medium significance
0.80+	Large significance

Table 4.1 - Interpretation Intervals of Cohen's  $d$

### 4.3 Univariate Analysis and Descriptive Statistics

#### 4.3.1 Section 1: Biographical Data

This section presents and discusses the biographical data that were captured in the survey.

##### 4.3.1.1 SME

Frequency distribution - SME		
Yes	295	100%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.2 - Frequency distribution of SMEs

The respondents were asked to select whether they own a SME by selecting from one of the following alternatives: Yes or No. Table 4.2 illustrates the responses received to this question. The result indicated that 100% (n = 295) of the respondents were the owners of the SMEs. This forms part of the sampling frame indicated in Section 3.6.2.3.

##### 4.3.1.2 Gender

Frequency distribution - Gender		
Female	142	48%
Male	153	52%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.3 – Frequency distribution of gender

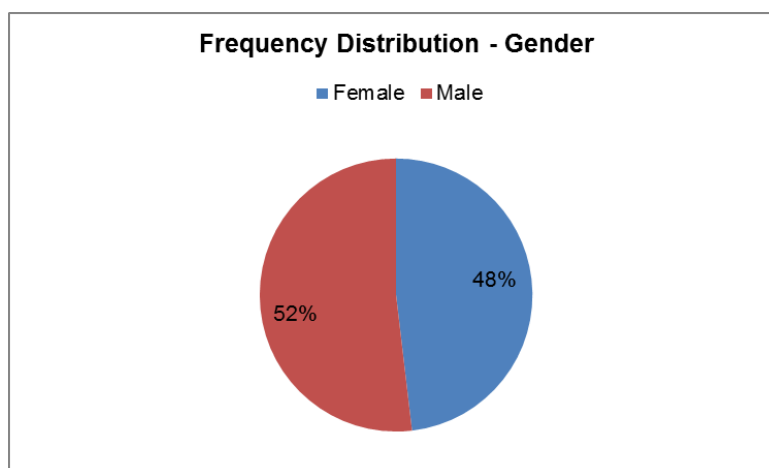


Figure 4.2 - Frequency distribution of Gender



The respondents were asked to select their gender by selecting from one of the following alternatives: Male or Female. Table 4.3 illustrates the responses received to this question. Figure 4.2 indicate that 52% (n = 153) of the respondents were male while only 48% (n = 142) were female.

#### 4.3.1.3 Age

Frequency distribution - Age		
18-25	43	15%
26-35	72	24%
36-45	90	31%
46-55	71	24%
56-65	16	5%
66 +	3	1%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.4 - Frequency distribution of Age

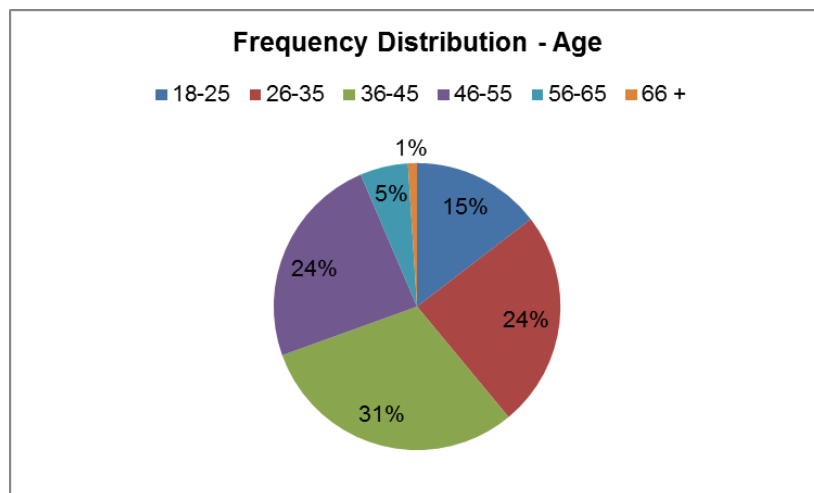


Figure 4.3 - Frequency distribution of Age

The respondents were asked to select their Age from a series of age groups. The results to this can be found in Table 4.4 and Figure 4.3 illustrates the distribution of the responses received to this question.

#### 4.3.1.4 Province

Frequency distribution – Province		
Eastern Cape	282	96%
Gauteng	5	2%
KwaZulu-Natal	3	1%
Mpumalanga	1	0%
Western Cape	4	1%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.5 - Frequency distribution by Province

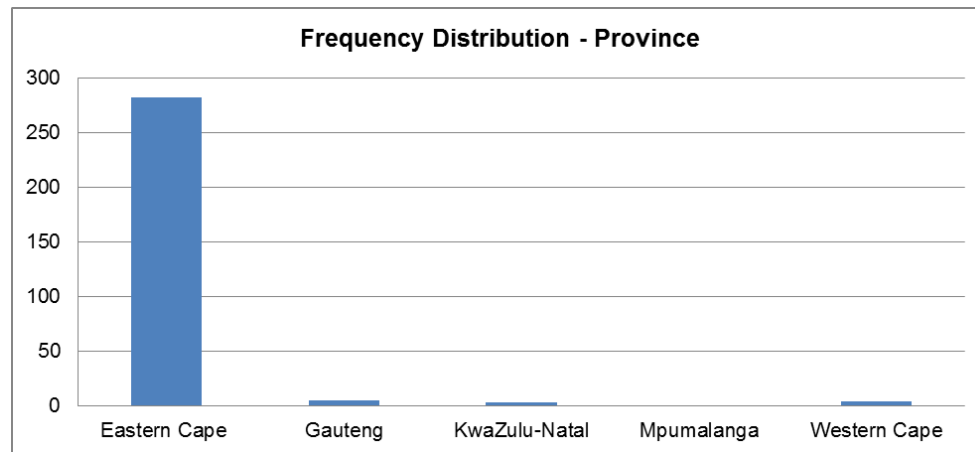


Figure 4.4 - Frequency distribution by Province

Table 4.5 and Figure 4.4 reflect the answers of the respondents that took part in the survey. Of the 295 respondents, 96% (n = 282) operate from the Eastern Cape. The high concentration of respondents from the Eastern Cape is expected since this particular survey was based in this province. The remaining 4% spread across the other regions of the country, which is specified in the table above.

#### 4.3.1.5 City/Town

Frequency distribution - City/Town		
Caledon	1	0%
Cape Town	1	0%
East London	9	3%
Humansdorp	1	0%
Johannesburg	6	2%
King Williams Town	2	1%
Kirkwood	1	0%
Maluti	1	0%
Matatiele	2	1%
Mthatha	2	1%

<b>Nglobo</b>	1	0%
<b>Port Elizabeth</b>	255	87%
<b>Port Shepstone</b>	1	0%
<b>Queenstown</b>	1	0%
<b>Randburg</b>	1	0%
<b>Stellenbosch</b>	1	0%
<b>Strand</b>	1	0%
<b>Stutterheim</b>	1	0%
<b>Uitenhage</b>	6	2%
<b>Total</b>	<b>294</b>	<b>100%</b>

Table 4.6 - Frequency distribution by City/Town

As stated earlier the survey was conducted in the Eastern Cape we now divulge further into detail as the Table 4.6 above indicates that the city of Port Elizabeth reflects an 87% (n = 255) response.

#### 4.3.1.6 Race

Frequency distribution - Race		
<b>Black</b>	134	47%
<b>White</b>	75	26%
<b>Coloured</b>	45	16%
<b>Indian</b>	17	6%
<b>Asian</b>	17	6%
<b>Total</b>	<b>288</b>	<b>100%</b>

Table 4.7 - Frequency distribution by Race

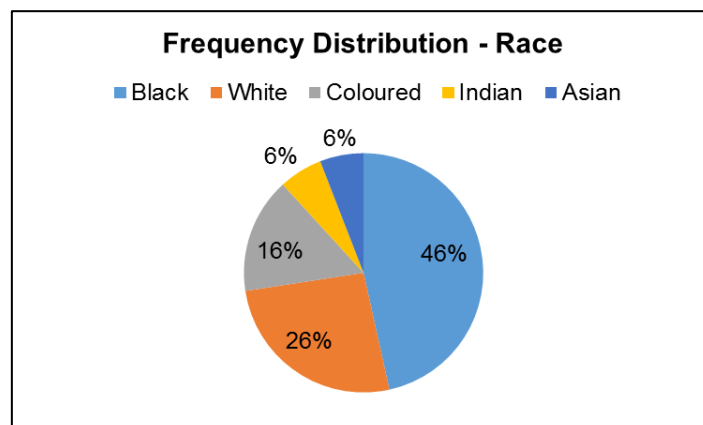


Figure 4.5 - Frequency distribution by Race

The respondents were asked to select their Race by means of this survey. Table 4.7 illustrates the responses received to this question. Figure 4.5 show that 47% (n = 134)

of the respondents were Black, 26% (n = 75) were White, 16% (n = 45) were Coloured, 6% (n =17) were Asian and 6% (n = 17) were Indian. This study stands to reason that the black community in South Africa is represented as the majority.

#### 4.3.1.7 Education

Frequency distribution – Education		
Less than Matric	24	8%
Matric	107	36%
Diploma	73	25%
Degree	66	22%
Post Graduate degree	25	8%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.8 - Frequency distribution by Education

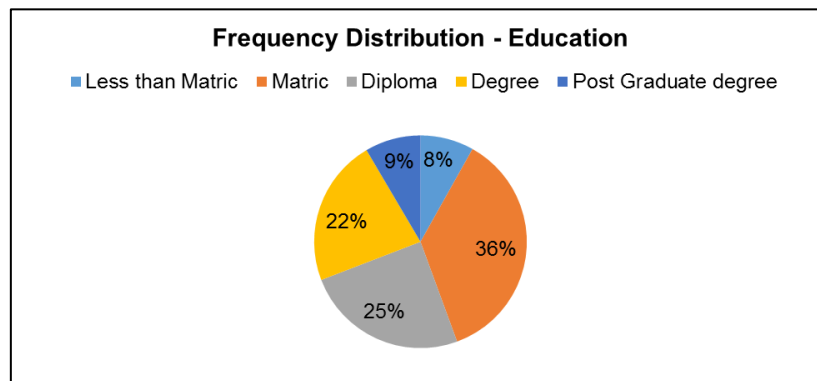


Figure 4.6 - Frequency distribution by Education

The respondents were asked to select their Education level. Table 4.8 illustrates the responses received to this question. Figure 4.6 show that 36% (n = 107) of the respondents had matric, 25% (n = 73) have diplomas, 22% (n =66) have Degrees, 8% (n = 25) have Post Graduate Degrees and 8% (n =24) have Less than Matric.

#### 4.3.1.8 Own SME

Frequency distribution - Own SME		
Yes	211	72%
No	84	28%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.9 - Frequency distribution by SME Ownership

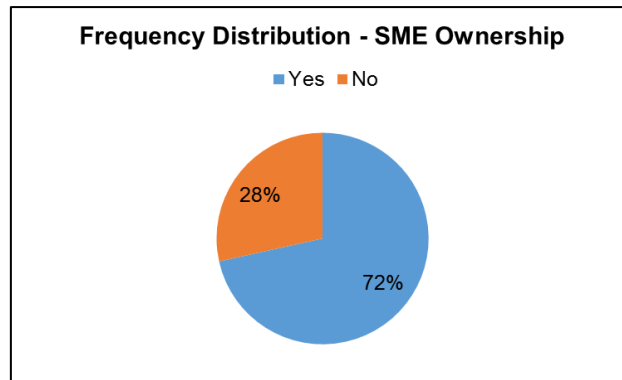


Figure 4.7 - Frequency distribution by SME Ownership

The respondents were asked if they owned the SME's. Table 4.9 and Figure 4.7 illustrate the responses received to this question. The results show that 72% (n = 211) of the respondents said Yes and 28% (n = 84) said No. The questionnaire allowed responses from members who represented the SMEs.

#### 4.3.1.9 Marital Status

Frequency distribution - Marital status		
Single	83	28%
In a relationship	39	13%
Living together	16	5%
Married	137	46%
Divorced	16	5%
Widowed	4	1%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.10 - Frequency distribution by Marital Status

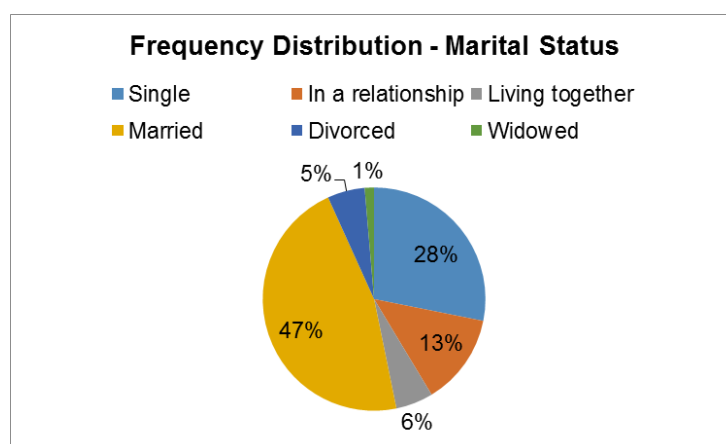


Figure 4.8 - Frequency distribution by Marital Status

The respondents were asked to select their Marital Status. Table 4.10 illustrates the responses received to this question. Figure 4.8 show that 47% (n = 137) of the respondents were married, 28% (n = 83) answered Single, 13% (n = 39) answered that they were in a relationship, 6% (n =16) were living together, 5% (n =16) answered divorced and 1% (n = 4) indicated that they were Widowed.

#### 4.3.1.10 Income

Frequency distribution – Income		
Up to R 15 000	153	52%
R 15 001 to R 25 000	77	26%
R 25 001 to R 45 000	40	14%
R 45 001 to R 65 000	20	7%
R 65 001 to R 85 000	3	1%
R 85 001 +	2	1%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.11 - Frequency distribution by Income

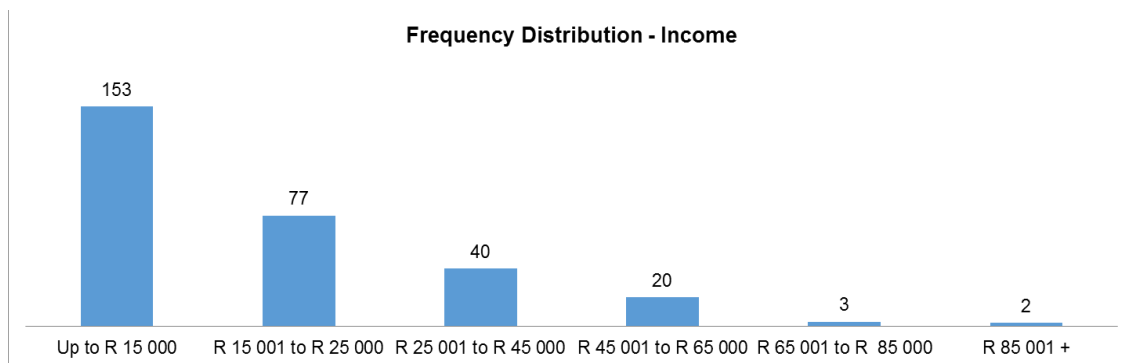


Figure 4.9 - Frequency distribution by Income

The respondents were asked to select their Income bracket. Table 4.11 and Figure 4.9 illustrate the responses received to this question. The results show that 52% (n = 153) of the respondents earned up to R15,000, 26% (n = 77) earned between R15,001 and R25,000, 14% (n = 40) earned between R25,001 and R45,000, 7% (n = 20) earned between R45,001 and R65,000, 1% (n = 3) earned between R65,001 and R85,000, and 1% (n = 2) earned an income of greater than R85,000.

#### 4.3.1.11 Sector

Frequency distribution – Sector		
<b>Agriculture, Fishing and Forestry</b>	7	2%
<b>Catering, Accommodation and Other Trade</b>	65	22%
<b>Construction</b>	16	5%
<b>Community, Social and Personal Services</b>	29	10%
<b>Electricity, Gas and Water</b>	5	2%
<b>Finance and Business Services</b>	18	6%
<b>Retail and Motor Trade and Repair Services</b>	89	30%
<b>Transport, Storage and Communications</b>	11	4%
<b>Manufacturing</b>	12	4%
<b>Wholesale Trade</b>	21	7%
<b>Services</b>	22	7%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.12 - Frequency distribution by Sector

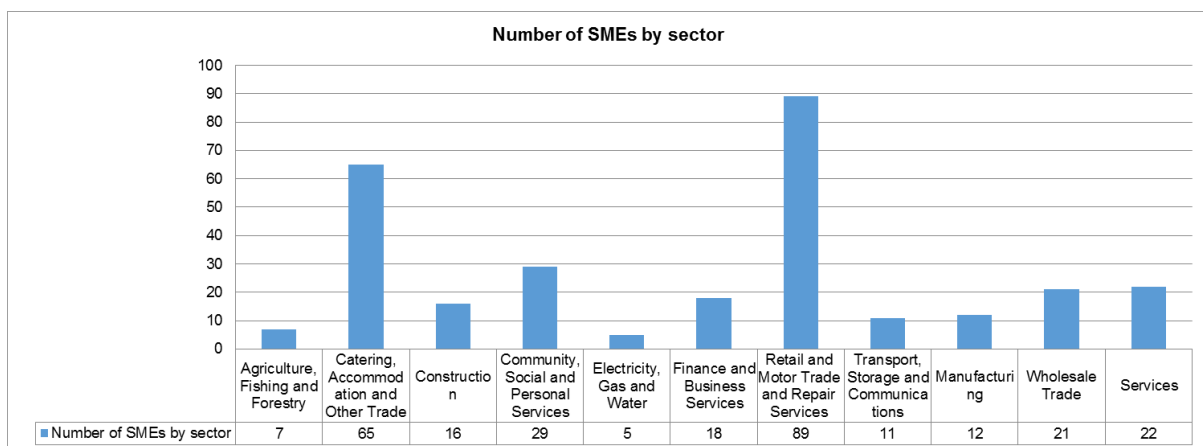


Figure 4.10 - Frequency distribution by Sector

The respondents were asked to select the sector that their business operates in. Table 4.12 and Figure 4.10 illustrate the responses received to this question. The results show that 30% (n = 89) fall in the Retail and Motor Trade and Repair Services category, while, 22% (n = 65) fall in the Catering, Accommodation and Other Trade category.

For purposes of this treatise defining the entrepreneurial category (Davis Tax Committee, 2014) was important. The National Small Enterprises Act classifies SMEs into its constituent categories of micro, very small, small and medium primarily based on full-time equivalent employment, turnover and gross asset value (National Small

Enterprise Act, 1996) and is illustrated in Figure 2.4. This research study was able to offer the business sector to distinguish the distribution of SMEs within this context.

#### 4.3.1.12 Other Sector

Frequency distribution - Other Sector		
No data	0	0%

Table 4.13 - Frequency distribution by Other Sector

Table 4.13 illustrates that there are no respondents that fall into the category Other Sector.

#### 4.3.1.13 Years in Operation

Frequency distribution - Years in operation		
Below 1 Year	33	11%
2 to 3 Years	65	22%
4 to 5 Years	70	24%
6 to 10 Years	73	25%
11 to 15 Years	25	8%
16 Years and more	29	10%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.14 - Frequency distribution by Years in Operation

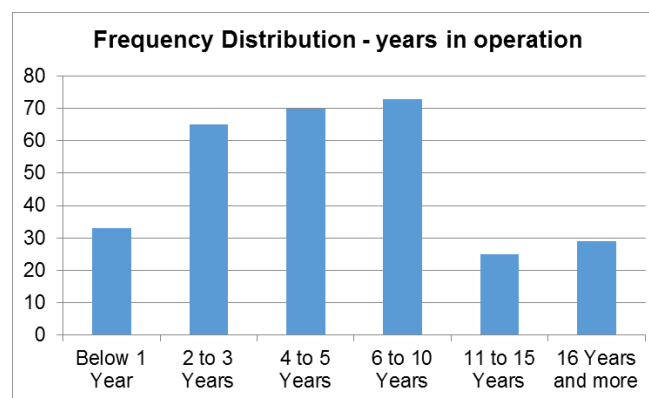


Figure 4.11 - Frequency distribution by Years in Operation

Table 4.14 and Figure 4.11 illustrate the results for Years in Operation for 6-10 years at 25% (n = 73), 4-5 years at 24% (n = 70), 2-3 years at 22% (n = 65), below 1 year at 11% (n = 33), 16 years and more at 10% (n = 29) and 11-15 years at 8% (n = 25).



The results may indicate that SMEs that are trading for more than 10 years have sufficient working capital, entrepreneurial competencies, human capital and access to markets.

#### 4.3.1.14 Employees

Frequency distribution - Employees		
Less than 5	117	40%
5-10	85	29%
11-20	51	17%
21-50	23	8%
51-100	14	5%
101-200	5	2%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.15 - Frequency distribution by Employees

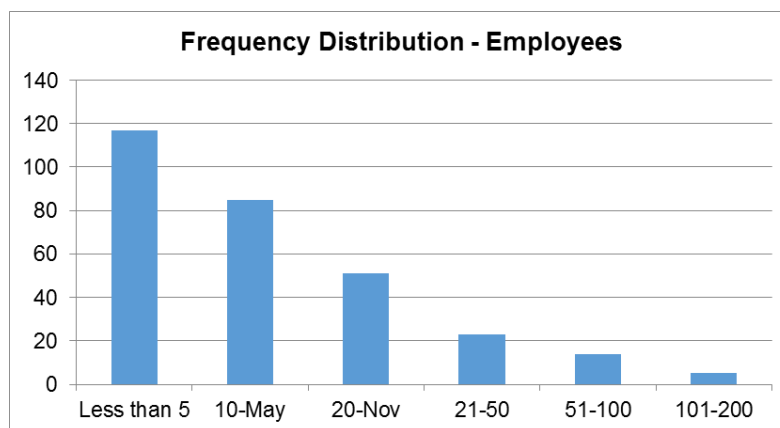


Figure 4.12 - Frequency distribution of Employees

Table 4.15 and Figure 4.12 show that 40% (n = 117) have less than 5 employees, 29% (n = 85) have between 5 and 10 employees, 17% (n = 51) have 11-20 employees, 8% (n = 23) have 21-50 employees, 5% (n = 14) have 51-100 employees and only 2% (n = 5) had more than 100 employees.

#### 4.3.1.15 Contract/ Temporary Employees

Frequency distribution - Contract/temporary Employees		
Less than 5 employees	223	76%
5-10 employees	41	14%
11-20 employees	22	7%
21-50 employees	9	3%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.16 - Frequency distribution by Contract/Temporary Employees

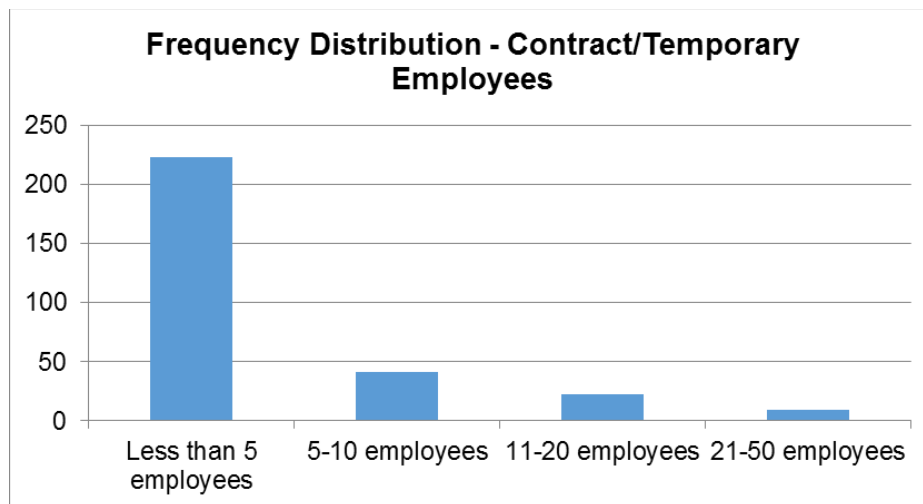


Figure 4.13 – Frequency distribution of Contract/Temporary Employees

Table 4.16 and Figure 4.13 present the frequency distribution of the contract/temporary employees employed in the business. In the Temporary and Contract Employees the results show that 76% (n = 223) of SMEs had less than 5 employees, 14% (n = 41) of SMEs had between 5-10 employees. 7% (n = 22) of SMEs had between 11-20 employees and 3% (n = 9) of SMEs had between 21-50 employees.

The results reflect that most of the sample of SMEs employed contract/temporary employees. Of the sample (n = 223) 76% indicated they had less than 5 employees on a contract or temporary basis. A reason to this may be due to the fragmented labour market in South Africa. Skilled labour in South African SMEs is described as difficult and expensive and further aggravated by the Labour and Minimum Wage Regulations Act.

#### 4.3.1.16 Female Employees

Frequency distribution - Female employees		
None	32	11%
1-4	153	52%
5-10	67	23%
11-20	27	9%
21-50	14	5%
51-100	2	1%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.17 - Frequency distribution by Female employees

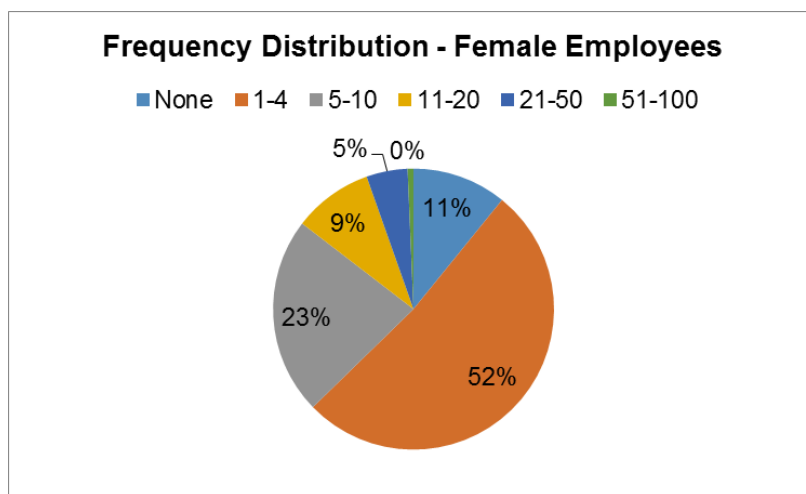


Figure 4.14 – Frequency distribution of Female Employees

The results from Table 4.17 and Figure 4.14 for Female Employees are as follows: 52% (n = 153) employ 1-4 females, 23% (n = 67) employ 5-10 females, 11% (n = 32) for No female employees. 9% (n = 27) for 11-20, 5% (n = 14) for 21-50, 1% (n = 2) for 51-100.

#### 4.3.1.17 Female Representation at Management Level

Frequency distribution - Female representation at management level		
Yes	214	73%
No	81	27%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.18 - Frequency distribution by Female representation at management level

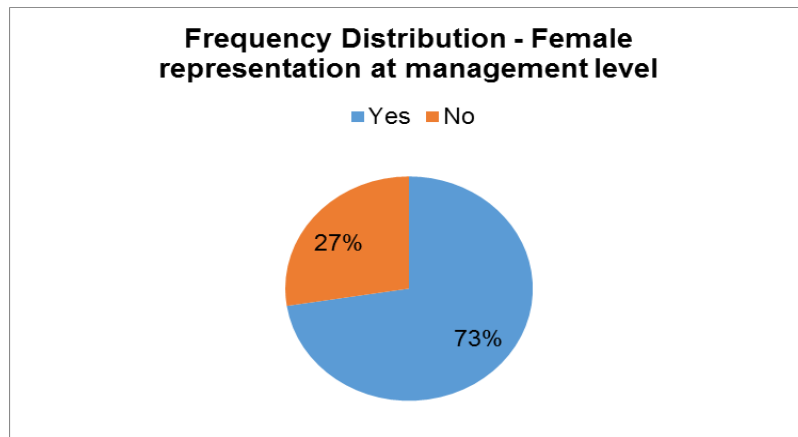


Figure 4.15 - Frequency distribution of Female representation at management level

Table 4.18 and Figure 4.15 present the results of the female representation at management level of the SMEs surveyed. The results show that 73% (n = 214) in the distribution have female representation at a management level and only 27% (n = 81) said that there was no female representation at a management level exists within their SME's.

#### 4.3.1.18 Profitable over the past 3 Years

Frequency distribution - Profitable over the past 3 years		
Yes	195	72%
Break-even	67	25%
No	10	4%
<b>Total</b>	<b>272</b>	<b>100%</b>

Table 4.19 - Frequency distribution by Profitability over the past 3 years

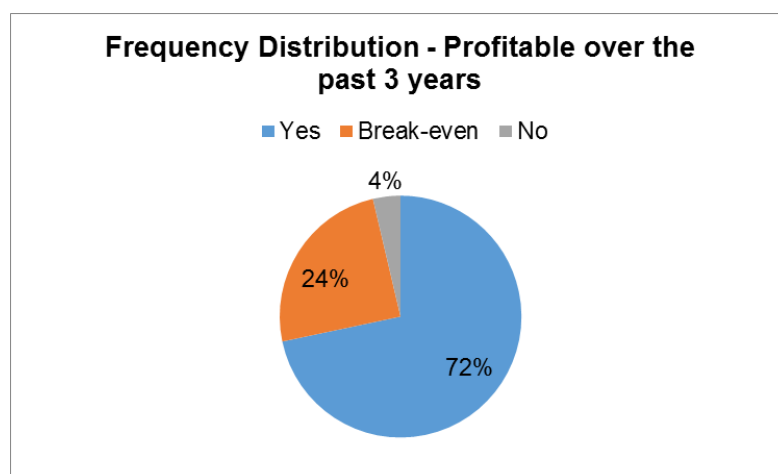


Figure 4.16 - Frequency distribution of Profit over the past 3 Years

Table 4.19 and Figure 4.16 present the results of whether a profit was achieved over the past 3 years. The results show that 72% (195) of respondents said Yes when they were asked if their SME was profitable and 25% (n = 67) said they the business broke even, while 4% (n = 10) said that their SMEs was not at all profitable over the past 3 years.

#### 4.3.1.20 Social Media to promote

Frequency distribution - Social media to promote		
Yes	194	68%
No	91	32%
<b>Total</b>	<b>285</b>	<b>100%</b>

Table 4.20 - Frequency distribution by Social Media as a promotion tool

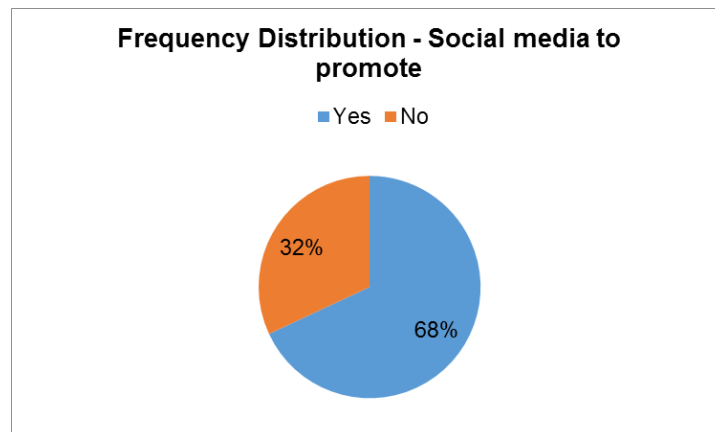


Figure 4.17 - Frequency distribution of Social media as a Promotion Tool

Table 4.20 and Figure 4.17 present the results to the question of social media as a promotional tool. The results for social media promotion from respondents are 68% (n = 194) who said yes and the remaining 32% (n = 91) said that they had no social media promotion or interaction for their SME.

#### 4.3.1.21 Social Media Boosts the Business Networks

Frequency distribution - Social media boosts the business networks		
Definitely	232	81%
Not at all	55	19%
<b>Total</b>	<b>287</b>	<b>100%</b>

Table 4.21 - Frequency distribution by Social media to boost Business Networks

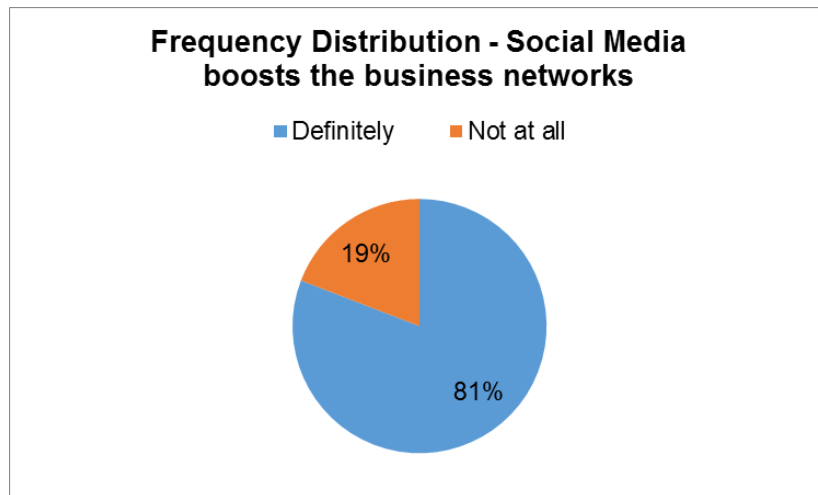


Figure 4.18 - Frequency distribution of Social Media use to boost Business Networks

Respondents who indicated that they use social media to promote their business were asked whether it boosted their business networks. The results reflected in Table 4.21 and Figure 4.18 indicate that 81% (n = 232) definitely had a boost for their business through the various social media platforms and 19% (n = 55) of respondents said that even though they had social media presence it did not boost or encourage the growth of the business. This may indicate that to promote the brand of the SME social media should be utilised.

#### 4.3.1.22 VAT Registration

Frequency distribution - VAT registered			
Yes		201	68%
No		94	32%
<b>Total</b>		<b>295</b>	<b>100%</b>

Table 4.22 - Frequency distribution by VAT Registration

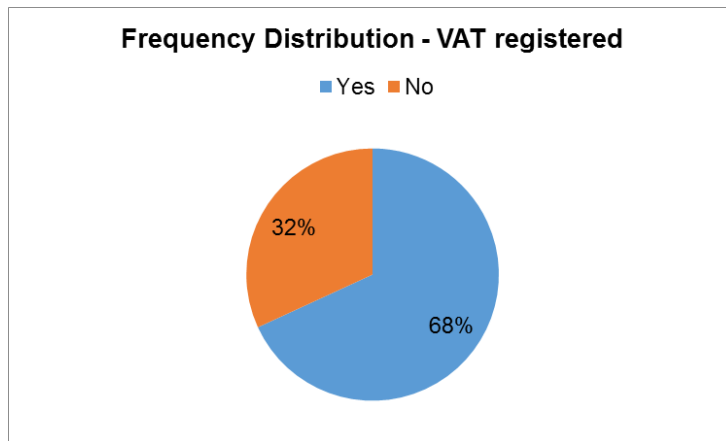


Figure 4.19 - Frequency distribution of VAT Registration

The respondents were asked if their business was registered for VAT, Table 4.22 and Figure 4.19 in the Frequency distribution are as follows; 68% (n = 201) answered yes to VAT registration and 32% (n = 94) answered No.

Policy makers may mobilise SME growth through introducing tax breaks and rewards that illustrate growth and employment. Equally, policy makers may provide easier value-added tax registrations and this may prove multiplier effects on GDP growth.

#### 4.3.1.23 Legal Entity

Frequency distribution - Legal entity		
Yes	257	87%
No	38	13%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.23 - Frequency distribution by Legal Entity

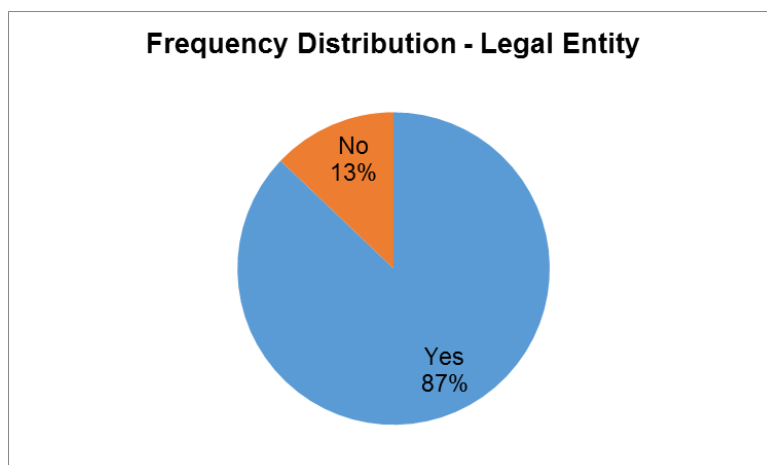


Figure 4.20 - Frequency distribution by Legal Entity

Table 4.23 and Figure 4.20 present the frequency distribution of the respondents who were asked if their business was indeed a legal entity, the results were as follows; 87% (n = 257) responded Yes and 13% (n = 38) responded No.

The results indicate that 13% of the sample of SMEs was operating informally. Shifting informal SMEs into the formal sector can have substantial advantages for the SME (for example, better access to credit and government services) and to the overall economy (for example, higher tax revenues, better regulation).

#### 4.3.1.24 Business Registration

Frequency distribution - Business registration		
PTY (Ltd)	90	40%
Closed Corporation (CC)	51	22%
Sole Proprietor	86	38%
<b>Total</b>	<b>227</b>	<b>100%</b>

Table 4.24 - Frequency distribution by Business Registration

The results from Table 4.24 show that 40% (n = 90) of respondents are registered for Pty (Ltd) and 22% (n = 51) were registered as a Close Corporation (CC) while 38% (n = 86) were registered as Sole Proprietors.

#### 4.3.1.25 B-BBEE Level

Frequency distribution - B-BBEE level		
Level 1	63	21%
Level 2	22	7%
Level 3	29	10%
Level 4	25	8%
Level 5	14	5%
Level 6	5	2%
Level 7	2	1%
Level 8	6	2%
Non-compliant	129	44%
<b>Total</b>	<b>295</b>	<b>100%</b>

Table 4.25 - Frequency distribution of B-BBEE Level



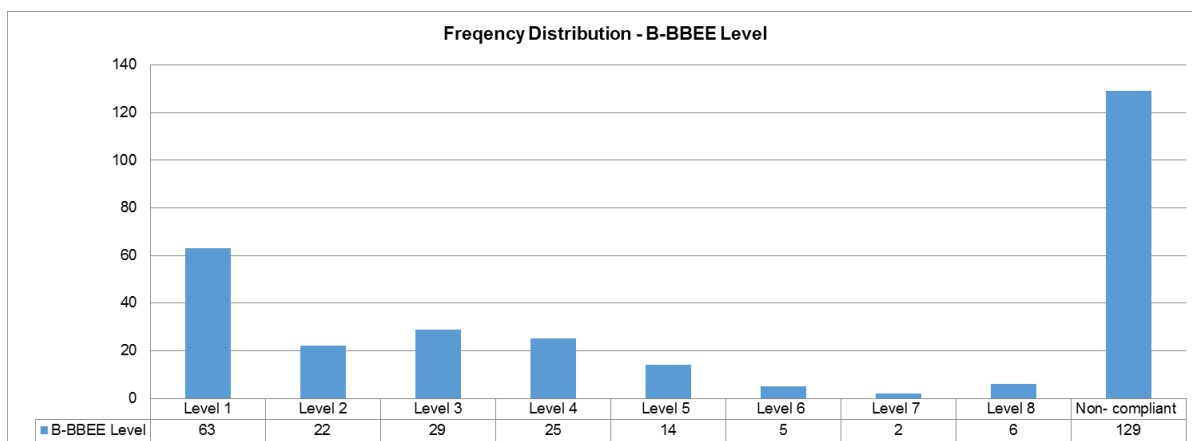


Figure 4.21 - Frequency distribution of B-BBEE Level

Table 4.25 and Figure 4.21 present the results of the B-BBEE levels among the sample of SMEs. Most SMEs surveyed (n = 129; 44%) were non-compliant to the B-BBEE codes.

The results echo the claim made by SAICA (2015) where the key findings were that 73% of SMEs do not engage in business activities with government, 40% of SMEs do not have B-BBEE ratings or are unaware of it, and 24% do not engage in business activities with large businesses. This may indicate that B-BBEE under the new codes highlighted that SMEs were less informed, unaware of the new ratings or felt there was no reason for the changes.

#### 4.3.1.26 Black Female Ownership

Frequency distribution - Black Female Ownership		
None	44	66%
<30%	9	13%
>30%	14	21%
<b>Total</b>	<b>67</b>	<b>100%</b>

Table 4.26 - Frequency distribution of Black Female Ownership

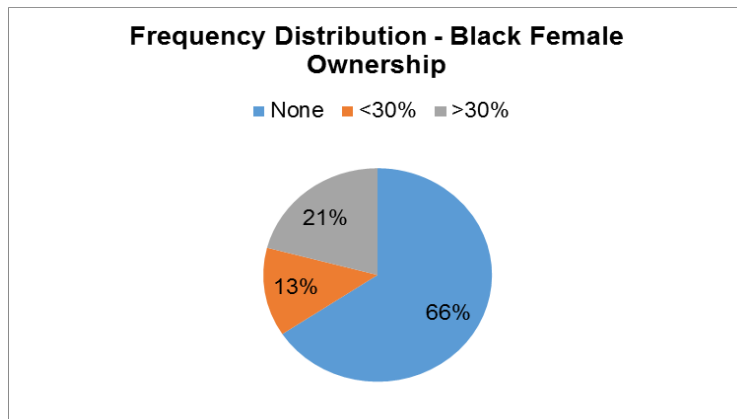


Figure 4.22 - Frequency distribution of Black Female Ownership

Table 4.26 and Figure 4.22 present the results to the question asked about Black Female Ownership. The results are as follows; 66% (n = 44) answered none, 21% (n = 14) were >30% and 13% (n = 9) responded <30%.

The results are coherent to the claim made by SAICA (2015) that SMEs were not well informed about the B-BBEE codes, 51% were unaware of the new ratings or felt there was no reason for the changes, 16% are non-compliant, and 67% are not engaged. This may prove as an advantage to a SME to access markets and secure funding.

#### 4.3.1.27 Start-up Capital Source

Frequency Distributions: Start-Up Capital Source - Items (n = 295)				
	No		Yes	
<b>Personal Savings</b>	78	26%	217	74%
<b>Friends and Family</b>	229	78%	66	22%
<b>Government Financial Agencies</b>	277	94%	18	6%
<b>Government Non-Financial Agencies</b>	293	99%	2	1%
<b>Loans from Banks</b>	221	75%	74	25%
<b>Venture Capitalists</b>	291	99%	4	1%
<b>Micro Financing</b>	289	98%	6	2%

Table 4.27 - Frequency distribution of Start-Up Capital Source

Respondents were asked where their capital came from and in Table 4.27 the results are as follows: For Personal savings 26% (n = 78) said No, 74% (n = 217) said Yes. For Friends and Family 78% (n = 229) Said No, 22% (n = 66) said Yes. For Government Financial Agencies 94% (n = 277) said No, 6% (n = 18) said Yes. For Government Non-Financial agencies 99% (293) said No, 1% (2) said Yes.

For Loans from Banks 75% (n = 221) said No, 25% (n = 74) said Yes. For Venture capitalist 99% (n = 291) said No, 1% (n = 4) said Yes, Micro Financing 98% (n = 289) said No, 2% (n = 6) said Yes.

#### 4.3.1.28 Funding to Grow Business

Frequency Distributions: Funding to Grow Business - Items (n = 295)				
	No		Yes	
<b>Personal Savings</b>	115	39%	180	61%
<b>Friends and Family</b>	248	84%	47	16%
<b>Government Financial Agencies</b>	268	91%	27	9%
<b>Government Non-Financial Agencies</b>	293	99%	2	1%
<b>Loans from Banks</b>	206	70%	89	30%
<b>Venture Capitalists</b>	288	98%	7	2%
<b>Micro financing</b>	287	97%	8	3%
<b>Retained Earnings</b>	260	88%	35	12%

Table 4.28 - Frequency distribution of Funding to Grow Business

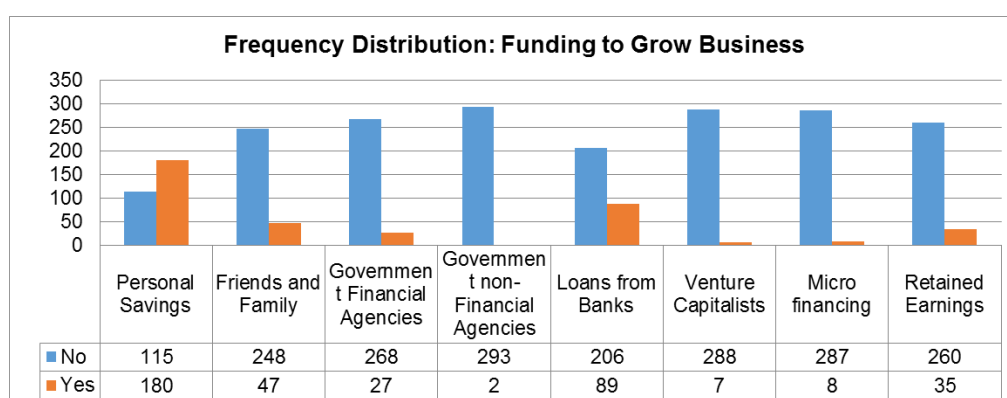


Figure 4.23 - Frequency distribution of Funding to Grow Business

In Table 4.28 and Figure 4.23 respondents were asked to reveal their financial support for business growth. Results are as follows: Personal Savings 39% (n = 115) said No, 61% (n = 180) said Yes. For Friends and Family 84% (n = 248) said No, 16% (n = 47) said Yes. For Government Financial Agencies 91% (n = 268) said No, 9% (n = 27) said Yes. For Government Non-Financial Agencies 99% (n = 293) said No, 1% (n = 2) said Yes.

For Loans from Banks 70% (n = 206) said No, 30% (n = 89) said Yes. for Venture Capitalists 98% (n = 288) said No, 2% (n = 7) said Yes. For Micro Financing 97% (n =

287) said No, 3% (n = 8) said Yes. For Retained Earnings 88% (n = 260) said No, 12% (n = 35) said Yes.

The respondents indicated that the funding was mainly accessed through personal savings and this may align to the lack of finance available to SMEs which leads to poor cash flow (Jones, 2016; SAICA, 2015; Mboniyane & Ladzani, 2011). The lack of finance creates growth stagnation. Fatoki and Odeyemi (2010) argue that the South African economy cannot be sustained without developing sustainable SMEs.

#### **4.4 Multivariate Analysis and Inferential Statistics**

##### **4.4.1 Reliability**

In Section 3.6.5.1, the statistical technique, namely the Cronbach Alpha was discussed. The Cronbach Alpha coefficient gauges the internal consistency of the measuring instruments and postulates whether further studies can be assumed. Table 4.29 depicts the Cronbach Alpha coefficients for the all factors. This coefficient of reliability ranges from 0 to 1 in assessing the measuring instruments reliability. A low coefficient value indicates a low internal consistency while a high value indicates a high internal consistency.

The Cronbach Alpha values for each of the factors are shown in Table 4.29. The lowest Cronbach Alpha values calculated from the 13 variables was 0.50 for Access to Finance, 0.53 for Growth, 0.62 for Access to Markets, 0.64 for Human Capital and 0.67 for Networks. These factors are acknowledged to have an unacceptable reliability. However, a Cronbach Alpha value of between 0.50 and 0.69 has been deemed acceptable for new and experimental research (Collis & Hussey, 2009; Nunnally, 1978). The internal reliability for all other measuring instruments is sufficient ranging from 0.84 to 0.90. These values are greater than 0.70 as per the guidelines for reliability coefficient established in Table 3.15, Section 3.6.5.

<b>Factor</b>	<b>Cronbach Alpha Value</b>
<b>Finance Obstacles (FO)</b>	0.87
<b>Access to Finance - This Business (AF2)</b>	0.50
<b>Growth (G)</b>	0.53
<b>Access to Markets (AM)</b>	0.62
<b>Human Capital (HC)</b>	0.64

<b>Entrepreneurial Intention (EI)</b>	0.87
<b>Regulatory Framework Obstacles (RFO)</b>	0.84
<b>Infrastructure Obstacles (ISO)</b>	0.90
<b>Business Support Services (BSS)</b>	0.84
<b>Networks (N)</b>	0.67
<b>Networking Activities (NA)</b>	0.88

Table 4.29 - Cronbach Alpha coefficients for the factors (n = 295)

#### 4.4.2 Empirical evaluation of the hypothesised Scalability of SMEs Model

##### 4.4.2.1 Introduction to the Research Objective

This section presents and discusses the fifth research objective which is to “Evaluate the proposed model of Scalability of SMEs in South Africa” (RO<sub>3</sub>).

##### 4.4.2.2 Hypothesis Formulation and Testing

A conceptual model was established to determine the relationships between the dependent variable: Scalability of SMEs and the independent variables: Access to Finance, Access to Markets, Human Capital, Entrepreneurial Intention, Regulatory Framework, Infrastructure, Business Support Services, Networks and Networking Activities. Table 4.30 displays the formulated hypotheses, the corresponding Pearson’s Correlation value and the correlation strength.

Notably, correlations are:

- Statistically significant at 0.05 level for n = 295 if  $|r| \geq 0.114$ ;
- Practically significant if  $|r| \geq 0.300$ ; and
- Are both statistically and practically significant if  $|r| \geq 0.300$  (Gravetter & Wallnau, 2009: 534).

The table highlights whether the hypothesis is accepted or rejected.

Hypothesis	Hypothesis Description	Pearson Correlation	Correlation Strength	Hypothesis Accepted or Rejected
<b>H<sub>1</sub></b>	Access to Finance is significantly related to Scalability of SMEs	<b>0.310</b>	Low positive correlation	<b>Accepted</b>
<b>H<sub>2</sub></b>	Access to Markets is significantly related to Scalability of SMEs	<b>0.387</b>	Low positive correlation	<b>Accepted</b>

H <sub>3</sub>	Access to Human Capital is significantly related to Scalability of SMEs	<b>0.261</b>	Low positive correlation	<b>Accepted</b>
H <sub>4</sub>	Entrepreneurial Intention is significantly related to Scalability of SMEs	<b>0.125</b>	Low positive correlation	<b>Accepted</b>
H <sub>5</sub>	Regulatory Framework is significantly related to Scalability of SMEs	<b>0.180</b>	Low positive correlation	<b>Accepted</b>
H <sub>6</sub>	Infrastructure is significantly related to Scalability of SMEs	<b>-0.58</b>	Medium negative correlation	<b>Rejected</b>
H <sub>7</sub>	Business Support is significantly related to Scalability of SMEs	<b>0.158</b>	Low positive correlation	<b>Accepted</b>
H <sub>8</sub>	Networks is significantly related to SMEs	<b>0.270</b>	Low positive correlation	<b>Accepted</b>
H <sub>9</sub>	Networking Activities is significantly related to SMEs	<b>0.105</b>	Low positive correlation	<b>Rejected</b>

Table 4.30 - Hypothesis Testing

Figure 4.24 displays the Pearson correlation values for each hypothesis test conducted. Hypothesis that are rejected are indicated with a red line.

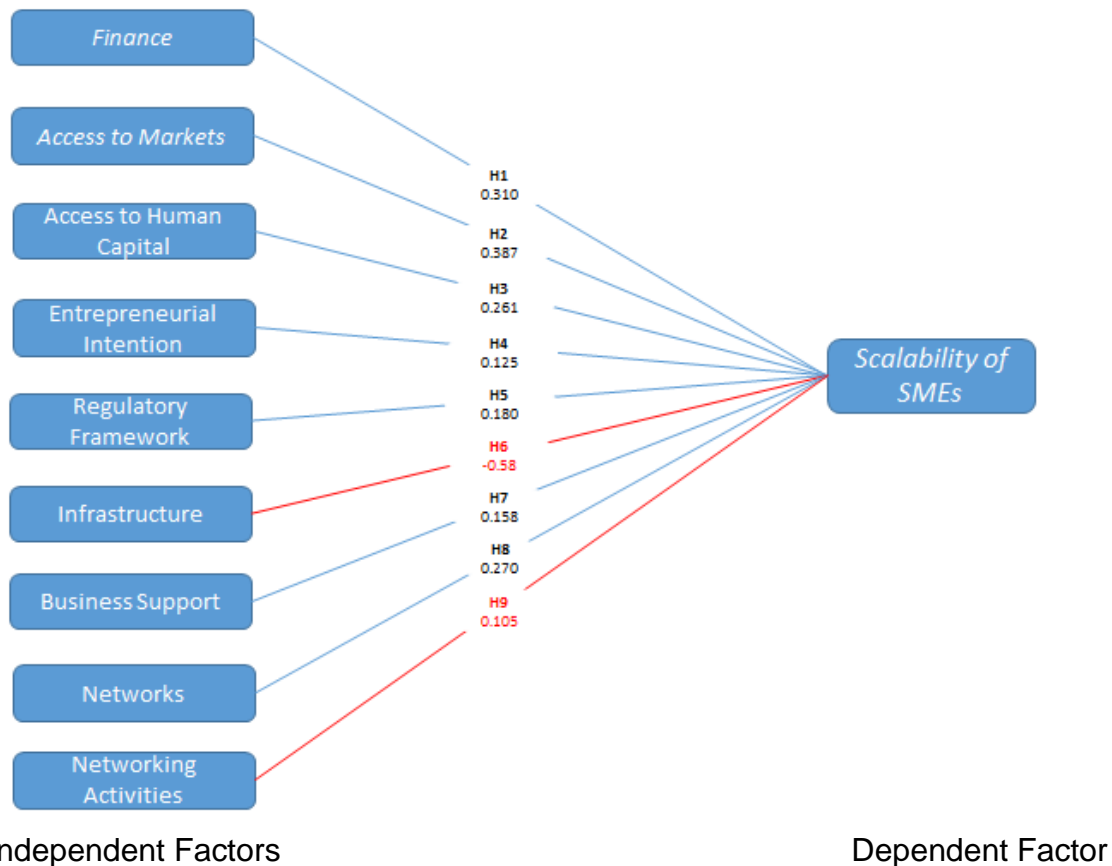


Figure 4.24 - The Hypothesised Model

#### 4.4.2.3 Conclusion

In this section, seven out of the nine hypotheses developed in this research study were accepted. It was shown that there exists a relationship between the Dependent Factor Scalability of SMEs and the Independent Factors, Access to Finance, Access to Markets, Access to Human Capital, Entrepreneurial Intention, Regulatory Framework, Business Support and Networks. The hypothesis test was measured by the Pearson's product moment correlation coefficient that measures the linear association between variables. Equally, no relationship exists between the Dependent Variable Scalability of SMEs, and the Independent Variables Infrastructure and Networking Activities.

#### 4.4.3 Establish which Factors have a greater Effect on Scalability of SMEs.

The fourth research objective of this study is to; "Establish which factors have a greater effect on the Scalability of SMEs in South Africa" (RO<sub>4</sub>).

Factors that influence Scalability of SMEs were ranked according to their mean ratings given based by the respondents. A higher rating meant that respondents agreed more strongly with the statements, while a lower rating meant that respondents disagreed with the statements given. Table 4.31 presents the ranking of the factors.

	Rank	Mean	S.D.
<b>Entrepreneurial Intention (EI)</b>	1	4.00	0.53
<b>Networking Activities (NA)</b>	2	3.75	0.66
<b>Infrastructure Obstacles (ISO)</b>	2	3.55	1.05
<b>Human Capital (HC)</b>	3	3.42	0.39
<b>Business Support Services (BSS)</b>	3	3.39	0.67
<b>Networks (N)</b>	3	3.29	0.50
<b>Access To Markets (AM)</b>	3	3.19	0.46
<b>Access To Finance - This Business (AF)</b>	3	3.17	0.65
<b>Regulatory Framework Obstacles (RFO)</b>	3	3.08	0.77

Table 4.31 - Inferential Ranking of Scalability of SMEs (n = 295)

#### 4.4.3.1 Data Analysis of Variable Mean Values

From Table 4.31 the factors EI ranked as number one. Respondents felt that EI had a significant impact with regards to scaling SMEs. EI is the fundamental part of any business and the driver to make the business a success.

The factors NA and ISO were ranked in second place with means ranging from 3.55 to 3.75. This essentially indicates that respondents have a greater than average opinion to the factors of NA and ISO with regards to scaling SMEs. The aforementioned expounds the importance of networking activities and infrastructure for SMEs to scale.

The factors HC, BSS, N, AM, AF and RFO were all ranked in third place with mean scores ranging from 3.08 to 3.42. This may indicate that respondents have an average opinion with regards to these factors as a measure of scalability. The literature advocates that these factors are important factors, however, the respondents indicate that these factors are not a necessity for a business to scale.

#### 4.4.4 Establish which factors have a significant effect on the Scalability of SMEs in South Africa

The fifth research objective of this study is to; “Establish which factors have a significant effect on the scalability of SMEs” (RO<sub>5</sub>).

##### 4.4.4.1 Data Analysis of Variable Mean Values

The purpose of this section is to establish whether significance effect is seen from the sample of SMEs by performing a Cohen’s d calculation as explained in Section 4.2.2.2. A one-sample t-test was performed on the variables from a sample of n = 295 respondents. In order to conclude that significant effect sizes exist there must be both a statistical and practical significance. The significance found is highlighted in Table 4.32 below.

Independent Variable	Mean	S.D.	H <sub>1</sub> :m	t	p	Cohen's d
Access to Finance - This Business (AF2)	3,17	0,65	≠3.40	-6,19	<.0005	0,36
Access to Markets (AM)	3,19	0,46	≠3.40	-7,90	<.0005	0,46
Human Capital (HC)	3,42	0,39	≠2.60	36,28	<.0005	2,11
Entrepreneurial Intention (EI)	4,00	0,53	≠3.40	19,51	<.0005	1,14
Regulatory Framework Obstacles (RFO)	3,08	0,77	≠3.40	-7,13	<.0005	0,42
Infrastructure Obstacles (ISO)	3,55	1,05	≠3.40	2,50	,013	0,15



<b>Business Support Services (BSS)</b>	3,39	0,67	≠3.40	-0,28	,781	n/a
<b>Networks (N)</b>	3,29	0,50	≠3.40	-3,88	<b>&lt;.0005</b>	<b>0,23</b>
<b>Networking Activities (NA)</b>	3,75	0,66	≠3.40	9,20	<b>&lt;.0005</b>	<b>0,54</b>

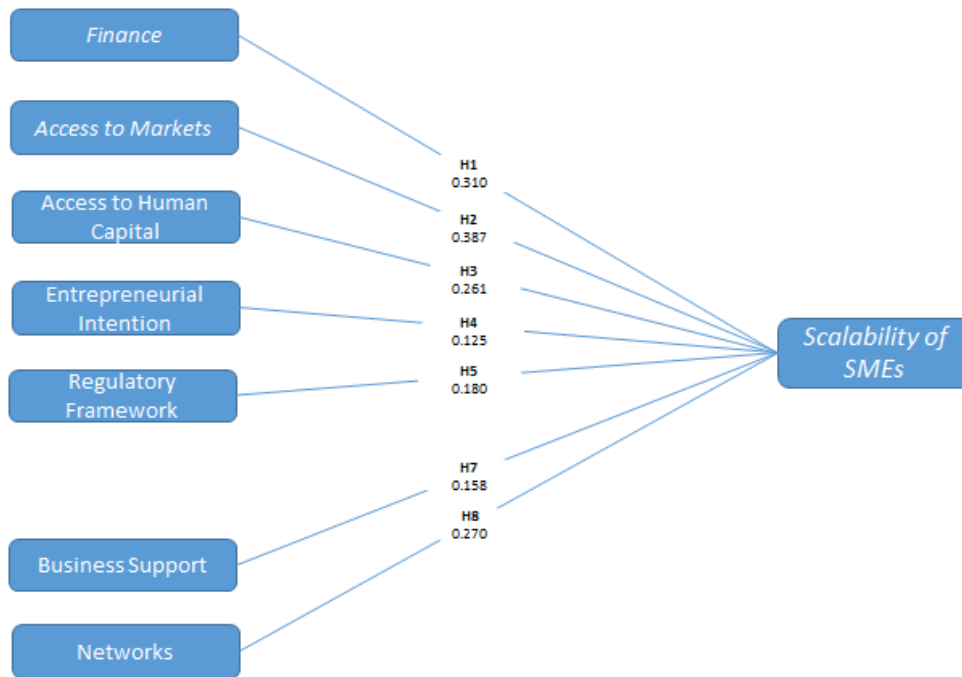
Table 4.32 - t-Test of factors

From the data in Table 4.32 it can be seen that a significant (large) effect size for human capital (Cohen's  $d = 2.11$ ) and EI (Cohen's  $d = 1.14$ ) exists. A possible explanation for the aforementioned can be the importance these variables have on the scalability and existence of SMEs. Networking Activities (Cohen's  $d = 0.54$ ) indicates a medium significance towards the scalability of SMEs whereas Networks (Cohen's  $d = 0.23$ ), Access to Finance (Cohen's  $d = 0.36$ ), Regulatory Framework (Cohen's  $d = 0.42$ ) and Access to Markets (Cohen's  $d = 0.46$ ) reflects a small significance.

Networking activities are fundamental for SMEs to build long term relationships within industry and for collaboration. Access to finance, regulatory framework and access to markets reflects a small significance but collectively make an impact. Infrastructure (Cohen's  $d = 0.15$ ) and business support (Cohen's  $d = n/a$ ) shows a non-significant relationship towards the scalability of SMEs. The aforementioned signifies that SMEs do not rely on infrastructure and business support to scale. If entrepreneurial intention and human capital are in place, infrastructure and business support will not make a difference for the business to succeed and scale.

#### 4.5 Final model with the accepted factors

Figure 4.25 displays the Pearson correlation values for each accepted hypothesis test. The independent factors accepted by means of the hypothesis test are: Finance, Access to Markets, Access to Human Capital, Entrepreneurial Intention, Regulatory Framework, Business Support and Networks.



Independent Factors

Dependent Factor

Figure 4.25 - The hypothesised Model with accepted Factors

#### 4.6 Summary

This chapter addressed **RQ<sub>3</sub>**: “What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?”, **RQ<sub>4</sub>**: “What factors in the proposed model for Scalability of SMEs have a higher influence on the Scalability of SMEs?” and **RQ<sub>5</sub>**: “What is the significance of the factors influencing the scalability of SMEs?”

This chapter achieved the research objective of; “Evaluate the proposed model of Scalability of SMEs in South Africa” (**RO<sub>3</sub>**), “Establish which factors have a greater effect on the Scalability of SMEs in South Africa” (**RO<sub>4</sub>**) and “Establish which factors have a significant effect on the scalability of SMEs” (**RO<sub>5</sub>**).

In the following chapter the main research objective (**RO<sub>M</sub>**) will be discussed. The research questions will be answered by providing a summary of the key findings. A summary of the contributions and the knowledge gained from this research study will be presented. Future research possibilities and the limitations to the study will be discussed. Recommendations for the scalability of SMEs in South Africa will be offered which are explicated from the literature review and data analysis.

## 5 CHAPTER 5: FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

### 5.1 Introduction

Literature exposed SMEs as pivotal to economic growth, job creation, poverty alleviation and innovation (Harrington, 2017; Roundy, 2017; Bureau for Economic Research, 2016; Stam & Spigel, 2016). Therefore, the development and growth of SMEs induce the national income and are explicated to reduce inequality and promote social cohesion. The South African National Development Plan (NDP) 2030 aims to eradicate poverty and inequality (NDP 2030, 2017), and entrepreneurship offers the 'vehicle' to promote inclusive economic growth.

It may therefore be postulated that scaling and growing SMEs are of notable importance to the economic wealth of the country (Jones, 2016; Cant & Wiid, 2013) to the extent that it eliminates economic stagnation. Moreover, the Bureau for Economic Research (2016) indicates that SMEs contribute 14% to the percentage of total employment in South Africa. The problem statement is therefore argued that "No measurable approach exists to evaluate the challenges that limit the scalability of SMEs in South Africa".

To address this problem, Chapter 2 conducted a literature review to identify the key factors that growth or hinder the growth of SMEs. Notably, the relative importance and contribution of these factors were investigated. SMEs within the South African context require an understanding of the various challenges to grow organically. Literature exposed the following factors as challenges inherent to scale and grow SMEs, namely:

- Access to Finance (Jones, 2016; Makina, et al., 2015; SEDA, 2012; Mbonyan & Ladzani, 2011);
- Human Capital (Jones, 2016; Labour Market Intelligence Partnership, 2016; Mrwebi & Evbuomwan, 2016);
- Infrastructure (Bowen, et al., 2009; Anesta, et al., 2004; Ejembi & Ogiji, 2007);
- Access to markets (Jones, 2016; Mrwebi & Evbuomwan, 2016; Cant & Wiid, 2013; Rogerson, 2000);
- Black Economic Empowerment (BEE) (SAICA, 2015; SEDA, 2012); and
- Entrepreneurial competencies (Sajilan, et al., 2016; Gabrielsson, et al., 2009; Colombo & Grilli, 2005).

Chapter 2 concluded with the incorporation of these variables in the creation of the conceptual model for Scalability of SMEs. Chapter 3 identified the research methodology used in this treatise and in Chapter 4 an analysis and interpretation of data collected from the survey was conducted.

This chapter provides an overview of this chapter in Figure 5.1 and provides the chapter's research questions and objectives addressed. Research findings, recommendations and conclusions are covered in the sub-sections below:

- Sub-section 5.1 provides a brief introduction to the context within this treatise was conducted and outlines the remainder of the chapter's sub-sections;
- Sub-section 5.2 discusses the research questions of this treatise and whether the conducted research addresses the questions effectively;
- Sub-section 5.3 provides a summary of contributions made by the findings in this treatise;
- Sub-section 5.4 provides managerial recommendations for the scalability of SMEs, based on the findings of this treatise;
- Sub-section 5.5 broadly discusses opportunities for further research;
- Sub-section 5.6 discusses possible limitations of this study that should be taken into consideration;
- Sub-section 5.7 offers the recommendations; and
- Sub-section 5.8 concludes the chapter with a brief summary.

Chapter 1: Introduction and Problem Statement	
Chapter 2: Scalability of SMEs	
Chapter 3: Research Design and Methodology	
Chapter 4: Results and Analysis of the Empirical Study	
<b>Chapter 5: Findings, Recommendations and Conclusions</b> <ul style="list-style-type: none"> <li>•5.1 Introduction</li> <li>•5.2 Summary of the Research Questions and Research Objectives</li> <li>•5.3 Summary of Contributions</li> <li>•5.4 Managerial Recommendations</li> <li>•5.5 Future Research Possibilities</li> <li>•5.6 Possible Limitations of the Study</li> <li>•5.7 Recommendations for the scalability of SMEs in South Africa</li> <li>•5.8 Summary</li> </ul>	

*Figure 5.1 - Overview of Chapter 5*

## **5.2 Summary of the Research Questions**

Five research questions were presented and investigated to establish the main research question (**RQ<sub>M</sub>**) “What are the factors influencing the scalability of SMEs in South Africa?” This sub-section offers a summary of the investigation undertaken to answer each research question.

### **5.2.1 Research Question RQ<sub>1</sub>**

The first research question was stated as: “What are the factors that affect the scalability of SMEs?” In order to address this research question, the research objective (**RO<sub>1</sub>**) offered insights to the factors that affect the scalability of SMEs. A literature review was undertaken to identify the key factors hindering or growing entrepreneurial development.

Section 2.5 offered the key requirements and challenges for SMEs, namely: access to finance, human capital and infrastructure, access to markets, B-BBEE compliance and entrepreneurial intention as major catalyst to promote SME growth. Literature

indicated that reducing the factors that hinder SME growth are imperative to induce the claim that SMEs employ 60% of the work force and contribute approximately 51% to 57% of the national income (Mrwebi & Evbuomwan, 2016; Jones, 2016; Small Business Development, 2016; Ocloo, et al., 2014; Rogerson, 2013; Ashley, 2009; Wittig, 1999). Notably, the identified factors are presented as the independent factors of the conceptual model in Section 2.6.

### **5.2.2 Research Question RQ<sub>2</sub>**

The second research question was stated as: “How can a comprehensive description of the research methodology be delivered in order to replicate this study in the future?” In order to address this research question, Chapter 3 offered an explanation of the reliability of the chosen method of research. Chapter 3 proved that sufficient detail was produced for future research on the topic.

The various research paradigms, namely positivistic and quantitative paradigms were defined. The research strategy used for this study and the purpose of the literature review was explained. The various hypotheses from the proposed model for this research were formulated. The survey design and sampling methods were discussed. The data collection and data analysis were explained. The concepts of validity, reliability and generalisability were discussed as well as the topic of ethics, the relevance thereof and how it applied to this study.

### **5.2.3 Research Question RQ<sub>3</sub>**

Research Question 3 (RQ<sub>3</sub>) stated; “What are the relationships between the independent and dependent factors of Scalability of SMEs in South Africa?” In order to address this research question, Chapter 4 offered an explanation into the concepts of univariate and multivariate data analyses and the interpretation method applied in this study.

Section 4.3 expounds on the biographical data which was illustrated and discussed by using descriptive statistics that consisted mainly of frequency distributions. In Section 4.4, research Question 3 (RQ<sub>3</sub>) was answered by accepting or rejecting the hypothesised relationships by using inferential statistics in the form of Pearson

Coefficients. The importance of each factor was identified to understand how to improve the growth and scalability of SMEs.

#### **5.2.4 Research Question RQ<sub>4</sub>**

Research Question 4 (RQ<sub>4</sub>) stated; “What factors in the proposed model for Scalability of SMEs have a higher influence on the Scalability of SMEs?” In order to address this research question, Section 4.4.3 undertook a ranking on the average mean values of the factors. From Table 4.31 the factors EI ranked as number one. Respondents felt that EI had a significant impact with regards to scaling SMEs. The factors Networking and Infrastructure were ranked in second place with means ranging from 3.55 to 3.75. This essentially indicates that respondents have a greater than average opinion to the factors of Networking Activities and Infrastructure with regard to scaling SMEs. The aforementioned expounds the importance of networking activities and infrastructure for SMEs to scale. The factors Human Capital, Business Support, Access to Markets, Access to Finance and Regulatory Framework were all ranked in third place with mean scores ranging from 3.08 to 3.42.

#### **5.2.5 Research Question RQ<sub>5</sub>**

Research Question 5 (RQ<sub>5</sub>) stated; “What is the significance of the factors influencing the scalability of SMEs?” In order to address this research question, Section 4.4.4 undertook a one sample t-test to determine the mean values of a sample of SMEs. It was revealed that there is a small and medium significance in 8 of the fourteen factors of the hypothesised Scalability of SMEs model. However, the factors of Human Capital and Entrepreneurial Intention indicated a large significance of 2.11 and 1.14 respectively. Practical recommendations were offered to policy makers based on the statistical analysis of the survey results.

#### **5.2.6 Research Question RQ<sub>M</sub>**

The main research question (RQ<sub>M</sub>) states; “What are the factors influencing the scalability of SMEs in South Africa?” In order to provide answers to the main research problem, four sub-questions were formulated and investigated.

The main research question (RQ<sub>M</sub>) was answered by developing and testing the hypothesised Scalability of SMEs model as shown in Figure 5.3. This model identified

the following factors as having an influence on the scalability of SMEs, namely: Finance, Access to Markets, Access to Human Capital, Entrepreneurial Intention, Regulatory Framework, Business Support and Networks.

### **5.3 Summary of Contributions**

The following constitute the contributions to the body of knowledge on SMEs within a developing economy:

- A model for the SME growth and scalability has been developed, presented and statistically evaluated;
- This is a SME study with regard to growth where the majority of respondents are from a metropolitan municipality;
- The developed model for SME growth and scalability can be used by SMEs, to focus on the value-adding antecedent components to maximise SME growth.
- The government could use this research study to identify the importance of SMEs to an economy as well as use the research to assist with growth challenges faced by SMEs.

### **5.4 Managerial Recommendations**

This treatise proposes the following recommendations to the South African government regarding the importance of SMEs within the economy and challenges faced within the South African landscape.

Firstly, Jones (2016) and Cant and Wiid (2013) assert that SMEs are of notable importance to the economic wealth of the country to the extent that it eliminates economic stagnation. Cant and Wiid (2013), Fin24 (2010) and Kongolo (2010) further advocate that SMEs contribute between 51% and 57% to the GDP and equally employ 60% of the employable population of South Africa. The assertion made by Jones (2016), Cant and Wiid (2013), Fin24 (2010) and Kongolo (2010) underscores the importance of SMEs to the extent that it supports socio-economic gains and own foremost multiplier effects to the South African economy.

Secondly, according to the 2015 SME Insights Report (SAICA, 2015) and Groepe, (2015) 90% of new jobs will be created by SMEs by 2030 through the NDP (SAICA,



2015). The aforementioned echoes the importance of SMEs within the South African labour landscape. It is therefore recommended that South Africa needs to re-look at their stringent labour laws to encourage employment.

Thirdly, SMEs face numerous of challenges to scale upwards to achieve growth in national income, economic growth and employment. The following are some of the challenges faced by SMEs within South Africa; access to finance, access to human capital and access to markets, B-BBEE and entrepreneurial competencies. It is therefore recommended that the South African government establishes a support framework to support SMEs to overcome these challenges. The aforementioned support framework can be referred to as an entrepreneurial ecosystem, which could assist SMEs to grow and prosper. Other important considerations that policy makers may include are as follows:

- Technical assistance, introducing risk capital, subsidies, tax breaks and rewards to SMEs that illustrate growth and employment;
- Reducing rigid labour laws, easier value-added tax registrations, reducing the turnaround of payments to SMEs where government is the client and incentives for large business who pay timeously: and
- Educating SMEs on Black Economic Empowerment (BEE) protocols.

Fourthly, entrepreneurial issues among SMEs are the lack of experienced and trained leaders in businesses. This issue creates poor planning, leading, organising and control of the business and fosters a dysfunctional business (Gabrielsson, et al., 2009). This leads to slower growth for SMEs and may indicate that the business will not meet future societal needs. Rogerson (2000) argues that successful entrepreneurs have industry experience and a basic level of education with technical knowledge. Sajilan, et al. (2016) and Colombo and Grilli (2005) assert that an entrepreneur's competency is characterised by the actions taken to deliver business growth and sustainability. Equally, entrepreneurial competencies are underscored by the ability to acquire, develop and mobilise resources to achieve the business vision and mission (Mitchelmore & Rowley, 2010; Colombo & Grilli, 2005; Grant, 1991; Barney, 1991). It is therefore important to highlight the following key competencies for entrepreneurs to

have: the ability to seek new opportunities, managerial skills, risk taker, innovative and creative mind-set, leadership and need to be operationally inclined.

## **5.5 Future Research Possibilities**

This treatise looks at the importance of SMEs within the South African economy and the challenges faced to scale SMEs. The research may be limited to the extent of its scrutiny into each identified factor that challenges the growth of SMEs. Some research opportunities to further explore challenges are outlined below:

- Future research can be performed on the B-BBEE model in South Africa to establish whether or not the B-BBEE are implemented in the correct way and its effects on business and the economy;
- Future research could be conducted in terms of the stringent labour laws in certain sectors of the economy and the impact it has on SMEs;
- Further research could focus on whether the actual challenge is access to markets or if the SMEs are not meeting the requirements to access these markets;
- Further research can be conducted to identify current support structures provided to SMEs by the South African government;
- Further research can be conducted to measure the success of SMEs who has gone through the process with the support of a South African “incubator”; and
- Finally, research can be conducted to ensure the South African government is conforming to the international rules and policies for SMEs.

## **5.6 Possible Limitations of the Study**

The following have been identified as limitations in this treatise:

- The sampling frame was limited to South African SMEs. If the study were to be conducted in different countries, the results could differ;
- The measuring instruments used for this study may not accurately reflect the evolving nature of SMEs; and
- Quantitative techniques were limited to descriptive and inferential statistics using Pearson’s correlations and t-test.

## 5.7 Recommendations for the scalability of SMEs in South Africa

The South African landscape is very interesting and challenging to conduct business within certain sectors. The fundamental part of any SME is to acquire access to markets as it drives the sales of the enterprise. Without sales, a SME will not exist, equally without working capital and a workforce; the enterprise cannot produce or offer any services. It is therefore paramount to understand the basic principles of business and to operate in a manner to ensure sustainability. South Africa does not need more entrepreneurs but rather better entrepreneurs who understand the principles of business.

South Africa has adopted a very unique B-BBEE model to enhance previously disadvantaged people's presence within business and management. It is therefore extremely important to be aware of the B-BBEE codes to create a competitive advantage for SMEs. SMEs that are fighting against the new B-BBEE policies will either lose business or ultimately close down as it is part of the South African legislation to conduct business. Entrepreneurs therefore have a responsibility to make themselves aware of the challenges SMEs are facing within South Africa and to align themselves to counteract these challenges. SMEs that educate themselves with the aforementioned will prosper and grow substantially. The opportunity for SMEs within South Africa is limitless and need to be supported by government to excel which will drive the economy and employment upwards.

## 5.8 Conclusion

This treatise attempted to propose a model for Scalability of SMEs, to achieve the main research objective that states, "To evaluate the factors influencing the scalability of SMEs in South Africa and identify areas for improvement". To achieve this, the main research question stated, "What are the factors influencing the scalability of SMEs in South Africa". Further research questions and objectives were formulated to address the main research question.

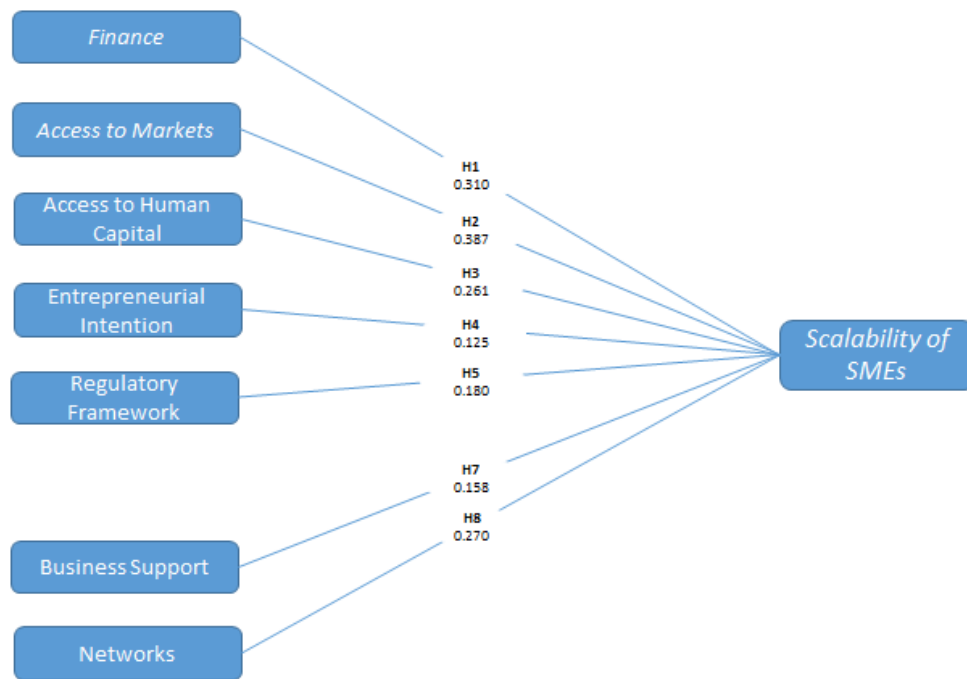
The deliverables to achieve this included:

- **RO<sub>1</sub>**: To conduct a literature review to develop insights on the factors that affects the scalability of SMEs;

- **RO<sub>2</sub>**: Justify and explain the research methodology that is used for this study;
- **RO<sub>3</sub>**: Evaluate the proposed model of Scalability of SMEs in South Africa;
- **RO<sub>4</sub>**: Establish which factors have a greater effect on the Scalability of SMEs in South Africa; and
- **RO<sub>5</sub>**: Establish which factors have a significant effect on the scalability of SMEs.

The key benefits that SMEs offer were discussed and the factors hindering their growth were highlighted and explored. Thereby answering the main research question. Inferential statistics undertaken presented the key relationships and significance of the factors (Section 4.4.2, Section 4.4.3 and Section 4.4.4).

In Section 4.4.2 seven out of the nine hypotheses developed in this research study were accepted. It was shown that a relationship exists between the Dependent Factors Scalability of SMEs and the independent factors, Access to Finance (0.310), Access to Markets (0.387), Access to Human Capital (0.261), Entrepreneurial Intention (0.125), Regulatory Framework (0.180), Business Support (0.158) and Networks (0.270). No relationship exists between the Dependent Variable Scalability of SMEs and the independent factors Infrastructure (-0.58) and Networking Activities (0.105) and therefore they were removed from the final accepted model. The model is displayed in Figure 5.2 below.



Independent Factors

Dependent Factor

Figure 5.2 – Final accepted hypothesised Model

The problem statement in this treatise was stated as no measurable approach exists to evaluate the challenges that limit the scalability of SMEs in South Africa. South Africa currently sits with a youth unemployment rate of roughly 50%, an unemployment rate of 27.7% and slow GDP growth of 1% per annum in real per-capita terms over the past 25 years (Rhodes Business School, 2017). This may indicate that promoting entrepreneurial activity is vital for economic growth. Literature exposed that governments in developing countries have produced support programmes, financial assistance schemes and innovation hubs and calls them “white elephants”. Mason and Brown (2014) echo the supposition made by Isenberg (2010) and assert that these support programmes lack exposure to markets with poor commercial application. A model for Scalability of SMEs, as developed by this treatise addresses this problem and is presented as Figure 5.2.

In concluding this treatise, recommendations were made where made as to how to grow and scale SMEs in South Africa. The opportunities for further research were presented and various limitations affecting this study were identified and managerial recommendations based on the findings were offered.

## REFERENCES

- Accountants for business. (2010). Small business: A global agenda. *The Association of Chartered Certified Accountants*, 1(1), 1-51.
- Albertini, F., Auffray, J.D. & Aziz, Y. (2011). *Entry strategy for SMEs in the Russian market - focus on challenges, entry modes and network relations*. Unpublished MSc dissertation, Linnaeus University School of Business and Economics.
- Anesta, E., Caceda, A. & Michalka, S. (2004). *Development of woodcarving small and medium-sized enterprises in Okahandja, Namibia*. Unpublished BSc thesis, Worcester Polytechnic Institute, Worcester, MA.
- Ashley, C. (2009). Supply and distribution chains of multinationals: Harnessing their potential for development. *Overseas Development Institute*, 1-7. [Online] Available from: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/5068.pdf> [Accessed on 25 January 2017].
- Ayyagari, M., Beck, T. & Demirgüç-Kunt, A. (2005). Small and medium enterprises across the globe, 1-36.
- Babbie, E.R. (2010). *The practice of social research*. 12<sup>th</sup> ed. Wadsworth, Belmont: Cengage Learning.
- Banga, R. (2011). *India's SME Sector needs higher incentives to go global*. [Online] Available from: <http://daily.bhaskar.com/article/BIZ-FEA-indias-sme-sector-needs-higher-incentives-to-go-global-1874353.html> [Accessed on 26 January 2017].
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Blumberg, B., Cooper, D.R. & Schindler, P.S. (2008). *Business research methods*. London: McGraw-Hill.
- Bolotinsky, M. & Jiang, H. (2008). *SMEs in Russia and China: A comparison*. [Online] Available from: [http://www.acg.ru/english/smes\\_in\\_russia\\_and\\_china\\_a\\_comparison](http://www.acg.ru/english/smes_in_russia_and_china_a_comparison) [Accessed on 26 January 2017].

- Bowen, M., Morara, M. & Mureithi, S. (2009). Management of business challenges among small and micro enterprises in Nairobi-Kenya. *KCA Journal of Business Management*, 2(1), 16-31.
- Bryman, A. & Bell, E. (2007). *Business research methods*. 2nd ed. New York: Oxford University Press.
- Bureau for Economic Research. (2016). *The small, medium and micro enterprise sector of South Africa*. [Online] Available from: <http://www.seda.org.za/Publications/Publications/The%20Small,%20Medium%20and%20Micro%20Enterprise%20Sector%20of%20South%20Africa%20Commissioned%20by%20Seda.pdf> [Accessed on 25 January 2017].
- Busenitz, L.W. (1996), Research on entrepreneurial alertness: Sampling, measurement, and theoretical issues. *Journal of Small Business Management*, 34, 35-44.
- Cant, M.C. & Wiid, J.A. (2013). Establishing the challenges affecting South African SMEs. *International Business and Economics Research Journal*, 12(6), 707-716.
- Cao, Y., Hartung, D., Forrest, E. & Shen, Z. (2011). Building blocks for Chinese SMEs to enter the global market: The roles of upstream knowledge and downstream channel infrastructure, *International Journal of Business and Management*, 6(7), 77-85.
- Chen, M.H. (2007). Entrepreneurial leadership and new ventures: Creativity on entrepreneurial teams. *Creativity and Innovation Management*, 16(3), 239–249.
- Chernukha, A. (2009). *Wipo-ppo-kipo Eastern European regional forum on using intellectual property (IP) panorama for building capacity of small and medium-sized enterprises (SMEs) for strategic intellectual property management*. Country Report - Russian Federation, 1-6.
- Chong, S. (2008). Success in electronic commerce implementation: A cross-country study of small and medium sized enterprises. *Journal of Enterprise Information Management*, 21(5), 468-492.
- CIMSME. (2011). *Challenges to MSME*. [Online] Available from: [https://www.indiansmechamber.com/challenges\\_to\\_msme.php](https://www.indiansmechamber.com/challenges_to_msme.php) [Accessed on 26 January 2017].

- Collis, J. & Hussey, R. (2009). *Business research: A practical guide for undergraduate and postgraduate students*. London: Palgrave Macmillan.
- Collis, J. & Hussey, R. (2014). *Business Research* (4th ed.). New York: Macmillan.
- Colombo, M.G. & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view, *Research Policy*, 34(6), 795-816.
- Cooper, D.R. & Schindler, P.S. (2006). *Business research methods*. 2nd ed. London: McGraw-Hill.
- Cooper, D.R. & Schindler, P.S. (2008). *Business research methods*. 9th ed. New York: McGraw-Hill.
- Dauda, S. & Nyarko, S.H. (2014). Chasing credit: The bane of small and medium scale enterprises in Assin North Municipality, Ghana. *International Journal of Entrepreneurship and Small Business*, 22(2), 218-230.
- Davis Tax Committee. (2014). *Davis Tax Committee Small and Medium Enterprises. Taxation Considerations Interim Report*.
- De Almeida, P.R. (2009). The Brics role in the global economy. *Cebri-Icône-British Embassy in Brasilia: Trade and international negotiations for journalists, Rio de Janeiro*, 146-154.
- Dohse, D. & Walter, S.G. (2012). Knowledge context and entrepreneurial intentions among students. *Small Business Economics*, 1(39), 877-895.
- EC Eurostat. (2010). Glossary: *Value added at factor cost*. [Online] Available from: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Glossary:Value\\_added\\_at\\_factor\\_cost](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Value_added_at_factor_cost) [Accessed on 27 January 2017].
- Edinburgh Group. (2013). *Growing the global economy through SMEs*. [Online] Available from: [http://www.edinburghgroup.org/media/2776/edinburgh\\_group\\_research\\_-\\_growing\\_the\\_global\\_economy\\_through\\_smes.pdf](http://www.edinburghgroup.org/media/2776/edinburgh_group_research_-_growing_the_global_economy_through_smes.pdf) [Accessed on 27 January 2017].



- Ejembi, S.A. & Ogiji, P. (2007). A comparative analysis of risks and returns of running small/medium and micro enterprises in North and Central Nigeria. *Journal of Social Science*, 15(1), 7-15.
- EM Equity. (2016). *World Bank issues 2016 'perfect storm' warning amid BRICS synchronized slowdown*. [Online] Available from: <https://emergingequity.org/2016/01/07/world-bank-issues-2016-perfect-storm-warning-amid-brics-synchronised-slowdown/> [Accessed on 25 January 2017].
- EU SME Centre. (2015). *China's transforming economy: Opportunities and challenges for European SMEs*. [Online] Available from: <http://www.eusmecentre.org.cn/article/china%E2%80%99s-transforming-economy-opportunities-and-challenges-european-smes> [Accessed on 26 January 2017].
- Euronews. (2015). *Future of SMEs: Europe's economic powerhouse*. [Online] Available from: <http://www.euronews.com/2015/09/28/smes-in-europe-innovating-and-investing-for-growth> [Accessed on 27 January 2017].
- European Commission. (2017). *Entrepreneurship and small and medium-sized enterprises (SMEs)*. (Online) Available from: [https://ec.europa.eu/growth/smes\\_en](https://ec.europa.eu/growth/smes_en) [Accessed on 27 January 2017].
- Eurostat. (2015). *Dependent and independent SMEs and large enterprises*. [Online] Available from: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics\\_on\\_small\\_and\\_medium-sized\\_enterprises](http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_small_and_medium-sized_enterprises) [Accessed on 27 January 2017].
- Fabien, P. (2015). *EU and UK Procurement – RSLs, RPs and SMEs: Where are we at and where to next?* [Online] Available from: <http://www.bto.co.uk/blog/eu-and-uk-procurement-%E2%80%93-rsls,-rps-and-smes.aspx?ids=4118,4115,4030,4029,3927,3925,3802,3782,3622,3621,3481,3441,3476,2376,2219,2377,2362,2363,2379,2383,2367,2366,2378>. [Accessed on 27 January 2017].
- Falkena, H., Abedian, I., Von Blottnitz, M., Coovadia, C., Davel, G., Madungandaba, J., Masilela, E. & Rees, S. (2001). *SMEs access to finance in South Africa - A supply-side regulatory review*. [Online] Available from: <http://www.treasury.gov.za/publications/other/Access%20to%20Finance%20in%20>

20South%20Africa%20-%20A%20Supply-Side%20Regulatory%20Review.pdf  
[Accessed on 27 January 2017].

Fatoki, O. & Odeyemi, A. (2010). Which new small and medium enterprises in South Africa have access to bank credit? *International Journal of Business and Management*, 5(10), 128-136.

Fin24. (2010). *63% of small businesses fail*. [Online] Available from: [www.fin24.com/Entrepreneurs/63-of-small-businesses-fail-2010111](http://www.fin24.com/Entrepreneurs/63-of-small-businesses-fail-2010111) [Accessed on 26 January 2017].

Finmark Trust. (2010). *Finscope Small Business Survey*. Johannesburg, South Africa.

Firoozmand, S., Haxel, P., Jung, E. & Suominen, K. (2015). *State of SME finance in the United States in 2015*, [Online] Available from: [http://www.tradeupfund.com/uploads/2/6/0/4/26048023/state\\_of\\_sme\\_finance\\_in\\_the\\_united\\_states\\_2015.pdf](http://www.tradeupfund.com/uploads/2/6/0/4/26048023/state_of_sme_finance_in_the_united_states_2015.pdf) [Accessed on 26 January 2017].

Fox, W. & Bayat, M.S. (2010). *A guide to managing research*. Juta and Company Ltd.

Fu-Lai Yu, T. (1999). Entrepreneurial alertness and discovery. *The Review of Austrian Economics*, 14(1), 47-63.

Furtuna, F. & Ruvinskaya, A. (2013). *Small businesses in Russia: Drowning in a sea of giants*. [Online] Available from: <http://knowledge.wharton.upenn.edu/article/small-businesses-in-russia-drowning-in-a-sea-of-giants/> [Accessed on 26 January 2017].

Gabrielsson, J., Tell, J. & Politis, D. (2009). Business simulation exercises in small business management education: Using principles and ideas from action learning. *Action Learning: Research and Practice*, 7(1), 3-16.

Global Entrepreneurship Monitor. (2014). The crossroads - a goldmine or a time bomb? *Global Entrepreneurship Monitor*. [Online] Available from: <http://www.gemconsortium.org> [Accessed on 27 January 2017].

Global Reporting Initiative (2017). *GRI Empowering sustainable decisions*. [Online] Available from: <https://www.globalreporting.org/Pages/default.aspx>. [Accessed on 19 February 2017].

- Global Reporting Initiative. (n.d.). *Small business big impact SME sustainability reporting from vision to action*. [Online] Available from: <https://www.globalreporting.org/resourcelibrary/Small%20Business%20Big%20Impact%20Booklet%20Online.pdf>. [Accessed on 28 January 2017].
- Grant, R.M. (1991). The resource based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114-135.
- Gravetter, F.J. & Wallnau, L.B. (2009). *Statistics for the behavioral sciences*. 8<sup>th</sup> ed. Belmont, CA: Wadsworth.
- Greyhound Knowledge Group. (2014). The Indian SME Survey analysing Indian SME perceptions around Union Budget. [Online] Available from: [http://firstbiz.firstpost.com/sme-report/pdf/Analysing-Indian-SME-perceptions-around-Union-Budget-2014-15\\_Final-new.pdf](http://firstbiz.firstpost.com/sme-report/pdf/Analysing-Indian-SME-perceptions-around-Union-Budget-2014-15_Final-new.pdf). [Accessed on 26 January 2017].
- Groep, F. (2015). *The role of small business in the economy*. The South African Reserve Bank.
- Guerrero, M., Rialp, J. & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 1(4), 35-50.
- Gupta, V., MacMillan, I.C. & Surie, G. (2004). Entrepreneurial leadership: Developing and measuring a cross-cultural construct. *Journal of Business Venturing*, 19(2), 241–260.
- Habberton, G. & Notcutt, K. (2013). *Unlocking the growth of SMEs and social business in South Africa*. [Online] Available from: <http://impacttrust.org.za/blog/unlocking-sme-and-social-business-growth-in-south-africa/> [Accessed on 27 January 2017].
- Hall, C. (2007). *When the dragon awakes: Internationalisation of SMEs in China and implications for Europe*. [Online] Available from: <http://www.cesifo-group.de/portal/pls/portal/docs/1/1191662.PDF> [Accessed on 26 January 2017].
- Häner, C. (2011). SMEs in turbulent times—a comparative analysis between Argentina, Brazil and European countries. *Mater Thesis at Hochschule RheinMain, University of Applied Sciences, Wiesbaden Business School*.
- Harrington, K. (2017). Entrepreneurial Ecosystem Momentum and Maturity: The important role of entrepreneur development organisations and their activities.

- Harris, D. (2011). *Five business challenges for SMEs in China*. [Online] Available from: [http://www.chinalawblog.com/2011/01/five\\_business\\_challenges\\_for\\_smes\\_in\\_china.html](http://www.chinalawblog.com/2011/01/five_business_challenges_for_smes_in_china.html) [Accessed on 26 January 2017].
- Hisrich, R.D., Peters, P.M. & Shepard, D.A. (2008). *Entrepreneurship*. 5th ed. London: Mc Graw-Hill.
- Income Tax Act, Act No. 58 of 1962, Chapter 2, South Africa.  
[http://www.into-sa.com/uploads/download/file/12/Income\\_Tax\\_Act\\_\\_1962\\_.pdf](http://www.into-sa.com/uploads/download/file/12/Income_Tax_Act__1962_.pdf)  
 [Accessed on 15 June 2017].
- Infoplease. (2016). *World's 50 most populous countries: 2016*. [Online] Available from: <http://www.infoplease.com/world/statistics/most-populous-countries.html>.  
 [Accessed on 25 January 2017].
- Jia, C. (2011). *Small firms, big problems as costs rise*. [Online] Available from: [http://www.chinadaily.com.cn/business/2011-06/29/content\\_12800726.htm](http://www.chinadaily.com.cn/business/2011-06/29/content_12800726.htm)  
 [Accessed on 26 January 2017].
- Jones, E. (2016). *Opinion: SMEs struggle for survival in South Africa*. [Online] Available from: [http://www.cnbc africa.com/news/southern-africa/2016/09/09/smes-struggle-for-survival-in-south-africa-\(1\)/](http://www.cnbc africa.com/news/southern-africa/2016/09/09/smes-struggle-for-survival-in-south-africa-(1)/). [Accessed on 27 January 2017].
- Jones, O. & Tilley, F. (2003). *Competitive advantage in SMEs: Organising for innovation and change*. San Francisco, CA: Wiley.
- Kamper, G. (2008). A profile of effective leadership in some South African high-poverty schools. *South African Journal of Education*, 28, 1-18.
- Karabulut, A. T. (2016). Personality Traits on Entrepreneurial Intention. *Procedia-Social and Behavioral Sciences*, 229, 12-21.
- Katua, T. (2014). The role of SMEs in Employment creation and economic Growth in selected countries. *International Journal of Education and Research*, 2(12), 461-472.
- Kessides, C. (2007). The urban transition in sub-Saharan Africa: Challenges and opportunities. *Environment and Planning C Government and Policy*, 25(4), 466–485.

- Koba, M. (2011). *BRICS: CNBC explains*. [Online] Available from: <http://www.cnbc.com/id/44006382> [Accessed on 25 January 2017].
- Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development. *African Journal of Business Management*, 4(11), 2288-2295.
- Kothari, C.R. (2006). *Research methodology: methods and techniques*. 2<sup>nd</sup> ed. New Delhi: New Age International Publishers.
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship: Theory & Practice*, 18(1), 5-21.
- Kumar, R. (2011). Research Methodology: A Step-by-Step Guide for Beginners. *Nurse Education in Practice*, 12(3), 25.
- Kunene, T.R. (2008). *A critical analysis of entrepreneurial and business skills in SMEs in the textile and clothing industry in Johannesburg, South Africa*. Unpublished PhD thesis, University of Pretoria, South Africa.
- Kushnir, K., Mirmulstein, M.L. & Ramalho, R. (2010). Micro, small, and medium enterprises around the world: How many are there and what affects the count. *Washington: World Bank/IFC MSME Country Indicators Analysis Note*.
- Labour Market Intelligence Partnership. (2016). *Skills supply and demand in South Africa*. [Online] Available from: [http://www.hsrc.ac.za/uploads/pageContent/7429/LMIP\\_SkillsSupplyandDemand\\_Sept2016.pdf](http://www.hsrc.ac.za/uploads/pageContent/7429/LMIP_SkillsSupplyandDemand_Sept2016.pdf) [Accessed on 4 February 2017].
- Lancaster, G. (2005). *Research methods in management: A concise introduction to management and business consultancy*. Oxford: Elsevier Butterworth-Heinemann.
- Leedy, P. D. & Ormrod, J. E. (2010). *Practical research: Planning and design*. 9<sup>th</sup> ed. New Jersey: Prentice-Hall.
- Leedy, P.D. & Ormrod, J.E. (2005). *Practical research: Planning and design*. 8<sup>th</sup> ed. New Jersey: Prentice-Hall.

- Leguyenko, M. (2015). *Russia and China to help small and medium-sized businesses find partners*. [Online] Available from: [http://rbth.com/business/2015/04/27/russia\\_and\\_china\\_to\\_help\\_small\\_and\\_medium-sized\\_businesses\\_find\\_part\\_45549.html](http://rbth.com/business/2015/04/27/russia_and_china_to_help_small_and_medium-sized_businesses_find_part_45549.html) [Accessed on 26 January 2017].
- Lehaney, B.A. & Vinten, G. (1994). "Methodology": An analysis of its meaning and use. *Work Study*, 43(3), 5–8.
- Leme, L. (2014). *São Paulo 2014 blog: Six facts about SMEs in Brazil*. [Online] Available from: <http://www.as-coa.org/blogs/s%C3%A3o-paulo-2014-blog-six-facts-about-smes-brazil> [Accessed on 25 January 2017].
- Lemmon, G.T. (2013). *Banking on growth: U.S. support for small and medium enterprises in least-developed countries. Policy Innovation Memorandum No. 39*. [Online] Available from: <http://www.cfr.org/economic-development/banking-growth-us-support-small-medium-enterprises-least-developed-countries/p31979> [Accessed on 27 January 2017].
- Lepoutre, J. & Heene, A. (2006). Investigating the impact of firm size on small business social responsibility: A critical review, *Journal of Business Ethics*, 67(1), 257-273.
- Letovanec, M. (2015). *Current challenges facing business across Europe*. [Online] Available from: [http://www.amcham.sk/publications/connection-magazine/issues/2015-04/272379\\_current-challenges-facing-businesses-across-europe](http://www.amcham.sk/publications/connection-magazine/issues/2015-04/272379_current-challenges-facing-businesses-across-europe) [Accessed on 27 January 2017].
- Liena, F., Yunfei, L. & Qiaomei, J. (2011). *BRICS countries embrace strong economic recovery, structural shift*. [Online] Available from: [http://news.xinhuanet.com/english2010/business/2011-04/11/c\\_13824010.htm](http://news.xinhuanet.com/english2010/business/2011-04/11/c_13824010.htm) [Accessed on 25 January 2017].
- Ligthelm, A. (2012). The viability of informal micro businesses in South Africa: A longitudinal analysis (2007 to 2011). *African Journal of Business Management*, 6(46), 11416-11425.
- Liñán, F., Rodríguez-Cohard, J.C. & Ruenda-Cantuche, J.M. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 1(7), 195-218.

- Longenecker, J.G., Petty, J.W., Palich, L.E., Hoy, F., Radipere, S. & Phillips, M. (2017). *Small business management launching and growing entrepreneurial ventures*. United Kingdom: Cengage Learning.
- Lopriore, M. (2009). Supporting enterprise development and SME in Europe. *Eipascope*, 2009(2), 31-36.
- Makina, D., Fanta, A.B., Mutsonziswa, K., Khumalo, J. & Maposa, O. (2015). *Financial Access and SME Size in South Africa*. [Online] Available from: [http://www.finmark.org.za/wp-content/uploads/2016/01/Rep\\_Financial-Access-and-SME-Size-in-SA\\_Dec2015-1.pdf](http://www.finmark.org.za/wp-content/uploads/2016/01/Rep_Financial-Access-and-SME-Size-in-SA_Dec2015-1.pdf) [Accessed on 27 January 2017].
- Malaret, M. (2014). *Challenges of SMEs in Latin America*. Development bank of Latin America. (Development bank of Latin America, Interviewer). [Online] Available from: <https://www.caf.com/en/currently/news/2014/03/challenges-of-the-smes-in-latin-america/?parent=30234> [Accessed on 27 January 2017].
- Mankoff, J. (2010). *The Russian economic crisis*. [Online] Available from: [i.cfr.org/content/publications/attachments/Russian\\_Economy\\_CSR53.pdf](http://i.cfr.org/content/publications/attachments/Russian_Economy_CSR53.pdf) [Accessed on 26 January 2017].
- Marquand, R. (2011). *Amid BRICS' rise and 'Arab Spring', a new global order forms*. [Online] Available from: <http://www.csmonitor.com/World/Global-Issues/2011/1018/Amid-BRICS-rise-and-Arab-Spring-a-new-global-order-forms> [Accessed on 25 January 2017].
- Mason, C. & Brown, R. (2014). *Entrepreneurial ecosystems and growth oriented entrepreneurship*. Background paper prepared for the workshop organised by the OECD LEED Programme and the Dutch Ministry of Economic Affairs on Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship, The Hague, Netherlands.
- MBA Rendezvous. (2015). *Role and contribution of SMEs in Indian economy*. [Online] Available from: <http://www.mbarendezvous.com/general-awareness/msme-indian-economy/> [Accessed on 26 January 2017].
- Mbonyane, B. & Ladzani, W. (2011). Factors that hinder the growth of small businesses in South African townships. *European Business Review*, 23(6), 550-560.

- McGee, J.E., Peterson, M., Mueller, S.L. & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship: Theory and Practice*, 33(4), 65-988.
- Mishra, K. (2015). *MSMEs contribute for more than 37% of GDP and employment for 805 lakh Indians*. [Online] Available from: <http://smestreet.in/msmes-contribute-for-more-than-37-of-gdp-and-employment-for-805-lakh-indians/> [Accessed on 26 January 2017].
- Mitchelmore, S. & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behaviour & Research*, 16(2), 92-111.
- Mondal, W.I. (2015). Extreme poverty and the new Development Bank of Brics. *British Journal of Economics, Management & Trade*, 9(2), 1-10.
- Mrwebi, S., & Evbuomwan, N. *Promoting Job Creation and Economic Growth through Entrepreneurship and Innovation in South Africa*.
- Mueller, J., Zapkau, F. & Schwens, C. (2014). Impact of prior entrepreneurial exposure on entrepreneurial intention — Cross-cultural evidence. *Journal of Enterprising Culture*, 22(3), 251-282.
- National Credit Regulator. (2011). *Literature review on small and medium enterprises' access to credit and support in South Africa*. Pretoria.
- National Development Plan (NDP) 2030. (2017). *National Development Plan 2030: Our futures make it work*. [Online] Available: <http://www.gov.za/sites/www.gov.za/files/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf>. [Accessed on 15 June 2017].
- National Small Enterprise Act, Act No 102 of 1996, Chapter 2, South Africa. [https://www.thedti.gov.za/sme\\_development/docs/act.pdf](https://www.thedti.gov.za/sme_development/docs/act.pdf) [Accessed on 15 June 2017].
- Neklyuyev, P. (2016). *Small and medium businesses in Russia stepping up exports. Russia beyond the headlines*. [Online] Available from: [http://rbth.com/business/2016/02/16/small-and-medium-businesses-in-russia-stepping-up-exports\\_568227](http://rbth.com/business/2016/02/16/small-and-medium-businesses-in-russia-stepping-up-exports_568227) [Accessed on 26 January 2017].



- Neuman, W.L. (2006). *Social research methods: Qualitative and quantitative approaches*. 6th ed. United States: Pearson.
- Noble, A.F., Jung, D. & Ehrlich, S.B. (1999). *Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action*. *Frontiers of Entrepreneurship Research*, 73-78.
- Novais, A. (2013). 7 Challenges SMES face in Brazil. [Online] Available from: <http://thebrazilbusiness.com/article/7-challenges-smes-face-in-brazil> [Accessed on 26 January 2017].
- Nunnally, J.C. (1978). *Psychometric theory*. New York: McGraw Hill.
- Ocloo, C.E., Akaba, S. & Worwui-Brown, D.K. (2014). Globalization and competitiveness: Challenges of small and medium enterprises (SMEs) in Accra, Ghana. *International Journal of Business and Social Science*, 5(4), 287-296.
- Okpara, F.O. (2007). The value of creativity and innovation in entrepreneurship. *Journal of Asia Entrepreneurship and Sustainability*, 3(2), 1-14.
- Olawale, F. & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African Journal of Business Management*, 4(5), 729-738.
- Organisation for Economic Co-operation and Development. (OECD). (2000). *Small and medium-sized enterprises: Local strength, global reach. Policy Brief*. [Online] Available from: <http://www.oecd.org/cfe/leed/1918307.pdf> [Accessed on 27 January 2017].
- Organisation for Economic Co-operation and Development. (OECD). (2005). *Small and medium-sized enterprises (SMEs)*. [Online] Available from: <https://stats.oecd.org/glossary/detail.asp?ID=3123>. [Accessed on 27 January 2017].
- Organisation for Economic Co-operation and Development (OECD) (2016). *List of OECD Member countries - Ratification of the Convention on the OECD*. [Online] Available from: <http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm>. [Accessed on 27 January 2017].
- Oriaku, N. (2012). Current challenges facing small businesses: Case of Brazil and United States. *International Review of Business Research Papers*, 8(7), 39 – 49.

- Ozaralli, N. & Rivenburgh, N.K. (2015). Entrepreneurial intention: Antecedents to entrepreneurial behaviour in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 6(3), 1-32.
- Papalardo, F., Meirelles, C., Sacomano, J.B. & De Aranha Machado, J. (2014). Small and Medium Enterprises in Brazil: A Comprehensive Study of the Manager's View of the Business. *International Federation for Information Processing*, 82-89. [Online] Available from: [http://link.springer.com/chapter/10.1007/978-3-662-44736-9\\_10#page-2](http://link.springer.com/chapter/10.1007/978-3-662-44736-9_10#page-2) [Accessed on 26 January 2017].
- Piperopoulos, P. & Dimov, D. (2014). Burst bubbles or build steam? Entrepreneurship education, Entrepreneurial self-efficacy, and entrepreneurial intentions. *Journal of Small Business Management*, 53(4), 970-985.
- Polaski, S., De Souza, B., Filho, F.J., Berg, J., McDonald, S., Thierfelder, K., Willenbockel, D. & Zepeda, E. (2009). *Brazil in the Global Economy*. International Labour Office and Carnegie Endowment for International Peace.
- Remeikiene, R., Startiene, G. & Dumciuviene, D. (2013). *Explaining entrepreneurial intention of university students: The Role of Entrepreneurial Education*. International Conference 2013.
- Rhodes Business School. (2017). *SA's entrepreneur ecosystem needs sweeping overhaul*. [Online] Available: <http://www.ru.ac.za/businessschool/latestnews/sasentrepreneuecosystemneedssweepingoverhaul.html>. [Accessed on 15 June 2017].
- Richburg, K.B. (2011). *China, other developing BRICS nations seek change in global economic order*. [Online] Available from: [https://www.washingtonpost.com/world/china-other-developing-brics-nations-seek-change-in-global-economic-order/2011/04/14/AFarMgdD\\_story.html?utm\\_term=.3694ff39df63](https://www.washingtonpost.com/world/china-other-developing-brics-nations-seek-change-in-global-economic-order/2011/04/14/AFarMgdD_story.html?utm_term=.3694ff39df63) [Accessed on 25 January 2017].
- Robu, M. (2013). The dynamic and importance of SMEs in Economy. *The USV Annals of Economics and Public Administration*, 1(17), 84-89.

- Rogerson, C.M. (1997). *Globalization or informalization? African urban economies in the 1990s. Managing urban growth in Africa*. Tokyo, United Nations University Press.
- Rogerson, C.M. (2000). Successful SMEs in South Africa: The case of clothing producers in the Witwatersrand. *Development Southern Africa*, 17(5), 687-716.
- Rogerson, C.M. (2004). The impact of the South African government's SMME programmes: A ten-year review (1994–2003). *Development Southern Africa*, 21(5), 765-784.
- Rogerson, C.M. (2013). Improving market access opportunities for urban small, medium and micro enterprises. *Urbani Izziv*, 24(2), 133-143.
- Rosstat, M. (2015). *Brazil, Russia, India, China, South Africa*. BRICS Joint Statistical Publication. Statistics of Russia.
- Roundy, P.T. (2017). "Small town" entrepreneurial ecosystems: Implications for developed and emerging economies. *Journal of Entrepreneurship in Emerging Economies*, forthcoming.
- Russian SME Resource Center. (2017). *SME Statistics 2010-2014: Key performance indicators of SMEs in Russia*. [Online] Available from: <http://rcsme.ru/en/statistics2015> [Accessed on 26 January 2017].
- Safonov, S. (2014). *Small and medium entrepreneurship in Russia*. Roundtable discussion SME financing in ENCA, Luxembourg. [Online] Available from: [http://www.eib.org/attachments/general/events/2014\\_03\\_12\\_luxembourg\\_sme\\_financing\\_enca\\_safonov\\_en.pdf](http://www.eib.org/attachments/general/events/2014_03_12_luxembourg_sme_financing_enca_safonov_en.pdf) [Accessed on 26 January 2017].
- Sajilan, S., Tehseen, S. & Adeyinka-Ojo, S. (2016). A conceptual framework of the impact of entrepreneurial competencies on small and medium enterprises business performance in the Malaysian Hospitality and Tourism industry. *Review of Integrative Business and Economics Research*, 5(2), 47-61.
- Samo, A.H. & Hashim, N. (2016). *The impact of entrepreneurial alertness on entrepreneurial intentions*. [Online] Available from: <http://researchleap.com/impact-entrepreneurial-alertness-entrepreneurial-intentions/>. [Accessed on 19 February 2017].

- Sánchez, J.C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. *International Entrepreneurship and Management Journal*, 1(7), 239-254.
- Saunders, M.N. & Tosey, P.C. (2013). The layers of research design. *Rapport*, (Winter), 58-59.
- Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business student*, 5<sup>th</sup> ed. Harlow, England: Prentice Hall.
- Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research methods for business students*. Harlow, England: Prentice Hall.
- Sekaran, U. (2006). *Research methods for business. A skill building approach*. John Wiley & Sons.
- SiMODiSA Start-Up. (2015). *Accelerating the growth of SMEs in South Africa*. [Online] Available from: [http://www.simodisa.org/wp-content/uploads/2014/08/Top-25-constraints-to-entrepreneurship\\_SiMODiSA\\_April-2015.pdf](http://www.simodisa.org/wp-content/uploads/2014/08/Top-25-constraints-to-entrepreneurship_SiMODiSA_April-2015.pdf) [Accessed on 3 January 2016].
- Small Business Development*. (2016). [Online] Available from: <http://www.etu.org.za/toolbox/docs/government/sbd.html> [Accessed on 3 January 2016].
- Small Enterprise Development Agency (SEDA). (2012). *Analysis of the needs, state and performance of small and medium businesses in the agriculture, manufacturing, ICT and tourism sectors in South Africa*, Small Enterprise Development Agency. [Online] Available from: <http://www.seda.org.za/Publications/Publications/Analysis%20of%20the%20needs,%20State%20and%20Performance%20of%20Small%20and%20Medim%20B%20businesses%20in%20the%20Agriculture,%20Manufacturing,%20ICT%20and%20Touri.pdf> [Accessed on 26 January 2017].
- Smith, J.A. (2011). *BRIC becomes BRICS: Changes on the geopolitical chessboard*. [Online] Available from: <http://www.foreignpolicyjournal.com/2011/01/21/bric-becomes-brics-changes-on-the-geopolitical-chessboard/> [Accessed on 25 January 2017].

- South Africa Institute of Chartered Accountants (SAICA). (2015). *2015 SME Insights Report*. [Online] Available from: [http://www.saica.co.za/portals/0/documents/saica\\_sme.pdf](http://www.saica.co.za/portals/0/documents/saica_sme.pdf) [Accessed on 15 June 2017].
- Stam, E. & Spigel, B. (2017). Entrepreneurial ecosystems. In R. Blackburn, D. De Clercq, J. Heinonen, & Z. Wang (Eds.), *The SAGE handbook of small business and entrepreneurship*. London: SAGE. [Online] Available from <https://us.sagepub.com/en-us/nam/the-sage-handbook-of-small-business-and-entrepreneurship/book245753#features> [Accessed on 27 June 2017].
- Statistics South Africa. (2015). *General household survey*. [Online] Available from: <http://www.statssa.gov.za/publications/P0318/P03182015.pdf> [Accessed on 27 January 2017].
- Stratfor. (2011). *Smaller companies' troubles challenge China's economic policy*. [Online] Available from: <http://www.forbes.com/sites/energysource/2011/06/23/smaller-companies-troubles-challenge-chinas-economic-policy/#21c589213e05> [Accessed on 26 January 2017].
- Tavakol, M. & Dennick, R., (2011). *Making sense of Cronbach's alpha*. International Journal of Medical Education, 2, 53-55.
- The Brazil Business. (2016). *How many companies are there in Brazil*. [Online] Available from: <http://thebrazilbusiness.com/article/how-many-companies-are-there-in-brazil> [Accessed on 26 January 2017].
- The Conversation. (2014). *Entrepreneurial ecosystems and the role of government policy*. [Online] Available from: <http://theconversation.com/entrepreneurial-ecosystems-and-the-role-of-government-policy-35809>. [Accessed on 27 January 2017].
- The Guardian. (2012). *Counting SMEs contribution to sustainability*. [Online] Available from: <https://www.theguardian.com/sustainable-business/smes-contribution-sustainability-sharing-stories>. [Accessed on 28 January 2017].

- The Standard. (2011). *SMEs hold key to economic growth*. [Online] Available from: <https://www.thestandard.co.zw/2011/10/23/smes-hold-key-to-economic-growth/> [Accessed on 27 January 2017].
- The World Bank. (2015). *Small and Medium Enterprises (SMEs) Finance*. [Online] Available from: <http://www.worldbank.org/en/topic/financialsector/brief/smes-finance> [Accessed on 25 January 2017].
- The World Bank. (2016). *Policies for SME growth: What works, What doesn't?* [Online] Available from: <http://www.worldbank.org/en/events/2016/11/08/policies-for-sme-growth-what-works-what-doesnt#1> [Accessed on 26 January 2017].
- The World Bank. (2011). *World Bank Russian Economic Report, No. 24*. [Online] Available from: [http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/305499-1245838520910/RER24\\_full\\_Eng.pdf](http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/305499-1245838520910/RER24_full_Eng.pdf) [Accessed on 26 January 2017].
- Thomas, J.R., Nelson, J. & Silverman, S. (2010). *Research methods in physical activity*. 7th ed. Human Kinetics.
- TMF Group. (2016). *Top challenges of doing business in Brazil*. [Online] Available from: <https://www.tmf-group.com/en/news-insights/business-culture/top-challenges-brazil/> [Accessed on 26 January 2017].
- UHY. (2016). *China's declared backing for SMEs may open doors to foreign investors*. [Online] Available from: <http://www.uhy.com/chinas-declared-backing-for-smes-may-open-doors-to-foreign-investors/> [Accessed on 26 January 2017].
- UPS. (2010). *Chinese SMEs face three main challenges: Innovation, financing and supply chain efficiency*. [Online] Available from: [https://www.ups.com/content/cn/en/about/news/press\\_releases/20100128\\_cn\\_sme.html](https://www.ups.com/content/cn/en/about/news/press_releases/20100128_cn_sme.html) [Accessed on 26 January 2017].
- Van der Berg, S. (2008). *How effective are poor schools? Poverty and educational outcomes in South Africa*. CeGE Discussion Paper.
- Van Gelderen, M., Kautonen, T. & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30(5), 655-673.

- Venkataramanaiah, S. & Parashar, S.P. (2007). Enhancing the competitiveness of SMEs through industrial clusters: The Indian experience. *International Journal of Technology Management and Sustainable Development*, 6(3), 227-243.
- Wegner, T. (2012). *Applied business statistics: Methods and excel-based applications*, 3<sup>rd</sup> ed. Cape Town: Juta.
- Wittig, W.A. (1999). *Building value through public procurement: A focus on Africa*. International Anti-Corruption Conference.
- World Economic Outlook. (2013). *International Monetary Fund*. [Online] Available from:  
<http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/weorept.aspx?pr.x=91&pr.y=5&sy=2011&ey=2018&scsm=1&ssd=1&sort=country&ds=.&br=1&c=223%2C924%2C922%2C199%2C534&s=NGDPD%2CNGDPDPC%2CPPPGDP%2CPPPPC&grp=0&a=> [ Accessed on 25 January 2017].
- Yoshino, N. & Taghizadeh-Hesary, F. (2016). *Major challenges facing small and medium-sized enterprises in Asia and solutions for mitigating them*. Asian Development Bank Institute.
- Zapkau, F., Schwens, C., Steinmetz, H. & Kabst, R. (2015). Disentangling the effect of prior entrepreneurial exposure on entrepreneurial intention. *Journal of Business Research*, 68(3), 639-653.

## Appendix A: Questionnaire

Dear Participant, You are invited to participate in a survey that aims to assess the "Scalability of Small or Medium sized Enterprises (SMEs) in South Africa".

The questions pertain to Finance, Access to Finance, Growth, and Access to Markets, Human Capital, Entrepreneurial Intention, Regulatory Framework, Infrastructure, Business Support Services, Networks, Networking Activities, and Modern Technologies in SMEs. You must be over the age of 18 to participate and represent a SME. It will take approximately 20 minutes to complete the questionnaire. Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point.

It is very important for us to learn your opinions. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures, you may contact Professor Margaret Cullen at [margaret.cullen@nmmu.ac.za](mailto:margaret.cullen@nmmu.ac.za). If you are interested in the results, you are more than welcome to contact Wesley Augustyn by email at [wesley@bsindustries.co.za](mailto:wesley@bsindustries.co.za). Thank you very much for your time and support.

Do you represent a SME?

1. Yes
2. No

Please indicate your gender

1. Female
2. Male
3. N/A

Please indicate your age

1. 18-25
2. 26-35
3. 36-45
4. 46-55
5. 56-65
6. 66 +



Which Province do you live in?

1. Eastern Cape
2. Free State
3. Gauteng
4. KwaZulu-Natal
5. Limpopo
6. Mpumalanga
7. Northern Cape
8. North West
9. Western Cape
10. Other, please indicate \_\_\_\_\_

Which city/town is the business situated in?

Indicate your race:

1. Asian
2. Black
3. Coloured
4. White
5. Indian
6. Other-Please indicate \_\_\_\_\_

Please indicate your level of education:

1. Less than Matric
2. Matric
3. Diploma
4. Degree
5. Post Graduate degree

Do you own the SME?

1. Yes
2. No

Please indicate your marital status:

1. Single
2. In a relationship
3. Living together
4. Married
5. Divorced
6. Widowed

What is your personal monthly income?

1. Up to R 15 000.00
2. R 15 001.00 to R 25 000.00
3. R 25 001.00 to R 45 000.00
4. R 45 001.00 to R 65 000.00
5. R 65 001.00 to R 85 000.00
6. R 85 001.00 +

What sector does your business operate in?

1. Agriculture, Fishing and Forestry
2. Catering, Accommodation and Other Trade
3. Construction
4. Commercial Agents and Allied Services
5. Community, Social and Personal Services
6. Electricity, Gas and Water
7. Finance and Business Services
8. Retail and Motor Trade and Repair Services
9. Transport, Storage and Communications
10. Mining and Quarrying
11. Manufacturing
12. Wholesale Trade
13. Other- Please specify \_\_\_\_\_

How many years has the business been in operation?

1. Below 1 Year
2. 2 to 3 Years
3. 4 to 5 Years
4. 6 to 10 Years
5. 11 to 15 Years
6. 16 Years and more

How many employees are employed in the business?

1. Less than 5 employees
2. 5-10 employees
3. 11-20 employees
4. 21-50 employees
5. 51-100 employees
6. 101-200 employees
7. 201 and more employees

In the year that the business was founded/formed, how many permanent, full-time individuals worked in this business?

How many of the current employees are contract/temporary workers?

1. Less than 5 employees
2. 5-10 employees
3. 11-20 employees
4. 21-50 employees
5. 51-100 employees
6. 101-200 employees
7. 201 and more employees

How many woman does the business employ?

1. 0
2. Less than 5 employees
3. 5-10 employees
4. 11-20 employees
5. 21-50 employees
6. 51-100 employees
7. 101-200 employees
8. 201 and more employees

Does the business have female representation at management level?

1. Yes
2. No

The business has been profitable over the past 3 years.

1. Yes
2. Break-even
3. No
4. N/A

Does your business use social media to promote itself?

1. Yes
2. No
3. N/A

Social media boosts the business networks. e.g. through Facebook the business acquired new clients or made new partnerships.

1. Definitely
2. Not at all

How effective are the following social media platforms towards promoting the business?

	Highly Ineffective	Ineffective	Neutral	Effective	Highly Effective	N/A
LinkedIn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facebook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Twitter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instagram	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Google+	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meerkat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Xing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Is the business VAT registered?

1. Yes
2. No

Is your business a legal entity?

1. Yes
2. No

If yes for the above question, please indicate how the business is registered.

1. N/A
2. PTY (Ltd)
3. Closed Corporation (CC)
4. Sole Proprietor

What is the business B-BBEE level?

1. Level 1
2. Level 2
3. Level 3
4. Level 4
5. Level 5
6. Level 6
7. Level 7
8. Level 8
9. Non- compliant

Indicate the business ownership structure (Select all that apply)?

1. Less than 51% Black Ownership
2. More than 51% Black Ownership
3. 100% Black Ownership
4. 100% White Ownership
5. Less than 30% Black Woman Ownership
6. More than 30% Black Woman Ownership
7. No Black Woman Ownership
8. Other, please indicate \_\_\_\_\_

Source of start-up capital (Select all that apply)?

1. Personal Savings
2. Friends and Family
3. Government Financial Agencies
4. Government non-Financial Agencies
5. Loans from Banks
6. Venture Capitalists
7. Micro Financing
8. Other, please indicate \_\_\_\_\_

Have you accessed funding to grow the business? (Select all that apply).

1. Personal Savings
2. Friends and Family
3. Government Financial Agencies
4. Government non-Financial Agencies
5. Loans from Banks
6. Venture Capitalists
7. Micro financing
8. Retained Earnings
9. Other, please indicate \_\_\_\_\_

To what degree are the following elements of Finance an obstacle to current operations of this firm?

	Very Severe Obstacle	Major Obstacle	Neutral	Minor Obstacle	No Obstacle	N/A
Access to Debt Finance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Equity Finance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Grants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Soft Loans, i.e. non-interest bearing loans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to government agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement with the following statements:  
This question pertains to Access to finance:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
Access to finance can stimulate growth for the business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to finance can help the business' cash flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many SMEs are aware of government agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to acquire finance from government agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial support from government agencies impacts the success of SMEs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The commercial banks are willing to finance SMEs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of financial support from banks impacts the success of SMEs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to access finance as registered business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business has accessed formal finance. e.g. banks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business has accessed informal finance. e.g. family and friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to access finance from venture capitalists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement with the following statements:  
This question pertains to Growth:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
Government policies make it difficult for the business to grow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interest rates are favourable for growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exchange rates are favourable for growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to substitute my products & services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tax incentives will stimulate growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labour laws are favourable for the business to grow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business' clients will not switch to another competitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The current political environment is stable and therefore stimulates growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crime, theft and disorder affect business growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corruption stagnates economic growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement with the following statements:  
This question pertains to Access to Markets:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
It is easy to access International Markets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to access national Markets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to access markets where my business is situated in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market Information for the sector that the business operates in is readily available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supply chain requirements of corporates are complex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BEE supply chain requirements are a challenge for the business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a demand for the business' products & services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business has a strong internal supply chain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement with the following statements:  
This question pertains to Human Capital:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
The business has a pool of sufficient skilled labour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to acquire skilled labour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled labour is expensive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is an abundance of skilled labour in our region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The minimum paid labour rate is a constraint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management in the business has the appropriate knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management in the business has the appropriate capabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business employs a high percentage of skilled labour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business employs a high percentage of unskilled labour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business adheres to the Employment Equity Act, i.e the distribution of Black, White, Indian, Coloured, and Asian staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The young staff and graduates within the business are adequately skilled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The youth/graduates applying for positions in the business have the right skills and competencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The skilled labour within the business makes the business more competitive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement with the following statements:  
This question pertains to Entrepreneurial Intention:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
The owner of the business is proactive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner of the business perceives himself/herself as a risk taker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner of the business sees himself/herself as being innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner of the business has a fear of failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner has strong leadership skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner has the ability to seek new opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner can formulate and execute strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The owner has analytical and operational skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business owner's intention is to stimulate job creation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entrepreneurs add value to the economy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business owner is able to create new business opportunities through networking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business owner is happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business owner would finance other entrepreneurs i.e. be an investor who either provides capital to start-up ventures or supports small companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree are the following elements of the Regulatory Framework an obstacle to current operations of this business?

	Very Severe Obstacle	Major Obstacle	Neutral	Minor Obstacle	No Obstacle
Government-generated red tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B-BBEE codes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labour Laws	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Raising growth finance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with SARS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procedure to open a business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with the local municipality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



To what degree are the following elements of Infrastructure an obstacle to operations of this firm?

	Very Severe Obstacle	Major Obstacle	Neutral	Minor Obstacle	No Obstacle
Roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water and sewerage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electricity supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information and communication technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How satisfied are you with the following?  
This question pertains to Business Support services:

	Very Dissatisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
Access to Legal Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Tax Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Incubators/Accelerators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Consultants/Advisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to Education & Training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement with the following statements:

This question pertains to Networks:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
There are Research & Development collaboration opportunities between businesses and university researchers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is support from successful business people within the region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business has collaborated with other businesses. e.g. projects, joint ventures etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are available networks to access black business stakeholders. e.g. Clients, suppliers etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are available networks to access eligible black business partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business offers a unique value proposition to clients. e.g. price, quality, distribution etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business' management has a deep understanding of the capabilities and resources within the business.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business operates in an enabling entrepreneurial eco-system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bribery and corruption hinder the growth of the business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Please indicate your agreement with the following.

This question pertains to networking activities:

	Totally Disagree	Disagree	Neutral	Agree	Totally Agree
The business has accessed new markets/customers through business networking events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business owners/managers are able to create new business opportunities through networking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business leadership would attend organised events e.g. Entrepreneurial Trade Shows/Business Events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business leadership is selective of the types of business networking events attended	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business promotes itself through business networking events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The business has developed partnerships/alliances through business networking events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-person business networking events are a good platform to form relationships with other businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking leads to business growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Appendix B: Research Ethics: Form E



**FORM E**

**ETHICS CLEARANCE FOR TREATISES/DISSERTATIONS/THESES**

*Please type or complete in black ink*

FACULTY: of Business and Economic Science

SCHOOL/DEPARTMENT: Business school

I, (surname and initials of supervisor) Cullen, M.O.M

the supervisor for (surname and initials of candidate) Augustyn, W

(student number) 208101425

a candidate for the degree of Masters in Business Administration

with a treatise/dissertation/thesis entitled (full title of treatise/dissertation/thesis):

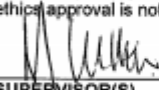
The scalability of SMEs within South Africa.

considered the following ethics criteria (please tick the appropriate block):

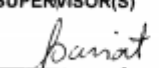
	YES	NO
1. Is there any risk of harm, embarrassment of offence, however slight or temporary, to the participant, third parties or to the communities at large?		✓
2. Is the study based on a research population defined as 'vulnerable' in terms of age, physical characteristics and/or disease status?		✓
2.1 Are subjects/participants/respondents of your study:		✓
(a) Children under the age of 18?		✓
(b) NMMU staff?		✓
(c) NMMU students?		✓
(d) The elderly/persons over the age of 60?		✓
(e) A sample from an institution (e.g. hospital/school)?		✓
(f) Handicapped (e.g. mentally or physically)?		✓

3. Does the data that will be collected require consent of an institutional authority for this study? (An institutional authority refers to an organisation that is established by government to protect vulnerable people)		✓
3.1 Are you intending to access participant data from an existing, stored repository (e.g. school, institutional or university records)?		✓
4. Will the participant's privacy, anonymity or confidentiality be compromised?		✓
4.1 Are you administering a questionnaire/survey that:		
(a) Collects sensitive/identifiable data from participants?		✓
(b) Does not guarantee the anonymity of the participant?		✓
(c) Does not guarantee the confidentiality of the participant and the data?		✓
(d) Will offer an incentive to respondents to participate, i.e. a lucky draw or any other prize?		✓
(e) Will create doubt whether sample control measures are in place?		✓
(f) Will be distributed electronically via email (and requesting an email response)?		
Note:		
• If your questionnaire <b>DOES NOT</b> request respondents' identification, is distributed electronically and you request respondents to return it <i>manually</i> (print out and deliver/mail); <b>AND</b> respondent anonymity can be guaranteed, your answer will be NO.		✓
• If your questionnaire <b>DOES NOT</b> request respondents' identification, is <i>distributed via an email link and works through a web response system (e.g. the university survey system)</i> ; <b>AND</b> respondent anonymity can be guaranteed, your answer will be NO.		
<i>Please note that if ANY of the questions above have been answered in the affirmative (YES) the student will need to complete the full ethics clearance form (REC-H application) and submit it with the relevant documentation to the Faculty RECH (Ethics) representative.</i>		


and hereby certify that the student has given his/her research ethical consideration and full ethics approval is not required.

  
 SUPERVISOR(S)

11/5/17  
 DATE

  
 HEAD OF DEPARTMENT

11/5/17  
 DATE

  
 STUDENT(S)

10/05/2017  
 DATE

Student(s) contact details (e.g. telephone number and email address):

*Please ensure that the research methodology section from the proposal is attached to this form.*

## Appendix C: Statistics for SME Sample

### Factor Items

	Highly Ineffective		Ineffective		Neutral		Effective		Highly Effective		Total	
LinkedIn	19	13%	13	9%	58	39%	33	22%	26	17%	149	100%
Facebook	18	7%	3	1%	39	16%	65	27%	117	48%	242	100%
Twitter	10	6%	20	11%	63	35%	42	23%	45	25%	180	100%
Blab	20	18%	20	18%	53	47%	12	11%	8	7%	113	100%
Instagram	15	8%	11	6%	40	22%	50	27%	70	38%	186	100%
Google+	19	11%	13	7%	51	28%	46	26%	50	28%	179	100%
Meerkat	24	23%	24	23%	42	40%	10	10%	4	4%	104	100%
Xing	29	28%	19	18%	41	39%	14	13%	1	1%	104	100%
Ning	28	28%	19	19%	41	41%	8	8%	5	5%	101	100%

Table 7.1 – Frequency Distributions: Social Media Effectiveness (n = 295)

	No		Yes	
Personal Savings	78	26%	217	74%
Family	229	78%	66	22%
Financial	277	94%	18	6%
Financial	293	99%	2	1%
Banks	221	75%	74	25%
Capitalists	291	99%	4	1%
Micro Financing	289	98%	6	2%

Table 7.2 – Frequency Distributions: Start-Up Capital Source - Items (n = 295)

	No		Yes	
Personal Savings	115	39%	180	61%
Family	248	84%	47	16%
Financial	268	91%	27	9%
Financial	293	99%	2	1%
Banks	206	70%	89	30%
Capitalists	288	98%	7	2%
Micro financing	287	97%	8	3%
Earnings	260	88%	35	12%

Table 7.3: Frequency Distributions: Funding To Grow Business – Items (n = 295)

	Very Severe Obstacle		Major Obstacle		Neutral		Minor Obstacle		No Obstacle	
Finance	17	6%	40	14%	91	31%	38	13%	109	37%
Finance	12	4%	35	12%	89	30%	52	18%	107	36%
Access to Grants	18	6%	36	12%	82	28%	37	13%	122	41%
Loans	24	8%	35	12%	66	22%	45	15%	125	42%
Government	32	11%	41	14%	73	25%	37	13%	112	38%

Table 7.4: Frequency Distributions: Finance Obstacles – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
finance can	4	1%	6	2%	45	15%	126	43%	114	39%
finance can help	4	1%	3	1%	46	16%	131	44%	111	38%
aware of	11	4%	74	25%	105	36%	83	28%	22	7%
acquire finance	50	17%	105	36%	100	34%	27	9%	13	4%
from government	7	2%	43	15%	100	34%	101	34%	44	15%
banks are willing	23	8%	63	21%	134	45%	65	22%	10	3%
support from	13	4%	31	11%	78	26%	123	42%	50	17%
access finance	10	3%	51	17%	110	37%	101	34%	23	8%
accessed formal	22	7%	50	17%	85	29%	106	36%	32	11%
accessed	26	9%	49	17%	77	26%	102	35%	41	14%
access finance	18	6%	67	23%	158	54%	40	14%	12	4%

Table 7.5: Frequency Distributions: Access to Finance – Items (n =295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
policies make it	5	2%	48	16%	111	38%	108	37%	23	8%
favourable for	23	8%	104	35%	116	39%	43	15%	9	3%
are favourable for	19	6%	88	30%	115	39%	65	22%	8	3%
substitute my	20	7%	67	23%	101	34%	84	28%	23	8%
will stimulate	4	1%	31	11%	117	40%	109	37%	34	12%
favourable for the	13	4%	58	20%	127	43%	80	27%	17	6%
clients will not	21	7%	68	23%	120	41%	64	22%	22	7%
political	85	29%	84	28%	85	29%	35	12%	6	2%
disorder affect	8	3%	12	4%	42	14%	97	33%	136	46%
stagnates	19	6%	9	3%	43	15%	77	26%	147	50%

Table 7.6: Frequency Distributions: Growth – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
access	39	13%	121	41%	91	31%	36	12%	8	3%
access national	17	6%	70	24%	111	38%	82	28%	15	5%
access markets	3	1%	22	7%	82	28%	142	48%	46	16%
Information for the sector that the	3	1%	46	16%	109	37%	113	38%	24	8%
requirements of	3	1%	20	7%	145	49%	108	37%	19	6%
chain	7	2%	58	20%	116	39%	85	29%	29	10%
demand for the	0	0%	15	5%	63	21%	150	51%	67	23%
a strong internal	5	2%	13	4%	99	34%	140	47%	38	13%

Table 7.7: Frequency Distributions: Access To Markets – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
a pool of	4	1%	15	5%	64	22%	157	53%	55	19%
acquire skilled	12	4%	74	25%	97	33%	83	28%	29	10%
expensive	3	1%	23	8%	64	22%	139	47%	66	22%
abundance of	18	6%	59	20%	96	33%	99	34%	23	8%
paid labour rate is	1	0%	36	12%	148	50%	92	31%	18	6%
the business has	0	0%	6	2%	54	18%	142	48%	93	32%
the business has	1	0%	4	1%	55	19%	144	49%	91	31%
employs a high	1	0%	33	11%	91	31%	132	45%	38	13%
employs a high	36	12%	97	33%	93	32%	55	19%	14	5%
adheres to the Employment	6	2%	18	6%	98	33%	107	36%	66	22%
and graduates	1	0%	24	8%	109	37%	106	36%	55	19%
youth/graduates applying for	2	1%	24	8%	111	38%	115	39%	43	15%
within the	0	0%	9	3%	65	22%	135	46%	86	29%

Table 7.8: Frequency Distributions: Human Capital – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
business is	0	0%	8	3%	34	12%	119	40%	134	45%
business	1	0%	11	4%	49	17%	128	43%	106	36%
business sees	1	0%	3	1%	40	14%	141	48%	110	37%
business has a	13	4%	52	18%	87	29%	85	29%	58	20%
strong leadership	2	1%	5	2%	32	11%	141	48%	115	39%
the ability to seek	1	0%	3	1%	38	13%	139	47%	114	39%
formulate and	1	0%	4	1%	43	15%	145	49%	102	35%
analytical and	2	1%	4	1%	49	17%	145	49%	95	32%
owner's intention	2	1%	9	3%	59	20%	114	39%	111	38%
add value to the	1	0%	5	2%	37	13%	108	37%	144	49%
owner is able to										
create new	2	1%	7	2%	53	18%	131	44%	102	35%
owner is happy	1	0%	13	4%	62	21%	112	38%	107	36%
owner would										
finance other	8	3%	43	15%	100	34%	82	28%	62	21%

Table 7.9: Frequency Distributions: Entrepreneurial Intention – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
generated red	21	7%	65	22%	150	51%	40	14%	19	6%
B-BBEE codes	22	7%	47	16%	127	43%	55	19%	44	15%
Labour Laws	18	6%	38	13%	127	43%	61	21%	51	17%
finance	19	6%	73	25%	111	38%	71	24%	21	7%
SARS	19	6%	65	22%	102	35%	70	24%	39	13%
open a business	24	8%	74	25%	102	35%	64	22%	31	11%
local municipality	23	8%	75	25%	98	33%	71	24%	28	9%

Table 7.10: Frequency Distributions: Regulatory Framework Obstacles – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
Roads	19	6%	31	11%	71	24%	80	27%	94	32%
sewerage	18	6%	43	15%	71	24%	69	23%	94	32%
Electricity supply	25	8%	46	16%	79	27%	69	23%	76	26%
communication	20	7%	25	8%	92	31%	66	22%	92	31%
Transport	32	11%	35	12%	81	27%	66	22%	81	27%

Table 7.11: Frequency Distributions: Infrastructure Obstacles – Items (n = 295).

	Very Dissatisfied		Not Satisfied		Neutral		Satisfied		Very Satisfied	
Services	6	2%	23	8%	123	42%	122	41%	21	7%
Services	3	1%	26	9%	107	36%	136	46%	23	8%
Incubators/Accel	7	2%	42	14%	167	57%	66	22%	13	4%
Consultants/Advi	7	2%	29	10%	128	43%	105	36%	26	9%
Education &	11	4%	28	9%	103	35%	111	38%	42	14%

Table 7.12: Frequency Distributions: Business Support Services – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
Research & Development	14	5%	48	16%	137	46%	82	28%	14	5%
from successful	12	4%	47	16%	107	36%	105	36%	24	8%
collaborated with	18	6%	61	21%	91	31%	105	36%	20	7%
available	12	4%	36	12%	119	40%	104	35%	24	8%
available	16	5%	32	11%	129	44%	104	35%	14	5%
offers a unique	3	1%	20	7%	77	26%	140	47%	55	19%
management has a deep	0	0%	12	4%	75	25%	143	48%	65	22%
operates in an	2	1%	25	8%	108	37%	117	40%	43	15%
corruption hinder	21	7%	25	8%	67	23%	77	26%	105	36%

Table 7.13: Frequency Distributions: Networks – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree		Total	
accessed new markets/customers	6	2%	32	11%	74	25%	127	44%	52	18%	291	100%
owners/managers are able to create	3	1%	16	5%	57	19%	163	56%	54	18%	293	100%
leadership would	4	1%	27	9%	78	27%	119	41%	65	22%	293	100%
leadership is	4	1%	24	8%	82	28%	145	50%	37	13%	292	100%
selective of the	4	1%	40	14%	79	27%	122	42%	48	16%	293	100%
promotes itself	4	1%	44	15%	89	30%	118	40%	40	14%	295	100%
developed partnerships/alliances	4	1%	44	15%	89	30%	118	40%	40	14%	295	100%
business	0	0%	20	7%	61	21%	129	44%	82	28%	292	100%
networking events	3	1%	7	2%	40	14%	131	45%	107	37%	288	100%
to business	3	1%	7	2%	40	14%	131	45%	107	37%	288	100%

Table 7.14: Frequency Distributions: Networking Activities – Items (n = 295).

	Totally Disagree		Disagree		Neutral		Agree		Totally Agree	
Cobots and their	60	20%	51	17%	93	32%	68	23%	23	8%
businesses that	61	21%	84	28%	78	26%	54	18%	18	6%
have discussed	81	27%	95	32%	90	31%	19	6%	10	3%
effective in our	53	18%	63	21%	109	37%	50	17%	20	7%
solve labour	46	16%	52	18%	124	42%	54	18%	19	6%
make our	45	15%	47	16%	126	43%	49	17%	28	9%

Table 7.15: Frequency Distributions: Modern Technologies - Items (n = 295).

	Very Negative 1.00 to 1.79		Negative 1.80 to 2.59		Neutral 2.60 to 3.40		Positive 3.41 to 4.20		Very Positive 4.21 to 5.00	
Finance Obstacles (FO)	12	4%	29	10%	91	31%	68	23%	95	32%
Access To Finance - In General (AF1)	0	0%	12	4%	135	46%	128	43%	20	7%
Access To Finance - This Business (AF2)	9	3%	41	14%	129	44%	101	34%	15	5%
Growth (G)	4	1%	105	36%	173	59%	13	4%	0	0%
Access To Markets (AM)	0	0%	25	8%	178	60%	91	31%	1	0%
Human Capital (HC)	0	0%	1	0%	162	55%	126	43%	6	2%
Entrepreneurial Intention (EI)	0	0%	3	1%	33	11%	141	48%	118	40%
Regulatory Framework Obstacles (RFO)	16	5%	55	19%	129	44%	71	24%	24	8%
Infrastructure Obstacles (ISO)	18	6%	21	7%	110	37%	55	19%	91	31%
Business Support Services (BSS)	7	2%	17	6%	143	48%	107	36%	21	7%
Networks (N)	1	0%	24	8%	155	53%	102	35%	13	4%
Networking Activities (NA)	1	0%	10	3%	77	26%	135	46%	72	24%
Modern Technologies (MT)	42	14%	80	27%	122	41%	39	13%	12	4%

Table 7.16: Frequency Distributions: Factors (n = 295).



	Very Negative 0.00 to 19.99		Negative 20.00 to 39.99		Neutral 40.00 to 60.00		Positive 60.01 to 80.00		Very Positive 80.01 to 100.00		Total	
Start-Up Capital Source (SC)	226	77%	48	16%	20	7%	1	0%	0	0%	296	100%
Funding To Grow Business (GB)	220	75%	70	24%	5	2%	0	0%	0	0%	301	100%

Table 7.17: Frequency Distributions: Capital Sources (n = 295).

## Appendix D: Plagiarism Report

Wesley Augustyn: THE SCALABILITY OF SMALL AND MEDIUM ENTERPRISES IN SOUTH AFRICA:

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