

**An exploratory study into the factors that impact sustainability-led innovation
(SLI) in Small and Medium Enterprises (SME's) within KZN**

Farah Abdool

Student Number: 15007088

Supervisor: Kogie Moodley

Research Methodology (RESM8419p)

Varsity College

IIE Bachelor of Commerce Honours in Management

Declaration:

I hereby declare that the Research Report submitted for the Bachelor of Commerce Honours degree to The Independent Institute of Education is my own work and has not previously been submitted to another University or Higher Education Institution for degree purposes.

Word Count: 11 339

Table of Contents

Abstract	4
1. Introduction	5
1.1. Contextualisation	5
1.2. Rationale	6
1.3. Problem Statement	7
1.4. Purpose Statement	7
1.5. Research Questions	7
1.5.1. Primary Question	7
1.5.2. Sub Questions	7
1.6. Research Objectives	8
2. Literature Review	9
2.1. Conceptualisation	9
2.2. Theoretical Foundation	9
2.3. Review of past literature	11
Effectiveness of sustainability-led innovation	12
Resources as a factor of SLI	13
Access to funding	13
Significance of human resources, skills and capabilities	15
Influence of leadership in implementing SLI	16
2.4. Conclusion	18
3. Research Methodology	19
3.1. Research Design	19
Outline of worldview/paradigm/tradition	19
Epistemological	19
Ontological	20
Axiological	20
3.2. Conceptual Approach and Design	21
3.2.1 Conceptual Approach: Qualitative Approach	21
3.2.2. Conceptual Design	22
3.2.2.1. Line of reasoning: Inductive reasoning	22
3.2.2.2. Type of Dimension	22
3.2.2.3. Type of Approach	23
3.2.2.4. Qualitative data collection: In-depth Interviews	23
3.3. Research Plan	24

3.3.1. Unit of analysis	24
3.3.2. Population.....	24
3.3.2.1. Target population	24
3.3.2.2. Accessible population.....	24
3.3.2.3. Population parameters	25
3.3.3. Sample.....	25
3.3.3.1. Sampling Method: Non-probability/purposive sampling.....	25
3.3.3.2. Sampling Type: Purposive sampling	26
3.3.3.3. Sample size.....	27
3.4. Data Collection.....	27
3.4.1. Data collection Method	28
3.4.2. Measuring Instrument: In-depth interview.....	28
3.4.3. Scope of questions	29
3.5. Data Analysis	30
3.5.1. Data Analysis Method: Thematic Analysis.....	30
4. Findings and Interpretation of Findings.....	32
4.1. Background of Participants	32
4.2. Findings and Interpretation of findings	32
Theme 1: Extent of awareness regarding SLI.....	32
Theme 2: Capital or funding as a factor of SLI	34
Theme 3: Influence of leadership in implementing SLI	34
Theme 4: A South African perspective	36
4.3. Trustworthiness of the findings.....	37
Credibility	37
Transferability	38
Dependability	38
Confirmability	38
5. Conclusion	40
5.1. How the research problem/purpose/questions were answered.....	40
5.2. Implications of findings for future practices	41
5.3. Final conclusions/ evaluation of success of the research/possible future actions and/ future research that can be conducted on the topic.....	42
5.4. Ethical Implications	44
5.5. Limitations of the study	45
References.....	48

Annexure A: Information sheet for participants	60
Annexure B: Consent form for audio or video recording.....	64
Annexure C: Gatekeepers letter / Request to conduct research	65
Annexure D: Gatekeepers Approval.....	67
Annexure F: Interview Questions	68
Annexure G: Ethics Clearance Letter	69
Annexure F: Originality Report	71
Annexure G: Summary Document Table.....	72

Abstract

South Africa faces a high SME failure rate due to the lack of understanding on the concept of sustainability-led innovation (SLI) and SME's not being able to transform their businesses into sustainable ventures (Leboea, 2017). Failure factors are both internal and external (Leboea, 2017). The purpose of this research was to identify the factors that impact SLI within SMEs and to determine how these factors influence SME's ability to implement SLI.

The sample used for this study were, two owners and a senior manager of SMEs based in KwaZulu-Natal. The data was collected using a semi-structured interview schedule, this enabled the researcher to gain an in-depth understanding of the phenomenon through exploring the experiences, views and beliefs of the participants on how factors such as resources, skills, capabilities and leadership influenced SME's ability to implement SLI.

The research found that the process of acquiring capital, financing and funds is long and complicated for SME's, and SLI is predominantly self-financed. In terms of skills and capabilities, SME's rarely invest in up skilling staff in relation to SLI. The findings suggest that aristocratic leadership inhibits the fostering of innovative solutions. However, transformational and charismatic leadership improved implementations towards SLI. Recommendations were made towards the challenges faced, and areas for possible future research avenues were highlighted.

1. Introduction

1.1. Contextualisation

Sustainability is becoming a major driver of innovation (Bessant, 2014). As per Mannan (2016), SME's are either in the process of, or are progressing to launch sustainable products and services. Presently, it is not possible to think about economic development without simultaneously considering preservation of the environment, and giving a shared advantage to society, which essentially is the foundation of what sustainability-led innovation entails (Zafar, 2014). The globalisation of markets, rapid technological advances and shorter product lifecycles are forcing SME's towards sustainable innovation in order to gain a competitive advantage (Mannan, 2016).

According to Klewitz (2011) and Jonathan Gosling (2012), SLI is important for companies for two main reasons, firstly there is an increase in environmental regulation and concerns surrounding aspects such as resources and pollution on national and international levels as well as external pressure from various stakeholders who demand companies address sustainability-related concerns. Secondly, in terms of the business case, commentators state by addressing factors which influence SLI within SME's may generate competitive advantages through more cost efficient production, stable business relationships, resource access, provide new business opportunities through product/ process differentiation and new markets (Klewitz, 2011).

As per Susman (2017), Small and Medium Enterprises (SME's) have been identified as productive drivers of inclusive economic growth and development in South Africa and around the world. According to Africa (2019), researchers have estimated that, SME's make up 91% of formalised businesses, provide employment to 60% of the labour force and total economic output accounts for approximately 34% of the GDP. According to Gideon (2006), the contribution of the SME sector cannot be sustained without the survival of existing SME's and creation of new SMEs. SMEs are seen as a significant component of the solution to South Africa's development issues.

However, South Africa faces a high SME failure rate due to SME's not being able to transform their businesses into sustainable ventures (Leboea, 2017). According to Bushe (2019), it is estimated that 40% of all new businesses fail in their first year of existence, 60% in their second year and 90% within the first 10 years from inception. Failure factors are both internal and external, this includes factors such as access to funding, skills and capabilities and leadership (Leboea, 2017). SME's do not understand the concept of implementing SLI and the impact it has on business survival. SME's within South Africa perceive SLI as a liability and are primarily profit driven (Leboea, 2017).

1.2. Rationale

As per Bessant (2014), there is concerns surrounding resources, climate change, energy and pollution. The World Wide Fund for Nature report suggests that lifestyles presently require the resources of around 2 planets. Addressing factors that influence SLI within SME's is vital as commentators state that SLI provides opportunities for sustainable process innovations which increase operating efficiencies and reduce costs and for product innovations which exploits potential market space. This study is relevant as the global market for green products and services was estimated as a \$3.2 trillion business opportunity (Jonathan Gosling, 2012). As per Susman (2017), South African SMEs make up 90% of formal businesses and contribute towards GDP and employment. As per Leboea (2017), South Africa faces problems relating to the high SME failure rate, due to entrepreneurs not being able to transform businesses into sustainable ventures. Fatoki (2014), states that, new South African SME's do not usually move past the existence stage. Therefore, this study is relevant as it will allow SME's to understand the factors affecting implementation of SLI. The research seeks to aid senior management in making resource-based decisions. According to Alderin (2016), SLI is relatively new, much of research to date has focused on understanding and developing the concept. However, there is insufficient research surrounding the factors which influence SME's ability to proactively implement SLI, thus contributing towards the existing body of knowledge.

1.3. Problem Statement

Key energy and raw material resources are becoming scarce and entrepreneurs are not able to transform businesses into sustainable ventures (Leboea, 2017). As per Bushe (2019) and Lings (2014), research into the causes and the impact of SME failure is negligible in developing countries. According to Alderin (2016), SLI is a relatively new concept. There is a lack of understanding of SLI and an awareness of the factors impacting the implementation of SLI within a South African context.

1.4. Purpose Statement

The purpose of this research is to identify the factors which impact SLI within SME's, and to determine how these factors influence SME's ability to implement SLI. This study intends to make use of phenomenological data-analysis, purposive sampling, and interviews. The results will be analysed using thematic analysis. This study will utilise owners and senior managers of SME's, located in KZN, South Africa, as participants. The purpose of this study is to gain more knowledge on the concept of SLI, as well as gain an understanding of the underlying factors which impact the successful implementation of SLI by SME's.

1.5. Research Questions

1.5.1. Primary Question

What are the factors that impact SME's ability to implement sustainability-led innovation?

1.5.2. Sub Questions

- ✓ How does access to resources impact SME's ability to implement sustainability-led innovation?
- ✓ How does skills and capabilities within SME's impact their ability to introduce sustainability-led innovation?
- ✓ What role does leadership of SME's play in terms of their ability to implement sustainability-led innovation?

1.6. Research Objectives

- ✓ To determine how access to resources impacts SME's ability to implement sustainability-led innovation
- ✓ To understand the role that skills and capabilities have on SME's ability to introduce sustainability-led innovation
- ✓ To explore the role that leadership of SME's play in terms of their ability to implement sustainability-led innovation

2. Literature Review

2.1. Conceptualisation

Small Medium Enterprises (SME's) – refers to an enterprise with fewer than 200 employees, an annual turnover of less than R 64 million, capital assets of less than R10 million, and direct managerial involvement by owners (United Nations, 2012).

Sustainability-led innovation – the process where sustainability considerations (environmental, social, and financial) are integrated into company systems from idea generation through to research and development and commercialization. This applies to products, processes, services, technologies, new business and organisational models (Katerva, 2020).

Resources – refers to tangible assets (Land, labour, buildings, machinery, equipment, capital and funding) and intangible assets (Brand reputation, trademarks, intellectual property) (Rouse, 2011).

Skills and Capabilities – refers to the capacity, materials and expertise an organisation needs in order to perform core functions (Rouse, 2011).

Leadership - refers to owners/managers of an organisation involved in making sound and challenging decisions, creating and articulating a clear vision, establishing achievable goals and providing followers with the knowledge and tools necessary to achieve those goals (Rouse, 2020).

2.2. Theoretical Foundation

The Resource Based Theory will be used to provide the theoretical foundation for this study. The Resource Based Theory is derived from the Resource Based View (RBV), which emerged in the 1980's and 1990's, after major works were published by Birger Wernerfelt, Coimbatore Krishnarao Prahalad and Hamel, Jay Barney and others in their respective studies (Jurevicius, 2013). According to Dejmal (2018), Resource-based theory states that if the resources are valuable, difficult to imitate, rare, and cannot be substituted, this may result in a competitive advantage for the organisation. The RBV model suggests that it would be more practical to exploit external opportunities using existing resources in a modified and innovative way,

rather than trying to obtain new resources for each new opportunity (Jurevicius, 2013). In the RBV model, resources are given the superior role in aiding companies towards achieving improved organisational performance (Jurevicius, 2013).

The main component of the RBV Theory is resources. The RBV categorises resources as tangible and intangible resources (Jurevicius, 2013). As per Katerva (2020), tangible resources confer little advantage to companies because rivals can soon acquire identical assets. However, as per Klewitz and Hansen (2011), intangible resources are built over time, and cannot be bought by companies from the market. Intangible resources are the main source of sustainable competitive advantage.

There are two critical assumptions of RBV which state that the resources must also be;

- *Heterogeneous* - skills, capabilities and other resources which an organisations possess must differ from their competitors (Jurevicius, 2013).
- *Immobile* - resources should not be able to move from company to company (Jurevicius, 2013).

In 1991, Jay Barney identified the VRIO framework which is a strategic analysis tool, which was derived from the RBV theory (Businessballs, 2019). VRIO is an acronym for a four-question framework which is conveyed to resources in order to evaluate the ability of the resource to obtain a sustainable competitive advantage (Smith, 2020).

Valuable

Questions whether a resource adds value by enabling a firm to exploit opportunities or defend against threats (Jurevicius, 2013). A resource needs to add value for the organisation, in order for the resource to be a means of achieving sustainability-led innovation.

Rare

Rare and valuable resources grant temporary competitive advantage (Jurevicius, 2013).

Costly to imitate

A resource is costly to imitate if other organisations cannot imitate, buy or substitute it at a reasonable price (Jurevicius, 2013).

Organised to Capture Value

Resources itself do not offer any advantage for a company if it is not organised to capture the value from them. The SME must organise its management systems and organisational structure to be able to fully utilise the potential of its valuable, rare and costly to imitate resources and capabilities (Jurevicius, 2013).

If the answer to all the VRIO components is “yes” then the organisation would be considered to have resources which have the potential to gain a sustainable competitive advantage (Jurevicius, 2013).

The RBV theory is relevant to this research topic, as it provides a means of identifying and evaluating the important factors which impact SLI within SME's. The RBV theory, which incorporates the VRIO framework, is ideal for this study as the theory incorporates the main components of the research questions. Resources is one of the key concepts identified for this study and South African SME's successful emergence, survival, and growth depends on their resources (Imran, 2019). The lack of the use of VRIO analysis may demonstrate why entrepreneurs are not able to turn their businesses into sustainable ventures (Leboea, 2017). It may also assist poorly performing SME's in identifying whether factors in their possession could yield a competitive advantage which in turn could also impact implementation of SLI and thus providing opportunities for sustainable process and product innovations.

2.3. Review of past literature

The purpose of this literature review is to provide and critique information which relates to how these various factors that impact SLI within SMEs. Through engaging with past literature, the researcher was able to gain a deeper understanding of the problems that exist, which assisted in reinforcing the findings of this study.

Furthermore, the purpose of reviewing past literature was also to criticise the

literature and identify shortcomings. Three themes are used in this review namely; effectiveness of sustainability-led innovation, Resources as a factor of SLI which is further broken into sub themes of access to funding, significance of human resources, skills and capabilities. The last theme is the influence of leadership in implementing SLI.

Effectiveness of sustainability-led innovation

According to Bos-Brouwers (2009), innovation processes towards sustainable development have received increasing attention in academic literature. Companies which have integrated sustainability into their orientation and innovation processes have exhibited increased value creation in their introduction of new products to the market and improved cooperation with stakeholders (Bos-Brouwers, 2009). As per Bessant (2014), SLI provides the provision for alternative goods and services, more efficient approaches to resource and energy management, new partnerships and ways of working which could help unleash economic development. Additionally Bessant (2014), highlights sustainability together with technological innovation yields both, bottom line and top line returns. The positive outlook, on SME's involvement in SLI is supported by Bos-Brouwers (2009), who states that SME's can achieve a competitive advantage and generate sustainable business practices by adopting innovation strategies which are led by sustainable and environmental good practices.

Upsill-Goddard, Glass, Dainty and Nicolson (2016), argue that strong communication channels and commitment to training programmes increase the capacity for implementing standards, however SMEs tend only to approach standards if they see immediate financial benefits from their implementations.

The positive stance has been opposed in a study by Bos Brouwers (2009), which concluded that most organisations which were surveyed believed that environmental issues affected their business and there are requirements to deal with these environmental issues, and the meeting of these requirements was seen as a cost which was not transferable to customers in terms of added benefits and only few organisations could show that it led to a competitive advantage. Another research study by Bos-Brouwers (2009), states that obstacles which are faced by companies

involved in sustainable innovations are greater and different to those faced by companies which are not involved in them. Gosling, Jia and Bessant (2012), further stated that weak infrastructure is a barrier to implementing SLI within SME's, as it difficult to implement SLI initiatives unilaterally. There is no unanimous finding or decision which definitively states that being involved in SLI does or does not aid an SME in achieving a sustainable competitive advantage. This research paper, will provide more information on that factors that influence implementation of SLI in a KZN context, as the previous literature has not taken into consideration the local PESTLE environments in South Africa.

Resources as a factor of SLI

According to Husso (2010), the increase in globalisation activities, accelerating technological change, availability of substitute products, and expanding customer expectations are creating a turbulent environment for SME's. Therefore, it is imperative that owners or managers continuously search for new ways to achieve a sustainable competitive advantage, in order to remain profitable in the turbulent business environment (Bessant, 2014). Appropriate utilisation of resources contributes towards implementing SLI within SME's. The overall objective of SLI is to reduce negative impacts on the environment while ensuring growth and longevity of an organisation (Urbaniec, 2015). The literature studied has mostly mentioned two resources which are vital for SME's to successfully implement SLI;

Access to funding

According to Falkena (2020) and Liedtke (2019), there are several opportunities for SME's to apply for funding. The most popular sources of funding for SME's is via; non-banking financial intermediaries, government subsidies, finance through secondary market development and venture capital (Falkerna, 2020). However, most lenders and venture capitalists very rarely consider extending finances to SME's due to the SME failure rate in South Africa (Fatoki, 2014).

Business Partners (2018) and Liedtke (2019), found that the South African economy does not favour SMEs, as SME's are often burdened with structural hurdles when attempting to access funding. SME's also have the option of requesting funding from banks. According to Bushe (2019), SMEs are reluctant to approach banks, as banks require business records based on which banks make their decision to provide funding and loans. SME's usually lack the business experience and financial records to qualify for funding, thus making it difficult for SMEs to access financing which impacts growth and survival.

SMEs worldwide rely initially on self-financing by entrepreneurship. Once the organisation starts to grow, and further capital is required, SMEs move on to debt finance or venture capital as they expand operations (Falkerna, 2020). However, once the decision has been made by the SME to move on to debt finance or venture capital Liedtke (2019), states that it takes 45 days for a local entrepreneur to meet the regulatory requirements to get access to funding. In contrast, it takes less than 20 days in 130 other countries. Small Business Development (2020), argues that the South African government has put measures in place to help SME's survive. The Department of Small Business development announced a number of interventions for small businesses which includes a Debt Relief Financing Scheme and the Growth Resilience Facility. This view is supported by Fin24 (2020), which states that businesses which are currently financed by the Small Enterprise Finance Agency (SEFA) can apply for a moratorium on debt repayments, and several tax relief measures have been introduced however Fin24 (2020), argues more than 85% of South African SME's polled in a recent survey did not know how to access emergency relief funds set up by government.

The literature demonstrated that there are many sources from which SME's can access funding, however the process can be tedious and the possibility of receiving funding is unlikely. The studied literature provides reasons which act as a barrier to access funding for SME's, however, why those barriers exist is not mentioned. This research study seeks to identify the degree to which South African SME's have access to funding and how availability of funding impacts the implementation of SLI.

Significance of human resources, skills and capabilities

According to Husso (2010) and UK Essays (2018), human resources play an essential role when in determining the success or failure of SME's.

Bessant (2014), states that human resources influences the success or failure of SME's, and are essential in terms of improving product/service offerings, processes and the position of an organisation. Husso (2010), supported this by pointing out the crucial role personnel play when firms attempt to take advantage of opportunities or counter threats within their business environments.

Hornsby and Kuratko (2003), emphasised that employees in small firms are the key factors in distinguishing successful from unsuccessful ventures. This notion is supported by Mochado and Melo (2014), who state that people are a business's greatest asset, and an organisation's human resources can impact the success or failure of a firm. Dunn, Paul, Short, Larry Edgar, Liang and Kathleen (2008), advocates that human resources can be even more imperative to SME's with fewer employees, because that business could be overly dependent on their workforce. This gives rise to the notion that SME's should have processes in place to avoid being overly dependent on their human resources as SME's can be affected significantly by the loss of valued employees or the hiring of incompetent personnel, (Dunn et al., 2008). As per Stone (2012), a barrier to human resource performance and productivity is the increasing pace of technological advancement which makes human skills obsolete.

According to UK Essays (2018), human resources within SME's is a much more dynamic element than in larger firms, in developing economies, as SME's provide more benefit to developing economies than larger firms. Stone (2012), further highlighted that SME's which train their workers are significantly more likely to grow (and less likely to close) than those which do not.

The studied literature consists predominantly of studies conducted in first world countries, however research undertaken by the University of Stellenbosch (2018), explains that South African SME's reported that they struggled to find reliable, committed, mature, experienced and affordable employees, which resulted in

business failure. University of Stellenbosch (2018), further highlights that South Africa faces the same issues as first world countries regarding the importance of human resources within SME's. According to Jonathan Gosling (2012), there is a problem of limited talent pool to keep up with advancing technologies. And there is a lack of highly qualified talents who can meet SME's needs.

From the studied literature it can be deduced that human resource management has received considerable attention, however, most of that literature is generic and or related to larger firms (Dunn et al., 2008). However, majority of the existing literature, which has been studied strongly agrees with the opinion that human resources is vital for the success of SME's. The reviewed literature included opinions which stated that if people were competent they may not be affordable by SME's and if people are affordable, they may not be competent. However, none of the studies opposed the importance of human resources within SME's. As per Beaver and Kate (2005), another recurring idea was the need to implement good human resource development practices within emerging and growing SMEs and recognising the important role that human resources can play in developing a skilled and efficient workforce. This research seeks to gain insight into how SME's within South Africa perceive the importance of their human resources, skills and capabilities, and how human resources impact the implementation of SLI within SME's.

[Influence of leadership in implementing SLI](#)

As stated by Manz (1989) and Yukl (2009), innovation has gained increasing attention in literature Manz (1989) and Yukl (2009), also proposed that leadership is one of the most influential predictors of innovation. This is further supported by Wilson (2013) and Rosing (2011), who highlighted that positive relationships exists between leadership and innovation. SME's require reliable leadership in order to spearhead new developments, implement changes and remain competitive (Wilson, 2013).

As highlighted by Smit (2003), leadership remains an area of concern within South African SMEs. Leadership styles in South Africa are often seen as bureaucratic, directive and task-oriented.

However, historically, South Africans are more likely to be influenced by Charismatic leadership to bring about change (Mutsekwa, 2016). This is supported by Nikoloski (2015), who points out that leaders with charisma emerge as an imperative for the competitiveness of SME's. However as per Dudley (2017), the challenges brought about by globalisation require better, faster and more efficient response of all enterprises in order to preserve and enhance their competitive position. Bossink (2007), further identified charismatic leadership as a useful leadership style for implanting SLI. Barczak (1989) and Nadler (1990), state that charismatic leadership generates energy, creates commitment and directs individuals towards new objectives or values. However Howell and Higgins (1990), argue that the charismatic leadership style also neglects organisational boundaries. Miller (2020), further stated that charismatic leadership is dependent on the energy levels of the leader and that charismatic leaders convince others to follow their own vision, thus limiting creativity or plans of followers, because follower see something better through the perspective of the leader (Miller, 2020).

As indicated by Zhang (2018) and Visser (2005), transformational leadership is a suggested leadership style for successful implementation of innovation as well as an important driver of innovation across varying organisational functions and levels. Transformational leaders are said to inspire followers to achieve extraordinary outcomes by providing both meaning and understanding. Bass (2006), states that transformational leaders aligns goals and objectives of individual followers as well as the larger organisation, and provides the follower with support, mentoring and coaching. This view was opposed by Boerner, Eisenbeiss and Griesser (2007), who provides evidence suggesting a negative or no relationship between transformational leadership and innovative outcomes. As per Naguib (2015), transformational leadership may affect the climate of innovation. Avolio (1993), found that only two dimensions of transformational leadership (intellectual stimulation and individualised consideration) affect the innovation climate.

According to Finch (2019), there is no universally set leadership style for implementing SLI. SME's will incorporate different leadership styles which are affected by external factors such as, organisational environment and technology (Finch, 2019).

After reviewing the existing literature, it can be deduced that majority of the studies looked at, were generic and not specific to South Africa. The current research focused on corporate and multinational enterprises. It is evident that the studies conducted did not consider how different leadership styles were exercised over resources during implementation of SLI. This study seeks to focus on the role that leadership plays in implementing SLI within SME's in KZN.

2.4. Conclusion

From the above it is evident that access to resources such as; financing, capital, human resources (which includes skills and capabilities) and the type of leadership style, are regarded as important factors of SLI. In conclusion, access to, management and efficient utilisation of these factors influences the success of SLI within SMEs. The value of this study is increased, due to the lack of understanding on the concept of SLI and the lack of local research which has been conducted on this topic. Although, there are sufficient international studies which suggest that organisations need to be innovative and sustainable, there is a lack of research considering these elements jointly and considering the factors which play a role in the implementation of these concepts.

3. Research Methodology

3.1. Research Design

Outline of worldview/paradigm/tradition

This study will follow the interpretivist paradigm. As per Du Plooy-Cilliers, Davis, and Berzuidenhout (2014), interpretivism was introduced due to the inadequacies and limitations of positivism. The interpretive paradigm looks at understanding the world as it is, from subjective experiences of individuals. This paradigm is concerned with the meaning (versus measurement) of methodologies, such as interviewing or participant observation, that rely on a subjective relationship between the researcher and subjects (Unisa, 2014). The Interpretivism paradigm could be ideal for this study as the purpose of this research is to gain an understanding of how owners or managers perceive, manage and utilise factors which impact the level of SLI within SME's. This study also aims to gain insight into the opinions of these individuals regarding the benefits and or barriers of implementing SLI. Interpretivism will be utilised, as this study is qualitative in nature. A subjective interpretation may be required to critically study this phenomenon. As per Lin-Yen (2017), the benefit of interpretivism is that there are multiple sources of data, hereby providing a more holistic approach and a deeper understanding of the problem.

Epistemological

According to Stroll and Martinich (2020), epistemology refers to the philosophical study of the nature, origin, and limits of human knowledge. For the purpose of this study, the interpretivism paradigm of viewing the phenomenon from the outside will be used. This study, looks at the nature, origin and limits of human knowledge relating to management or utilisation of factors such as resources, skills and capabilities, leadership and how these impact the implementation of SLI, as well as the knowledge of owners or managers within SME's on SLI itself. The epistemological position for this study will see the researcher gain an understanding from interviewing individuals owning/managing SME's. The knowledge can be assumed to be valid and true as it is from a source which has had first-hand experience in dealing with factors relating to the implementation of SLI. The researcher will record the interviews to ensure

accuracy of information and to avoid assumptions during the analysis of the collected data.

Ontological

Ontology is the philosophical field revolving around (the study of) the nature of reality (all that is or exists), and the different entities and categories within reality (Rivas, 2015). The ontological view for this study is that SME's are affected by factors relating to implementing SLI in South Africa. Furthermore, the ontological view for this study is that SME's do not understand the concept of implementing SLI. Additionally, SME's within South Africa perceive SLI as a liability and are primarily profit driven. To gain a better understanding of this ontological view a question which could be posed is 'how SME's perceive they would be impacted by the implementation of SLI?'. It is understood that each participant may have a different perspective and view.

Axiological

Refers to the study of the nature, types, and criteria of values and value judgments especially in ethics (Merriam-Webster, 2020). The main aim of this study is to gain a better understanding, regarding the factors that influence the implementation of SLI and how the implementation of SLI is perceived by SME's. The understanding of this phenomena is intended to be free of bias. The axiological view indicates that the researcher will treat contributions from all participants equally, and not give preference to certain participants, and their opinions (Du Ploy-Cilliers et al., 2014). The study will be guided by the researcher having an open mind when collecting and analysing data from individuals owning or managing SME's and continuously analysing the research to avoid manipulation, favouritism and influence from participants. The researcher will strive to not be biased or allow his/her own prejudices to influence the research process. This study may derive value by assisting SMEs in making better decisions concerning the factors which impact SLI within SME's in South Africa.

The research design will provide an appropriate framework for this research study (Sileyew, 2019).

3.2. Conceptual Approach and Design

3.2.1 Conceptual Approach: Qualitative Approach

This study will utilise the qualitative approach, as it is effective in gathering information with relation to different social settings.

Qualitative Research is exploratory research. It will be used to gain an understanding of underlying reasons, opinions, and motivations of SME's with regards to factors which influence the implementation of SLI (DeFranzo, 2011). Qualitative Research may also be utilised to identify trends in thoughts, opinions, and delve deeper into the problem (DeFranzo, 2011). As per DeFranzo (2011), qualitative research will rely on linguistic rather than numerical data, and will employ meaning-based rather than statistical forms of data analysis

The purpose of using qualitative research for this study, is to attempt to gain a deeper understanding of the problem regarding high SME failure rate, and which factors impact the implementation of SLI, within SME'S, and how access to these factors influence SME's ability to implement SLI. The use of qualitative research may provide insights into thoughts and opinions of how leaders within SME's manage, perceive and feel towards dealing with these factors.

The advantages of employing a qualitative approach for this research study are that qualitative studies; provides depth and detail on the research topic, can capture changing attitudes within the sample group and provides a much more flexible approach for data collection (Poppulo, 2019). Qualitative studies also reduce assumptions which are placed on the collected data, hereby making the data analysis more legitimate (Poppulo, 2019). Participants will also be able to express themselves in their own way. As per Poppulo (2019), the only restriction of using the qualitative approach in the context of this study is that it is time consuming and some participants may provide information which will not be useful in answering the research questions, and certain input will not have any relevance to the study being conducted.

3.2.2. Conceptual Design

3.2.2.1. Line of reasoning: Inductive reasoning

Inductive reasoning infers theoretical concepts from the data collected and analysed in a specific study. Inductive reasoning moves from the specific to the general and the findings are applied to more abstract and broad theoretical constructs. Hence, inductive reasoning allows the building of an existing, or new theory (Du Ploy-Cilliers et al., 2014).

Inductive reasoning will be ideal for this study, as there are no definitive answers to the research questions and research problem (Du Ploy-Cilliers et al., 2014). The aim of the study is to gather data which will provide a finding which may clarify the factors which impact SME's implementation of SLI, and how SME's are impacted by SLI (Du Ploy-Cilliers et al., 2014).

3.2.2.2. Type of Dimension

Cross Sectional Survey Design will be used to create an overall picture of the phenomena at one specific point in time. It only collects data from participants once (Du Ploy-Cilliers et al., 2014). This study will only be conducted once and requires data to be collected once, therefore a cross sectional survey design is ideal.

This study seeks to employ an exploratory approach. Exploratory qualitative studies tend to be primarily inductive, working largely with an emerging theoretical framework rather than within established theory or sets of hypotheses deduced from it (Creswell, 2016). The aim of this research study is to gain insight from individuals (owners or managers of SME's) in order to understand their perceptions regarding the factors which impact the implementation of SLI.

3.2.2.3. Type of Approach

This research study will make use of the phenomenological data-analysis approach. As per Mannen (2007), claims that phenomenology is focused on the sober reflection on the lived experience of human existence. Phenomenology is driven by a fascination with meaning. Data analysis in phenomenology focuses on how individuals experience the world or in other words to truly see the world through the eyes of others (Manen, 2007). This phenomena will be studied in great detail to explore and gain a better understanding of how owners or managers perceive, manage and utilise factors which impact the level of SLI within SME's. Not many research studies look at the perception and feelings of owners and managers of SME's with regards to the implementation of SLI. Therefore, a qualitative study in the form of a phenomenological data analysis is required to gain in-depth understanding.

3.2.2.4. Qualitative data collection: In-depth Interviews

The data collection method which will be used is an in-depth interview to collect information from the participants about their views and experiences, by asking open ended questions. The study will consist of in-depth interviews for owners or managers of SME's, to determine how they feel about the factors which impact implementation of SLI.

As per Research Methodology (2018), an in-depth interview has been selected for this study as it has many advantages, such as; it allows participants to share their opinions without bias and manipulation from others, in-depth interviews elicit more information and deliver more value from each participant, in-depth interviews are considerably cheaper than other forms of data collection methods and in-depth interviews have the ability to provide rich and expressive data (Polaris Marketing Research, 2009).

There limitations include; semi-structured interviews are quite time consuming, as interviews must be transcribed, organised, analysed, and reported (Steber, 2017). The researcher will communicate with each owner or manager of a SME and arrange a zoom call. The researcher will enlighten each owner or manager of a SME regarding the purpose, instructions and why each participant is important to the

study. After explaining the requirements, the researcher will interview each owner or manager. The questions will be semi-structured and consist of open-ended questions in order to allow participants to elaborate. The researcher will ensure that the interview flows in a natural manner. A screen recording of the session on zoom will be used to record the interview. Notes will be made of important aspects.

3.3. Research Plan

3.3.1. Unit of analysis

The “unit of analysis” refers to the portion of content that will be the basis for decisions made during the development of codes (Research Design Review, 2019). Therefore, for the purpose of this study the unit of analysis will be individuals, in the form of owners or managers of SME’s in KZN, as information obtained from owners or managers of SME’s in KZN will provide the basis for analysis.

3.3.2. Population

As per Salkind (2010), a *population* is the entire collection of entities one seeks to understand or, more formally, about which one seeks to draw an inference. The population can be divided into two groups; Target population and Accessible population (Salkind, 2010).

3.3.2.1. Target population

The target population defines the units for which the findings of the study are meant to generalise (Lavrakas, 2008). The target population for this research study are all owners or managers of SME’s in KZN, as the findings are intended to be generalised to all owners or managers of SME’s in KZN.

3.3.2.2. Accessible population

Accessible population refers to the group that the researcher actually can measure (Mack, 2018). The accessible population for this study will be owners or managers of SME’s who are available to be interviewed via Zoom, as it will be too costly to physically interview all owners or managers of SME’s in KZN. Furthermore, due to

the restrictions imposed as a result of the Covid-19 pandemic, it is convenient and safer to conduct the interviews via Zoom.

3.3.2.3. Population parameters

The population parameters refers to the; nature, size and unique characteristics of the population of this specific study (Du Ploy-Cilliers et al., 2014). The population parameters for the purpose of this research study are;

- Owners/managers of SME's
- Based in KZN, South Africa
- Involved in management of resources
- Are actively involved in decision making
- Participant must be fluent in English
- Participants must have access to good internet connection
-

3.3.3. Sample

A sample is the group of people, objects, or items which are taken from a larger population for measurement (Gay, 2016). The sample will be representative of the population to ensure that the findings can be generalised from the research sample to the population as a whole (Gay, 2016).

3.3.3.1. Sampling Method: Non-probability/purposive sampling

This study will make use of non-probability sampling. As per Laerd Dissertation (2012), Non-probability sampling represents a group of sampling techniques which helps researchers to select units from a population that they are interested in studying. A core characteristic of non-probability sampling techniques is that samples are selected based on the subjective judgement of the researcher, rather than random selection (Laerd Dissertation, 2012). Non-probability sampling would suit this study as the sample needs to meet certain criteria in order to gain an appropriate understanding of the research, topic problem and research questions.

According to Research Methodology (2019), the advantages of utilising non-probability sampling are;

- Possibility to reflect the descriptive comments from the sample.
- Cost-effectiveness and time-effectiveness compared to probability sampling
- Effective when it is unfeasible or impractical to conduct probability sampling

As per Research Methodology (2019), the disadvantages of utilising non-probability sampling are;

- Lack of representation of the entire population.
- Lower level of generalisation of research findings compared to probability sampling.
- Difficulties in estimating sampling variability and identifying possible bias.

3.3.3.2. Sampling Type: Purposive sampling

Non-probability in the form of purposive sampling will be used. Purposive sampling, groups participants according to preselected criteria relevant to a particular research question (Salmons, 2018). It is applicable to this research study, as participants should meet certain criteria, to partake in this study. Participant will have to be; owners or managers of SME's, based in KZN, involved in management of resources, actively involved in decision making.

According to Research Methodology (2019), the advantages of purposive sampling are;

- Purposive sampling may be the only appropriate method available as there are only limited number of primary data sources who can contribute to this study.

According to Research Methodology (2019), the limitations to purposive sampling are;

- Vulnerability to errors in judgment by researcher
- Low level of reliability and high levels of bias.

3.3.3.3. Sample size

The sample size for this research is 3 participants ($n=3$) who reside or operate within the vicinity of KZN and are owners or managers of SME's. The recruitment method used by the researcher will be; the researcher will telephonically contact owners or managers of SME's who are known to the researcher. The researcher will proceed to explain that a research study is being conducted and the finer details of the research topic. The researcher will enlighten each owner or manager of the SME regarding the purpose, instructions and why each participant is pertinent to the study. After explaining the requirements, the researcher will ask the owner or manager of the SME if they will willingly participate, if they agree, the researcher will negotiate a time and date to set up a zoom call to conduct the in-depth interview.

3.4. Data Collection

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Management, 2017). Data collection can be divided into two main categories primary methods of data collection and secondary methods of data collection. For the purpose of this research study a primary data collection method will be used. A primary data source is an original data source. One in which the data is collected first hand by the researcher for a specific research purpose or project (Research Methodology, 2018). For this research study, data will be collected from owners or managers of SME's within KZN, and this will be considered a primary source.

3.4.1. Data collection Method

A qualitative data collection method will be used. The data collection method which will be utilised for this research study will be in-depth interviews. The researcher will communicate with each owner or manager of a SME and arrange a zoom call. The researcher will enlighten each owner or manager of a SME regarding the purpose, instructions and why each participant is important to the study. After explaining the requirement, the researcher will interview each owner or manager of a SME.

The participants will be interviewed regarding their views and experiences in dealing with the factors relating to the implementation of SLI, by posing to them open ended, semi-structured questions. The questions will be semi-structured and consist of open-ended questions in order to allow participants to elaborate. The researcher will ensure that the interview flows in a natural manner. This means that in the beginning of the interview, the researcher will use general questions to get the participants into their comfort zone. Once the participant is comfortable and gets used to the interviewer and the questions, the interviewer will pose more direct questions in relation to the topic. Since the interview will be conducted over a Zoom call, the researcher will be able to record a video of the entire interview. This will provide greater benefit as the researcher will be able to go back and look at facial expressions to gain a better understanding of responses from participants. The researcher will then transcribe the entire video of the interview, in order to set up for data analysis.

3.4.2. Measuring Instrument: In-depth interview

In-depth interviews are a qualitative data collection method which involves direct, one-on-one engagement with individual participants (Steber, 2017). As per Steber (2017), in-depth interviewing can take place face-to-face, or over digital platforms. For the purpose of this research study the in-depth interview will take place over a zoom call.

In-depth interviews have been selected due to the advantages, such as;

- Interviewers can establish rapport with participants to make them feel more comfortable, which can generate more insightful responses (Steber, 2017).

- Interviewers have better opportunity to ask follow-up questions, search for additional data, and revisit important topics later on in the interview to generate a rich understanding of attitudes, perceptions and motivations (Steber, 2017).
- Interviewers can monitor changes in tone and word choice to gain a deeper understanding (Steber, 2017).
- Researchers need fewer participants to obtain useful and relevant insights (Steber, 2017).

There are also a few limitations to in-depth interviews;

- In-depth interviews are time consuming, as interviews must be transcribed, organised, analysed, and reported (Steber, 2017).
- Participants typically expect an incentive to participate, and this must be carefully selected to avoid bias (Steber, 2017).

3.4.3. Scope of questions

The researcher will begin by asking the participants simple questions which relate to their everyday work and responsibilities, such as “please describe your typical day”, “what type of manager would you consider yourself to be?”, “what kinds of opportunities or threats is your business exposed to?”

Once the participant is in their comfort zone, and they feel at ease talking to the researcher. This is when the researcher will ask more pertinent questions regarding how the participant feels about the aid which they receive from the government, and also regarding the factors which contribute to the progression or regression of the SME. The interviewer will also discuss whether SME’s feel that there may be a need to be involved in SLI or not. The interviewer will let the interview flow and focus on aspects which the interviewer feels may enhance the research.

3.5. Data Analysis

Data analysis is a process of cleaning, transforming, and modelling data to discover useful information (Research Methodology, 2016). Data analysis will involve identifying patterns within the data collected and critically analysing the data to achieve research aims and objectives (Research Methodology, 2016).

Since this is a qualitative study, a qualitative data analysis method will be used. Qualitative data refers to non-numeric information such as interview transcripts, notes, video and audio recordings, images and text documents (Research Methodology, 2016). This research study will be analysing information which will be obtained via in-depth interviews and recorded as a video. The video will then be transcribed.

3.5.1. Data Analysis Method: Thematic Analysis

The data analysis method will make use of thematic analysis to analyse the data which will be collected. Thematic analysis is a common method of analysis in qualitative research (Google Sites, 2019). According to Mortensen (2020), a thematic analysis strives to identify patterns of themes in the interview data.

Thematic analysis was chosen as it provides a vast amount of flexibility. Many theories can be applied to this process across various range of epistemologies (All Assignment Help, 2017). Thematic analysis will also permit the researcher to apply the range of study past individual experiences, as well as helps in the interpretation of themes backed up by data (All Assignment Help, 2017).

The disadvantage of this approach is that it is difficult to implement correctly (Get The Matic, 2018). This will not be a factor for this study as there are only three participants and the interview process is intended to last for 15 minutes. The chances of incorrectly implementing thematic analyse will decrease due to the small sample size (Get The Matic, 2018).

According to Mortensen (2020), a six phase framework will be utilised for conducting a thematic analysis. The researcher will firstly become familiar with the data. Secondly, generate the initial codes by organising data in a meaningful and systematic way and by reducing data into smaller chunks of meaning. Thirdly, the researcher will search for themes from the several codes that fit together. Fourthly, the researcher will review, modify and develop preliminary themes. Fifthly, the researcher will define the themes by identifying the essence of what each theme is about. Lastly, the researcher will provide a write up of the themes by providing information surrounding the data analysis method, themes identified participants, and essentially providing presentation and interpretation of findings (Bessant, 2014).

4. Findings and Interpretation of Findings

In order to analyse and interpret the findings, thematic analysis was used. The collected data, from the interviews, was thoroughly analysed, understood and examined. Preliminary codes were assigned to the data in order to group and describe the gathered content. Patterns and themes were then identified within the codes across the different interviews. The themes were reviewed and thereafter defined and named. The process resulted in the interpretations and findings of the study.

4.1. Background of Participants

Participant A: referred to a 26 year old male, who has been a manager of a KZN based SME for the past 4 years. The participant has a degree in BCOM finance and marketing, as well as an honours degree in international business management.

Participant B: referred to a COO of a KZN based SME. Participant B is a 40 year old male, who has been involved in multiple SME ventures since his teenage years.

Participant C: referred to a 52 year old , female. She is the owner of several SME's. This participant has many qualifications including the license to perform as a financial advisor.

4.2. Findings and Interpretation of findings

Theme 1: Extent of awareness regarding SLI

From the conducted interviews, all participants agreed that there is insufficient information, conventions and programs relating to sustainability led innovation. The participants had further emphasised that their SME's have not been exposed and educated on matters regarding SLI.

Participant A and Participant B had a fairly good understanding of SLI, Participant C, however, did not understand the concept behind SLI. Participant A and Participant B had an academic understanding regarding SLI, however the participants had not

been exposed to information regarding SLI, how to implement, manage and develop SLI within their respective SME's.

As mentioned in the literature review, Bos-Brouwers (2009), has stated that innovation processes towards sustainable development have received increasing attention in academic literature. This was supported by Alderin and Do (2016), who postulate that there has been a vast expansion of research on sustainable innovation. However, the findings from the interviews opposed the views of Bos-Brouwers (2009) and Alderin and Do (2016), as was evident by the participants responses;

Participant A: *"It's (information on sustainability-led innovation) not really provided by our government we don't have any seminars or programs which do convey that information to SME's (clears throat) sorry ,therefore there's not a lot of material that we are exposed to when it comes to sustainability and sustainability led innovation."*

Participant B: *"I would say there not enough platforms where by the information (regarding SLI) or the concept is being promoted on a practical level."*

Participant C: *"I feel that there is insufficient conventions and programs that teach or provide us owners of SMEs within South Africa on how to implement sustainability led innovation, or how to begin implementing and incorporating it into strategizing."*

It was therefore evident that there is awareness regarding SLI, but the information is only highlighted through environmental issues which transpire, such as; global warming, oil spills by BP's drilling plants and wildfires in Australia. Awareness had not been created by the South African government, banks, NGO's or other bodies, and SME's were not exposed to seminars or programs which educate SMEs on the implementation of SLI. Therefore, it can be concluded under this theme, that there is insufficient awareness of SLI within South African SME's.

Furthermore, Participant A and Participant B had stated that they would be interested in attending conventions, seminars and gatherings which convey information, educate and create awareness on SLI for their relevant SME's.

Theme 2: Capital or funding as a factor of SLI

The interviews conducted found that the most important resources to SME's is funding and capital. The participants mentioned that they do not foresee any financial benefit in implementing or being involved in SLI. The participants also mentioned that being involved in SLI is costly to their respective SME's, and seeing as SME's rely greatly on self-financing the participants were all in agreement that any extra funds which were available could be put to better use, instead of allocating the extra funds towards SLI.

Participant A: *"The most important factor in my opinion which impacts our ability to implement SLI would be that it would be the perceived financial benefit of implementing SLI."*

Participant B: *"Money is a big factor (in implementing SLI) so I would say investment then technology."*

Participant C: *"There are a lot of factors that impact SME's ability to implement SLI such as is capital and funding, because implementing these measures are a costly process, especially for small SMEs."*

The findings derived from the interviewed participants agree with Fatoki (2014), which stated that most lenders and venture capitalists very rarely consider extending finances to SME's due to the high SME failure rate in South Africa. As mentioned in the literature review SMEs worldwide rely initially on self-financing by entrepreneurship, this is agreed by Participant A, who mentions *"we have no kick back from the government and being involved in sustainability led innovation is quite costly so being an SME we will not have that kind of capital to invest in sustainability led innovation."* Therefore, the lack of funding is a major factor which hinders South African SME's ability to successfully implement SLI.

Theme 3: Influence of leadership in implementing SLI

Participant A felt that they exhibited a transformational leadership style, whereas Participant B considered themselves to have used an autocratic leadership style to

engage with their subordinates. Participant C felt that they had both transformational and autocratic traits.

From the findings it can be derived that Participant A and Participant C have had more success in their incremental implementation of SLI within their SME's. The participants with a transformational and charismatic leadership style had found that their subordinates are more open to accepting change and incremental implementations of SLI. Participant B, however, had difficulty in implementing SLI. The findings provided backing to the literature review, in which Mutsekwa (2016), stated that South Africans are more likely to be influenced by charismatic leadership to bring about change.

Participant A: *"As leadership I feel we have done a good job in trying to change their (the subordinates) mind-set and change the way they go along and the way they carry themselves out and we have done quite a bit and the type of leadership style helped. The type of charismatic leadership which has led to them actually enjoying doing what they do and enjoy being involved in that small little initiatives which we have taken towards sustainability."*

Participant C: *"I try to exercise transformational leadership by encouraging my staff to move out of their comfort zones, and shift the organisation into trying new and innovative things."*

Participant B: *"I tend to be autocratic and merely say do this and it must get done."*

Participant B had stated his difficulty in attempting to implement SLI within his organisation.

Participant B: *"So everybody in their separate department's ermm are doing whatever they need to do ermm."*

The findings concurred with the literature review in which Bossink (2007), identified charismatic leadership as a useful leadership style for implanting SLI. Barczak (1989) and Nadler (1990), stated that charismatic leadership generates energy, creates commitment and directs individuals towards new objectives or values. Therefore, it can be concluded that transformational and charismatic leadership does

indeed ease the implementation of SLI within South African SME's, as well as assists in creating an organisational culture which is centred on sustainability.

Theme 4: A South African perspective

All participants were based in KwaZulu-Natal (KZN), South Africa. The findings hereby confirmed that there is not a great deal of awareness regarding SLI in KZN, South Africa.

Participant A: *"As an owner of an SME we haven't been exposed to information or seminars or programs regarding SLI."*

Participant B: *"There not enough platforms where by the information (regarding SLI) or the concept is being promoted on a practical level."*

Participant C: *"I feel that there is insufficient conventions and programs that teach or provide us owners of SMEs within South Africa on how to implement sustainability led innovation."*

The findings also suggested that SME owners or managers felt that they do not receive support from government in terms of funding, incentives and information regarding the implementation of SLI within their organisations. Participant A and Participant C had mentioned that they do not feel that the government has done enough to ensure that SME's are aware of the importance of SLI, whereas Participant B had stated that organisations in general feel that no matter what they do, their efforts alone will not result in noticeable environmental improvements.

Participant A: *"conventions and programs, I feel is, is very basic whereas normally banks and governments would have seminars or have programs which do inform you about sustainability but in South Africa we don't have that."*

Participant B: *"I don't think people believe that the little that they do makes an impact. When in reality it does."*

Participant C: *"There are online courses held in various other countries but there are often in dollar amounts and are costly also the political, social, economic climate*

differs extensively. There is no government support on these initiatives as well that I am familiar with."

The findings from the interviewed participants also brought to light that owners or managers of SME's would be very interested in attending seminars, conventions, meetings or any other platform which could educate them on the importance of SLI and on how to successfully implement SLI within their respective organisations.

4.3. Trustworthiness of the findings

As per Statistics Solution (2020), qualitative researchers do not use instruments with established metrics concerning validity and reliability, it was therefore pertinent to address how qualitative researchers establish that the study's findings are credible, transferable, confirmable, and dependable. Trustworthiness was all about establishing these four things (Statistics Solution, 2020).

Credibility

As per Korstjens and Moser (2017), credibility refers to the level of confidence associated with the truth of the research findings. Credibility establishes whether the research findings represent plausible information drawn from the participants' original data and is a correct interpretation of the participants' original views (Korstjens and Moser, 2017).

To ensure credibility the researcher has used the *member-checking* method. Member checking, is a technique for exploring the credibility of results (Birt, Scott, Cavers and Campbell, 2016) For the purpose of this study the data and results were returned to participants to check for accuracy and resonance with their experiences. The participants were then asked to confirm whether the data and findings accurately depicted their feelings and perceptions.

Transferability

As per Korstjens and Moser (2017), transferability is the degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents. Transferability looked at whether the findings from a specific participant could be applied to a different participant from the same sample.

Transferability was ensured by providing readers with evidence that the research study's findings can be applicable to other contexts, situations, times, and populations, by showing readers the similarity in responses from the three participants.

Dependability

According to Korstjens and Moser (2017), dependability refers to the stability of findings over time. Dependability involved participants' evaluation of the findings, interpretations and recommendations of the study which were supported by the data as received from participants of the study.

As per Birt et al.(2016), to establish dependability the researcher had described the changes which occurred in the setting and how these changes affected the way the researcher approached the study. Participants were also asked to evaluate the findings, interpretation and recommendations of the study, to ensure alignment with the feelings and perceptions of the participants (Birt et al., 2016).

Confirmability

Refers to the degree to which the findings of the research study could be confirmed by other researchers. Confirmability is concerned with establishing that data and

interpretations of the findings are not figments of the inquirer's imagination, but clearly derived from the data (Korstjens and Moser, 2017).

In order to enhance confirmability the researcher documented the procedures for checking and rechecking the data throughout the study (Trochim, 2020). Once the study had been completed, the researcher conducted a data audit which examined the data collection and analysis procedures and made judgements regarding areas of bias and distortion (Trochim, 2020).

5. Conclusion

5.1. How the research problem/purpose/questions were answered

The researcher aimed to discover what factors impacted sustainability-led innovation in Small and Medium Enterprises (SME's) within KZN. The research conducted and analysed resulted in the conclusion that both external and internal factors impact the implementation of SLI. Factors such as access to resources, skills, capabilities and leadership play a role in the implementation of SLI within SMEs.

The first research question was: "how does access to resources impact SME's ability to implement sustainability-led innovation?" in response to this question, the interviews conducted, found that the most important resources of SME's are access to funding and capital. The findings derived from the interviewed participants agreed with Fatoki (2014), which stated that most lenders and venture capitalists very rarely consider extending finances to SME's due to the high SME failure rate in South Africa coupled with the lack of government support initiatives. As mentioned in the literature review SMEs worldwide rely initially on self-financing by entrepreneurship. As a result limited access to capital and financing has resulted in incremental SLI measures that are known and tested or no implementation of SLI within SMEs in KZN.

The second research question was: "how does skills and capabilities within SME's impact their ability to introduce sustainability-led innovation?" to answer this question, Stone (2012), highlighted that SME's which train their workers are significantly more likely to grow (and less likely to close) than those which do not. The research interviews brought to light the lack of investment by South African SMEs with regards to up skilling staff in relation to SLI. The reviewed literature stated that if people were competent they may not be affordable by SME's and if people are affordable, they may not be competent. This was further supported by the participants, who stated that surplus funds are invested in up skilling employees with relation to their job description. Furthermore all participants agreed that there was a lack of SLI conventions, programs, seminars and training which educate and provide guidelines for stimulating sustainable and innovative skill development.

The final research question was “what role does leadership of SME’s play in terms of their ability to implement sustainability-led innovation?” to answer this question, Smit (2003), highlighted that leadership styles in South Africa are often seen as bureaucratic, directive and task-oriented. However, historically, South Africans are more likely to be influenced by charismatic leadership to bring about change (Mutsekwa, 2016). This has been further supported by the findings from the interview, as it was derived that Participant A and Participant C, both, exhibited transformational leadership style had greater success in their incremental implementation of SLI, and established that subordinates were less resistant towards change within their SME’s. Participant B exhibited an autocratic leadership style to engage with their subordinates. The findings suggest that aristocratic leadership style inhibits the fostering of new and innovative solutions provided by employees. By addressing each research question the research objectives of the study were fulfilled.

The research study addresses the lack of understanding of SLI, by providing detailed theoretical definitions which placed emphasis on economic development whilst simultaneously considering preservation of the environment, and giving a shared advantage to society. Extensive literature was reviewed, and interviews were conducted to establish which factors are significant, and impact SLI, such as skills, capabilities, access to resources and leadership, and the role of these factors on the implementation of SLI within SMEs in a South African context, thus addressing the lack of awareness of important factors. The shortcomings in SLI implementation within existing SMEs have been identified, which provides guidelines to assist owners and managers of SMEs on how to transform their businesses into sustainable ventures, hereby achieving the aim of the study.

5.2. Implications of findings for future practices

The research study revealed that there is a lack of government involvement regarding the implementation of SLI. Therefore, SMEs are not motivated to incorporate measures of SLI. The South African Government should put measures in place by designing regulatory frameworks that set the direction, encourage and

reward the experimentation, such as rebates for compliance and other measures which fosters innovation and improves sustainability. This can be demonstrated through procurement policies and by providing information to the public which demonstrates governments' commitment to achieving the same objectives.

The participants emphasised that there were challenges surrounding access to capital and financing for implementation of SLI. SME owners should reinvest portions of their profits into SLI. SMEs should also lease tangible assets to reduce capital costs. SMEs should make use of supply chain financing. Furthermore, government-backed venture capital organisations should also be established to provide equity investment to SMEs.

Participants highlighted that there is limited training and skill development with regards to SLI. SMEs should invest in training and skill development pertaining to innovation. In order to foster sustainable innovative solutions and contributions from employees, SMEs should integrate elements of gamification, encourage a high feedback environment, blend various e-learning methods, stakeholder dialogue and use interactive software guides.

SMEs should avoid exhibiting solely autocratic leadership as this results in resistance to change and limits the freedom of employees to produce innovative solutions. Leaders need to exhibit charismatic and transformational leadership styles which encourages staff contribution, participation and feedback from an operational point of view to stimulate SLI.

5.3. Final conclusions/ evaluation of success of the research/possible future actions and/ future research that can be conducted on the topic

The research was a success as it answered all research questions pertaining to the factors that impact SME's ability to implement sustainability-led innovation. The findings were insightful and provided an in-depth understanding into the identified factors such as access to resources, skills, capabilities and leadership, and the role of these factors on SMEs ability to implement SLI.

The research was successful as insight was gained in relation to the challenges faced by SMEs, which can be used to aid and ensure long term survival for developing and struggling SMEs within KZN. This information allows owners and managers of SMEs to be cognisant of these factors, and how to advance or improve the SLI within their organisations. The participants provided the researcher with insightful information that was used to address the research goals of the study.

The research study that was conducted contributes towards the disciplines of sustainability and innovation, as it will allow students and others to gain an understanding into the important resources and how these factors can be managed to stimulate innovation and yield a competitive advantage, growth and long term sustainability.

The study aimed to contribute towards the general body of knowledge. The research study was aimed at ensuring an understanding of the emerging concept of SLI and the significance of SLI within South Africa, specifically KZN. This study also added to the existing, but limited, literature on the role that underlying factors such as access to funding, leadership, skills and capabilities had on the ability to successfully implement SLI by SME's. The study further ensures that owners and managers of SMEs understand the importance, management and efficient utilisation of resources and the impact of resources on sustainability and the competitive positioning of the organisation. The study was also intended to provide guidance to owners and managers of SMEs of poorly performing SMEs by providing a relevant framework in order to evaluate whether factors in their possession could yield a competitive advantage, which in turn also impacts implementation of SLI and thus provide opportunities for sustainable process and product innovations, whilst simultaneously addressing the high failure rate of SMEs. The study aimed to build on existing literature by addressing shortcomings. By contributing to the existing body of knowledge, it re-affirmed that there are increasing concerns on the topic and that intervention is required by government and other relevant bodies.

It is evident that the challenges emphasised by previous literature still exist to date and needs intervention. This provides the possibility of future research, where the inclusion of a larger sample size will contribute towards a greater in-depth data collection on the role and impact of factors in the implementation of SLI. This research

study identified the lack of government involvement in terms of SLI, the future research will allow for exploring the role of the South African government in implementing SLI guidelines and incentives for SME's. The existing research identified human resources as a factor of SLI and emphasised the lack of SLI training and skill development in SMEs. A possible opportunity exists in exploring the role of employees within SMEs in producing sustainable innovative solutions. In addition, the increasing concerns of the difficulty to acquire financial means to implement SLI, provides an opportunity for future research on the barriers and possible solutions for SMEs in obtaining financial support for SLI within South Africa.

5.4. Ethical Implications

Informed Consent- is a voluntary agreement to participate in research (Dalar Shahnazarian, 2020) . The goal of the informed consent process is to provide sufficient information so that a participant can make an informed decision about whether or not to enrol in a study or to continue participation (Dalar Shahnazarian, 2020). As per California (2019), in obtaining consent, the researcher has informed the potential participants of all pertinent information and allowed the subject an opportunity to ask questions and choose whether or not to participate in the study. The researcher has also obtained written consent from participants and informed participants that their participation was voluntary and they may withdraw from the study at any stage (Trochim, 2020). The researcher has also ensured that there was a reasonable expectation that they were not be coerced into participation (Trochim, 2020). The researcher has further obtained consent to record the interview (Trochim, 2020).

Avoiding Harm- As per Yopyop (2014), avoiding harm refers to the researcher ensuring that they are careful about protecting participants from physical harm caused by their research this includes protection from undue intrusion, personal embarrassment, psychological or other harm. The researcher attempted to ensure that questions were asked in a respectful manner to avoid emotional harm (Du Plooy-Cilliers et al., 2014). The researcher has also established an appropriate

consent process which involved informing participants at the beginning of the study and continually monitoring the participant's progress thus allowing for withdrawal at any point. The researcher provided an informative debriefing period of the study (Yopyop, 2014). The researcher has made explicit any possible adverse effects of the research with participants (Yopyop, 2014).

Confidentiality- refers to a condition in which the researcher knows the identity of a research subject, but takes steps to protect that identity from being discovered by others (Evergreen, 2020). The researcher has explained and ensured that the participants understood that there was anonymity and that personal details, such as names of the participants and companies would not be exposed (Du Plooy-Cilliers et al., 2014). The researcher has also made use of a group format to protect the participant's identity (Du Plooy-Cilliers et al., 2014).

Bias- Du Plooy-Cilliers et al. (2007), posit that bias refers to the desire of achieving a particular result, which the researcher may not be aware of. This may influence the research results in the sense of how and where the researcher collects data from and how it is interpreted. To ensure that the research bias was not present the researcher has ensured that the guidelines of the academic institution was followed (Academy, 2020). The researcher has attempted to ensure that all results are included in the report and honesty around the limitations of the study was disclosed (Academy, 2020). The researcher has also ensured that the results of the research were recorded in writing to avoid reporting bias (Academy, 2020). Lastly, the oversight provided by a research supervisor was used to prevent research bias.

5.5. Limitations of the study

As per University (2020), the first limitation of this study was the sample size. The sample size used for this study was 3 participants which is insufficient, thus making it difficult to identify significant relationships from the data (University, 2020). The

researcher overcame this limitation by spending a significant amount of time conversing with each participant in order to gain an in-depth understanding on what factors impact SMEs ability to implement SLI within KZN. Furthermore, despite limited participants, the researcher also made use of probing questions and an open ended semi-structured interviews in order to obtain detailed responses and participant's views during the interview process.

The second limitation identified is the sample profile (Hospital, 2006). This study was limited exclusively to owners and managers of SMEs and it was not inclusive of employees who are involved in daily operations of SMEs. Thus posing a limitation when generalizing from the sample to the target population. The researcher overcame this limitation by conversing extensively with the managers of SMEs, in their capacity as an employee of an SME and from the perspective of leading and managing employees, in order to obtain insight into diversified views, thoughts and information (McLeod, 2019).

The third limitation is the time of the study, which refers to the duration taken to meet and submit deadlines for research manuscripts and the current environment or setting in which the research is conducted in (Wordvice, 2020). The time available to study the research problem and to measure change over time was constrained by the deadlines of the assignment (Wordvice, 2020). The timing of the study was also conducted during the Corona virus pandemic thus limiting mobility and face to face interaction for in depth interviews (Wordvice, 2020). The researcher overcame this limitation by conversing with participants via Zoom, which allowed for face-to face interaction electronically. The researcher also overcame time constraints through extensive planning, guidance provided by the research supervisor and prioritisation of tasks in accordance with deadlines.

The last limitation was the geographical location of the study (Dimitrios Theofanidis, 2018). This study was limited to KZN, South Africa. Thus not providing an overall scope of responses as data saturation was not achieved (Dimitrios Theofanidis, 2018). Although this affected the scope and accuracy of the research undertaken,

the researcher intended to overcome this by attaining an in-depth understanding from participants that own or manage SMEs which operate within KZN, which provides a platform for future researchers and readers to compare this with other geographical locations.

References

Africa, T. B. A. S., 2019. *The Banking Association South Africa -Small Medium Enterprises*. [Online]

Available at: <https://www.banking.org.za/what-we-do/sme/>

[Accessed 21 June 2020].

Academy, E., 2020. *How to Avoid Bias in Qualitative Research*. [Online]

Available at: <https://www.enago.com/academy/how-to-avoid-bias-in-qualitative-research/>

[Accessed 28 June 2020].

Alderin, C., 2016. *Sustainable Innovation -Driving Factors in Large Firms*, Uppsala: Uppsala University.

Alderin, C. and Do, T., 2016. *Sustainable Innovation - Driving Factors in Large Firms*, Sweden: Uppsala University.

All Assignment Help, 2017. *Thematic Analysis - lets get familiar with it*. [Online]

Available at: <https://www.allassignmenthelp.co.uk/blog/thematic-analysis/>

[Accessed 27 June 2020].

Avolio, B. J., 1993. Transformational leadership, transactional leadership, focus of control, and support for innovation: Key predictors of consolidated business-unit performance. *Journal of applied psychology*, Volume 78, pp. 891-902.

Bass, B. M., 2006. *Transformational Leadership*. 2nd Ed. New Jersey: Lawrence Erlbaum Associates, Publishers.

Barczak, G., 1989. Leadership Differences in New Product Development Teams. *Journal of Product Innovation Management*, 6(4), pp. 259-269.

Beaver, G. and Kate, H., 2005. *Training and developing an age diverse workforce in SMEs: The need for a strategic approach*, Toronto: Emerald Group Publishing Limited.

Bessant, J. T. a. J., 2014. Sustainability. In: J. Bessant, ed. *Strategic Innovation Management*. Chichester: John Wiley and Sons Ltd, pp. 389-403.

Birt, L., Scott, S., Cavers, D. and Campbell, C., 2016. *Member Checking: A tool to enhance Trustworthiness or merely a Nod to Validation*, Edinburg: University of Edinburg.

Bos-Brouwers, H. E. J., 2009. Corporate Sustainability and Innovation in SMEs: Business Strategy and the Environment, pp. 417-435.

Bossink, B. A., 2007. Leadership for Sustainable Innoation. *International Journal of Technology Management and Sustainable Development*, 6(2), pp. 135-149.

Bushe, B., 2019. *The causes and impact of business failure among small to micro and medium enterprises in South Africa. Africa's Public Service Delivery and Performance Review*, 7(1).

Businessballs, 2019. Resource-Based View of the Firm. [Online]

Available at: <https://www.businessballs.com/strategy-innovation/resource-based-view/>

Business Partners, 2018. Improving SMEs' access to finance imperative for SA. [Online]

Available at: <https://www.businesspartners.co.za/en-za/media-centre/media-releases/south-africa/improving-smes%E2%80%99-access-to-finance-imperative-for-sa>

California, T. R. o. t. U. o., 2019. *UCI Office of Research*. [Online]

Available at: <https://www.research.uci.edu/compliance/human-research-protections/researchers/how-to-consent.html>

[Accessed 28 June 2020].

Dalar Shahnazarian, J. H. M. A. S. R., 2020. *Informed Consent in Human Subjects Research*. [Online]

Available at: <https://oprs.usc.edu/files/2017/04/Informed-Consent-Booklet-4.4.13.pdf>

[Accessed 28 June 2020].

DeFranzo, S. E., 2011. *What's the difference between qualitative and quantitative research?*. [Online]

Available at: <https://www.snapsurveys.com/blog/qualitative-vs-quantitative-research/>

Dejmal, A., 2018. Resource-Based Theory: Path to Competitive Advantage. [Online]

Available at: <https://study.com/academy/lesson/resource-based-theory-path-to-competitive-advantage.html>

Dimitrios Theofanidis, A. F., 2018. Limitations and Delimitations in the Research Process. *Perioperative Nursing*, 7(3), pp. 155-163.

Dudley, W. C., 2017. Federal Reserve Bank of New York. [Online]

Available at: <https://www.newyorkfed.org/newsevents/speeches/2017/dud170511>

[Accessed 26 May 2020].

Dunn, P., Short, L. E. and Liang, K., 2008. HUMAN RESOURCE MANAGEMENT IMPORTANCE IN SMALL BUSINESS, Louisiana: University of Louisiana.

Du Plooy-Cilliers, F., Davis, C., and Bezuidenhout, R. (2014). *Research Matters*. Cape Town: Juta & Co Ltd.

Evergreen, 2020. *Understanding Confidentiality and Anonymity*. [Online]

Available at: <https://www.evergreen.edu/humansubjectsreview/confidentiality>

[Accessed 28 June 2020].

Falkena, H., 2020. SMES' ACCESS TO FINANCE IN SOUTH AFRICA, Pretoria: The Task Group of the Policy Board for Financial Services and Regulation.

Fatoki, O., 2014. The Causes of the Failure of New Small and Medium Enterprises in South Africa, Rome: Mediterranean Journal of Social Sciences.

Fin24, 2020. 'Shuttered and hopeless': Help is available to small businesses, but many don't know about it. [Online]

Available at: <https://www.fin24.com/Economy/shuttered-and-hopeless-help-is-available-to-small-businesses-but-many-dont-know-about-it-20200412>

Finch, C., 2019. External Factors Affecting Leadership. [Online]

Available at: <https://bizfluent.com/info-8583473-external-factors-affecting-leadership.html>

[Accessed 23 May 2020].

Gay, B., 2016. Information Sheet 16. *Sampling In Research* , pp. 1-5.

Get The Matic, 2018. *Thematic Analysis*. [Online]

Available at: <https://getthematic.com/insights/thematic-analysis/>

[Accessed 27 June 2020].

Gideon, H. M., 2006. *Global Entrepreneurship Monitor South African Report*. [Online]

Available at: <http://www.gemconsortium.org/document.aspx?id756>

[Accessed 21 June 2020].

Google Sites, 2019. *How to Use Thematic Analysis*. [Online]

Available at: <https://sites.google.com/site/howtousethematicanalysis/home/what-is-thematic-analysis>

[Accessed 27 June 2020].

Gosling, J., Jia, F. and Bessant, J., 2012. Building capabilities in sustainability-led innovation: Some examples from China, Exeter: Exeter Business School.

Hornsby, J. S. and Kuratko, D. F., 2003. Human Resource Management in U.S Small businesses: A Replication and Extension. *Journal of Developmental Entrepreneurship*, p. 73.

Hospital, T. H., 2006. *Sampling in Research*. [Online]

Available

at: https://www.thh.nhs.uk/documents/Departments/Research/InfoSheets/16_sampling_research.pdf

[Accessed 27 June 2020].

Howell, J. M., and Higgins, C. A. (1990). Champions of technological innovation. *Administrative Science Quarterly*, 35(2), 317–341.

Husso, M., 2010. Importance of Internal and External Factors when Adapting to Environmental Changes in SME Sawmills in Norway and Finland: The Manager's View, Bergen: JOURNAL OF FOREST PRODUCTS BUSINESS RESEARCH.

Imran, M., 2019. Resource and Information Access for SME Sustainability in the Era of IR 4.0: The Mediating and Moderating Roles of Innovation Capability and Management Commitment, Karachi: Faculty of Business Administration, Iqra University.

John Creswell, C. P., 2016. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 4th ed. California: SAGE.

Jonathan Gosling, F. J. J. B. A. T., 2012. *Building capabilities in sustainability-led innovation: Some examples from*, United Kingdom: Exeter Business School.

Jurevicius, O., 2013. Resource Based View. [Online]

Available at: <https://strategicmanagementinsight.com/topics/resource-based-view.html>

Katerva, 2020. Sustainable Innovation. [Online]

Available at: <https://katerva.net/about/sustainable-innovation>

Klewitz, J. and Hansen, E. G., 2011. Sustainability-oriented innovation in SMEs: A systematic literature review of existing practices and actors involved, Lüneburg: Leuphana University.

Korstjens, I. and Moser, A., 2017. *Practical guidance to qualitative research*. , Manchester: Taylor and Francis.

Laerd Dissertation, 2012. *Non-probability sampling*. [Online]

Available at: <http://dissertation.laerd.com/non-probability-sampling.php>

Lavrakas, P. J., 2008. *Encyclopedia of Survey Research Methods*. London: Sage Publications.

Leboea, S., 2017. The Factors influencing SME failure in South Africa, Cape Town: University of Cape Town.

Liedtke, S., 2019. SME sector 'critical' to growing South Africa's economy – Pityana. [Online]

Available at: https://m.engineeringnews.co.za/article/sme-sector-critical-to-growing-south-africas-economy-pityana-2019-04-11/rep_id:4433

Lings, K., 2014. The Missing Piece: Solving South Africa's Economic Puzzle. Johannesburg: Pan MacMillan

Lin-Yen, C. (2017). A Discussion of Paradigms and Research Methods. Wufeng: Wufeng University of Technology.

Mack, S., 2018. *What Is the Difference Between the Target Population and the Experimentally Accessible Population?*. [Online]

Available at: <https://smallbusiness.chron.com/difference-between-target-population-experimentally-accessible-population-70637.html>

Management, R. C. i. D., 2017. *Data Collection*. [Online]

Available

at: https://ori.hhs.gov/education/products/n_illinois_u/datamanagement/dctopic.html#:~:text=Data%20Collection,test%20hypotheses%2C%20and%20evaluate%20outcomes.

Manen, M. V., 2007. Phenomenology of Practice. *Phenomenology and Practice*, Volume 1, pp. 11-30.

Mannan, B., 2016. Modeling of critical factors for integrating sustainability with innovation for Indian small- and medium-scale manufacturing enterprises: An ISM and MICMAC approach. *Cogent Business and Management*, 3(1).

Manz, C. C., 1989. Research on the management of innovation: The Minnesota studies. Leadership and innovation: A longitudinal process view, pp. 613-636.

McLeod, S., 2019. *Simply Psychology*. [Online]
Available at: <https://www.simplypsychology.org/sampling.html>
[Accessed 27 June 2020].

Merriam-Webster. (2020, March 22). Axiology. Retrieved from Merriam-Webster:
<https://www.merriam-webster.com/dictionary/axiology>

Miller, K., 2020. Charismatic Leadership Style Advantages, Disadvantages and Characteristics. [Online]

Available at: <https://futureofworking.com/charismatic-leadership-style-advantages-disadvantages-and-characteristics/>

[Accessed 27 May 2020].

Mochado, C. and Melo, P., 2014. Effective Human Resources Management in Small and Medium Enterprises: Global Perspectives. Hershey: Business Science Reference.

Mortensen, D. H., 2020. *How to Do a Thematic Analysis of User Interviews*, Chicago: Interaction Design Foundation.

Mutsekwa, L. R., 2016. *University of Pretoria*. [Online]
Available
at: https://repository.up.ac.za/bitstream/handle/2263/59732/Mutsekwa_Relationship_2017.pdf?sequence=1
[Accessed 23 August 2020].

Nadler, M. T., 1990. Beyond the Charismatic Leader: Leadership and Organisational Change. *California Management Review*, 32(2), pp. 77-97.

Naguib, H. M., 2015. The impact of Transformational leadership on the organisational innovation. *The International Journal of Social Sciences and Humanities Invention*, 5(1), pp. 4337-4343.

Nikoloski, K., 2015. Charismatic Leadership and Power: Using the Power of Charisma for Better Leadership in Enterprises. *Journal of Process Management – New Technologies, International*, 3(2), pp. 18-27.

Polaris Marketing Research, 2009. *In-Depth Interviews Provide Rich Data*. [Online] Available at: https://cdn2.hubspot.net/hub/58820/file-15745310-hm/newsletters/qualitative_research/mrp_0809_in-depth_interviews.htm?t=1434213365369#:~:text=The%20advantages%20of%20in%2Ddepth,participants%20give%20the%20most%20feedback.

Poppulo, 2019. *10 Advantages and Disadvantages of Qualitative Research*. [Online] Available at: <https://www.poppulo.com/blog/10-advantages-and-disadvantages-of-qualitative-research/>

Research Design Review, 2019. *QUALITATIVE DATA ANALYSIS: THE UNIT OF ANALYSIS*. [Online] Available at: <https://researchdesignreview.com/2019/12/10/qualitative-data-analysis-unit-of-analysis/>

Research Methodology, 2016. *Qualitative Data Analysis*. [Online] Available at: <https://research-methodology.net/research-methods/data-analysis/qualitative-data-analysis/>
[Accessed 27 June 2020].

Research Methodology, 2018. *Primary data collection*. [Online] Available at: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjwx6qxpp_qAhWisXEKHQxoB5YQFjAGegQIDRAF&url=https%3A%2F%2Fmethods.sagepub.com%2Freference%2Fencyc-of-research-design%2Fn333.xml%23%3A~%3Atext%3DA%2520primary%2520data%2520collection

Research Methodology, 2019. *Non-Probability Sampling*. [Online] Available at: <https://research-methodology.net/sampling-in-primary-data-collection/non-probability-sampling/>

Research Methodology, 2019. *Purposive sampling*. [Online]
Available at: <https://research-methodology.net/sampling-in-primary-data-collection/purposive-sampling/>

Rivas, T. P., 2015. What is the difference between Ontology and Epistemology?
Retrieved from Researchgate:
https://www.researchgate.net/post/What_is_the_difference_between_Ontology_and_Epistemology

Rosing, K., 2011. Explaining the Heterogeneity of Leadership- Innovation Relationship: Ambidextrous Leadership. *The Leadership Quarterly*, Volume 22, pp. 956-958.

Rouse, M., 2011. Business Capability. [Online]

Available at: <https://searchapparchitecture.techtarget.com/definition/business-capability>

Rouse, M., 2020. TechTarget. [Online]

Available at: <https://searchcio.techtarget.com/definition/leadership>

Sabine Boerner, , S. A. E. D. G., 2007. Follower Behavior and Organizational Performance: The Impact of Transformational Leaders. *Journal of Leadership and Organizational Studies*, 13(3), pp. 15-26.

Salkind, N. J., 2010. *Encyclopedia of Research Design*. Brighton: Sage Publishing.

Salmons, J., 2018. *MethodSpace*. [Online]
Available at: <https://www.methodspace.com/qualitative-research-2017/>
[Accessed 2020 March 17].

Sileyew, K. J., 2019. *Research Design and Methodology*. [Online]
Available at: <https://www.intechopen.com/books/cyberspace/research-design-and-methodology>

Small Business Development, 2020. Relief funding for small businesses during COVID-19. [Online]

Available at: <https://www.yoco.co.za/blog/article/covid-19-relief-funding/>

Smit, H., 2003. The influence of leadership role competencies on organisational role competencies on Organisational change outcome in the Manufacturing industry In South Africa. *SA Journal of Human Resource Management*, 1(2), pp. 45-52.

Smith, R., 2020. Explaining the VRIO Framework (With a Real-Life Example). [Online]

Available at: <https://www.clearpointstrategy.com/vrio-framework/>

Statistics Solution, 2020. *What is Trustworthiness in Qualitative Research?*. [Online]

Available at: <https://www.statisticssolutions.com/what-is-trustworthiness-in-qualitative-research/>

[Accessed 28 June 2020].

Steber, C., 2017. *In-Depth Interviews: Data Collection Advantages and Disadvantages*. [Online]

Available at: <https://www.cfrinc.net/cfrblog/in-depth-interviewing>

Stone, I., 2012. *UPGRADING WORKFORCE SKILLS IN SMALL BUSINESSES: REVIEWING INTERNATIONAL POLICY AND EXPERIENCE*, Durham: Durham University Business School.

Stroll, A., and Martinich, A. P. (2020, April 23). Epistemology. Retrieved from Encyclopædia Britannica: <https://www.britannica.com/topic/epistemology>

Susman, S., 2017. fin24. [Online]

Available at: <https://www.dw.com/en/the-earth-is-exhausted-were-using-up-its-resources-faster-than-it-can-provide/a-39924823>

[Accessed 14 March 2020].

Trochim, W. M., 2020. *Qualitative Validity*. [Online]

Available at: <https://conjointly.com/kb/qualitative-validity/>

[Accessed 28 June 2020].

UK Essays, 2018. *Role of SMEs in Economic Development*. [Online]

Available at: <https://www.ukessays.com/essays/economics/smes-role-in-national-economies-economics-essay.php>

Unisa, 2014. *Research Methodologies and Design*. [Online]

Available

at: uir.unisa.ac.za/bitstream/handle/10500/4245/05Chap%204_Research%20methodology%20and%20design.pdf

United Nations, 2012. Definition of an SME. [Online]

Available at: <http://tfig.unece.org/contents/definition-statistics-SMEs.html>

University, S. H., 2020. *Organizing Academic Research Papers: Limitations of the Study*. [Online]

Available at: <https://library.sacredheart.edu/c.php?g=29803&p=185934>

[Accessed 27 June 2020].

University of Stellenbosch, 2018. What are the success factors of small business owners in South Africa? [Online]

Available at: https://www.usb.ac.za/usb_insights/insight-success-factors-of-small-business-owners-in-sa/

Upstill-Goddard, J., Glass, J., Dainty, A. and Nicholson, I., 2016. Implementing sustainability in small and medium-sized construction firms: The role of absorptive capacity, Vancouver: Emerald Publishing.

Urbaniec, M., 2015. TOWARDS SUSTAINABLE DEVELOPMENT THROUGH ECO-INNOVATIONS: DRIVERS AND BARRIERS IN POLAND, Kraków: Department of Entrepreneurship and Innovation, Cracow University of Economics.

Visser, K., 2005. The relationship between the characteristics of the transformational leader and the entrepreneur in South African SMEs. *South African Journal of Business Management*, Volume 36, pp. 1-10.

Wilson, R. M., 2013. Analysis of innovative leadership and sustainability of SME's in the Western Cape Province, South Africa. Research Gate.

Wordvice, 2020. *How to present study limitations and alternatives*. [Online]
Available at: <https://wordvice.com/how-to-present-study-limitations-and-alternatives/>
[Accessed 27 June 2020].

Yopyop, H. J., 2014. *Research Ethics Avoiding Harm*. [Online]
Available at: <https://www.slideshare.net/hannajemimayopyop/avoiding-harm-in-research-final>
[Accessed 28 June 2020].

Yukl, G., 2009. Leading organisational learning: Reflections on theory and research. *The Leadership Quarterly*, 20(1), pp. 49-53.

Zafar U. Ahmed, A. H. S., 2014. Competitive Papers. *Book of Abstracts Advances in Global Business Research*, 11(1), pp. 7-116.

Zhang, Y., 2018. How Does Transformational Leadership Promote Innovation in Construction? The Mediating Role of Innovation Climate and the Multilevel Moderation Role of Project Requirements. *Sustainability*, pp. 1-19.

Annexure A: Information sheet for participants



CONSENT FORM

My name is Farah Abdool and I am a student at Varsity College. I am currently conducting research under the supervision of Kogie Moodley regarding the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SMEs) within KZN. The aim of the research is to identify how access to resources impacts SME's ability to implement sustainability-led innovation and the role that factors such as skills, capabilities and leadership play in terms of SMEs ability to implement sustainability-led innovation (SLI). I hope that this research will enhance our understanding. This study will add to the general body of knowledge. The research study is aimed at ensuring an understanding of the emerging concept of SLI and the significance of SLI within South Africa, in specifically KZN. This study also seeks to ensure an understanding of the role that underlying factors such as access to funding, leadership, skills and capabilities have on the ability to successfully implement SLI by SME's. The study strives to ensure that owners and managers of SMEs understand the importance, management and efficient utilisation of resources and the impact of resources on sustainability and the competitive positioning of the organisation. The study is intended to provide guidance to owners and managers of SMEs or poorly performing SMEs by providing a relevant framework in order to evaluate and identify whether factors in their possession could yield a competitive advantage which in turn also impacts implementation of SLI and thus provide opportunities for sustainable process and product innovations, whilst simultaneously addressing the high failure rate and ensuring greater survival of SMEs.

I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to

participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.

What will I be doing if I participate in your study?

I would like to invite you to participate in this research because you have the knowledge or in a position of an owner/ managerial position of an SME. If you decide to participate in this research, I would like to conduct an interview with you regarding the research topic. You can decide whether or not to participate in this research. If you decide to participate, you may choose to withdraw at any moment or to decide not to answer particular interview questions.

Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about factors that impact SMEs ability to implement sustainability-led innovation. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.

Do I have to participate in the study?

- Your inclusion in this study is completely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;
- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at Varsity College will have access to your interview information. I would like to use quotes when I discuss the findings of the research, but I will not use any recognisable information in these quotes that can be linked to you.

What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my Bachelor of Commerce Honours in Management. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.

My contact details are as follows:

Farah Abdool

The contact details of my supervisor are as follows:

Kogie Moodley

Annexure B: Consent form for audio or video recording



CONSENT FORM FOR AUDIO OR VIDEO RECORDING

Consent form for participants	
I, _____, agree to allow Farah Abdool to audio record my interviews as part of the research about the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SMEs) within KZN. The aim of the research is to identify how access to resources impacts SME's ability to implement sustainability-led innovation and the role that factors such as skills, capabilities and leadership play in terms of SMEs ability to implement sustainability-led innovation SLI). This research has been explained to me and I understand what participation in this research will involve. I understand that:	
• My confidentiality will be ensured. My name and personal details will be kept private.	
• The recordings will be stored in a password-protected file on the researcher's computer.	
• Only the researcher, the researcher's supervisor and possibly a transcriber (who will sign a confidentiality agreement) will have access to these recordings.	
Signature	Date

Annexure C: Gatekeepers letter / Request to conduct research



Dear Sir

I am writing to ask your permission to conduct research at your TFS company. My name is Farah Abdool, a Bachelor of Commerce Honours in Management student at Varsity College a brand of the Independent Institute of Education (IIE). The research I wish to conduct for my Honours Project, titled an exploratory study into the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SME's) within KZN.

The aim of this study is to investigate the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SME's) within KZN. The project consists of three parts surrounding how access to resources impact SME's ability to implement sustainability-led innovation, how skills and capabilities within SME's impact their ability to introduce sustainability-led innovation and the role that leadership of SME's play in terms of SMEs ability to implement sustainability-led innovation. The nature of your firm's participation will be to participate in an interview to provide practical insight into how factors within SMEs impact SMEs ability to implement sustainability-led innovation. The interview will be conducted between the researcher and the Senior Accounting Manager of your SME. The interview, will be facilitated for a duration of 30 minutes via an online platform Zoom. The data collected from the interview will be utilised for data collection and analysis purposes of the research study. Ethical considerations in respect to adherence with anonymity and confidentiality will be exercised.

Yours sincerely

Farah Abdool

My contact details are as follows:

Farah Abdool

The contact details of my supervisor/navigator/lecturer are as follows:

Kogie Moodley

Annexure D: Gatekeepers Approval



Gatekeepers Approval

Consent form to conduct research at my company
I, [REDACTED]
Representative of [REDACTED]
My capacity: [REDACTED]
Give my permission that Farah Abdool may conduct research at my company. This research has been explained to me and I understand what participation in this research will involve. I reserve the right to withdraw this permission at any time. I also understand that research reports are available in the library and IIE Repository unless I indicate below that I would not
Select below:
• I request that my company's identity be kept confidential. • My company can be identified in the study • The study may never be available on the repository. • The study may be made available on the repository. • The study may be made available on the repository after months:

Annexure F: Interview Questions

1. What is your understanding on the concept of Sustainability-led innovation?
2. Do you think that there is sufficient information, conventions and programs relating to sustainability-led innovation?
3. What measures have been taken by your SME to ensure sustainable innovation?
4. What are the factors in your opinion that impact the ability of SMEs to implement SLI?
5. What do you think are the most important resources required to implement sustainability-led innovation?
6. How has access to resources impacted the implementation of SLI within your SME?
7. How has the level of skills and capabilities within your SME impacted your ability to implement SLI?
8. What type of leadership style do you exercise how has this leadership style impacted your ability to implement SLI?

Annexure G: Ethics Clearance Letter



20 July 2020

Student name: Farah Abdool

Student number: 15007088

Campus: Varsity College Durban North

Re: Approval of HBCM Proposal and Ethics Clearance

HONOURS ETHICAL CLEARANCE LETTER

Your research proposal and the ethical implications of your proposed research topic were reviewed by your supervisor and the campus research panel, a subcommittee of The Independent Institute of Education's Research and Postgraduate Studies Committee.

Your research proposal posed no significant ethical concerns and your supporting documents and instruments are in order to proceed. We hereby provide you with permission to proceed with your research.

In the event of you deciding to change your research methodology in any way, kindly consult your supervisor to ensure all ethical considerations are adhered to and pose no risk to any participant or party involved. A revised ethical clearance letter will be issued.

We wish you all the best with your research!

GENERAL CONDITIONS TO BE FULFILLED IN RELATION TO RESEARCH

Permission is granted to proceed with the above study subject to the conditions listed below being met and may be withdrawn should any of these conditions be flouted.

Please note: The panel has not considered the merits, accuracy or ethical soundness of the research. The only merits examined are the use of The IIE as a sample.

Permission is granted subject to the following conditions:

1. The researcher(s) will need to obtain informed consent in writing from all of the participants in his/ her sample if the study is not anonymous.
2. The researcher(s) will need to obtain Gatekeeper approval/permission letter/s and have handed this to the supervisor for verifying.
3. The researcher(s) may only use the data collected for research purposes and in no other way.
4. Photographs of human subjects may only be taken if relevant to the research, informed consent was obtained, and even with informed consent, the photographs may not be published on any online platforms.
5. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
6. No names or identifying information of participants may be used within the research and the research must be voluntary.
7. Please make it clear that the information will not be used punitively in any way and participants may in no way be counselled/advised based on this.

Annexure F: Originality Report



① An exploratory study into the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SME's) within KZN

Farah Abdool

Student Number: 15007088

Supervisor: Kogie Moodley

② Research Methodology (RESM8419p)

Varsity College

③ IIE Bachelor of Commerce Honours in Management

Declaration:

④ I hereby declare that the Research Report submitted for the Bachelor of Commerce Honours degree to The Independent Institute of Education is my own work and has not previously been submitted to another University or Higher Education Institution for degree purposes.

Word Count: 11 339

RESM8419P_2020_HBC1P_VCDN1 -
RESM8419P_VCDN1

Research Report 1

Farah Abdool on Sun, Aug 23 2020, 9:36 PM

98% highest match
Submission ID: d9f4ad11-5e40-434e-ac52-
5ba611d4cf8d

Farah Abdool 150070...

Word Count: 17,420 | 98%
Attachment ID: 3301637811

Citations (22/22)

- ① Another student's paper
- ② Another student's paper
- ③ Another student's paper
- ④ Another student's paper
- ⑤ <https://scholarsarchive.by...>

Blackboard

SafeAssign Originality Report

RESM8419p_VCDN1 • Research Report 1 • Submitted on Sun, 23 Aug 2020, 21:36

[View Originality Report - Old Des](#)

Farah Abdool

View Report Summary

① An exploratory study into the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SME's) within KZN

Farah Abdool

Student Number: 15007088

Supervisor: Kogie Moodley

② Research Methodology (RESM8419p)

Varsity College

③ IIE Bachelor of Commerce Honours in Management

Declaration:

④ I hereby declare that the Research Report submitted for the Bachelor of Commerce Honours degree to The Independent Institute of Education is my own work and has not previously been submitted to another University or Higher Education Institution for degree purposes.

Word Count: 11 339

1

Global database (17)

⑭ Student paper

Top sources

- | | | |
|---|---------------|-----|
| ① | My paper | 89% |
| ⑮ | iie | 3% |
| ③ | Student paper | 2% |

Annexure G: Summary Document Table

Title: An exploratory study into the factors that impact sustainability-led innovation (SLI) in Small and Medium Enterprises (SME's) within KZN

Research Purpose/ Objective	Primary Research Questions	Research Rationale	Seminal Authors/ Sources	Literature Review – Conceptual Framework	Paradigm	Approach	Data Collection Method	Ethics	Key Findings	Recommendations
This study is worth conducting as South Africa has a high rate of business failure among SMES. Few SME's and government organisations in South Africa afford SLI the necessary attention. This research study seeks to ensure that SME's in KZN understand what factors impact an SME's ability to implement SLI.	What are the factors that impact SME's ability to implement sustainability-led innovation?	SLI provides opportunities for sustainable process innovations and for product innovations which exploit potential market space. South Africa faces problems relating to the high failure rate amongst SME's. Study is worth conducting as it may allow SMES to understand factors affecting implementation of SLI. The research seeks to aid senior management in making resource-based decisions. There is insufficient research surrounding the barriers which influence SME's ability to proactively implement SLI.	Ram Nidumolu C.K. Prahalad M.R. Rangaswami Michael E. Porter	Theme 1 Effectiveness of sustainability-led innovation. Theme 2: Resources as a factor of SLI Access to Funding Significance of human resources, skills and capabilities Theme 3: Influence of leadership in implementing SLI	Interpretivism Epistemology This study, looks at the nature, origin and limits of human knowledge relating to management/utility of factors such as resources, skills and capabilities, leadership and how these impact the implementation of SLI Ontology: SME's do not understand the concept of implementing SLI. Additionally, SME's within South Africa perceive SLI as a liability and are primarily profit driven. Axiology: the aim is to gain a better understanding free of bias.	Qualitative Line of Reasoning- Inductive reasoning Cross sectional survey design. Phenomenological Data analysis Population Owners/ Senior managers within an SME Based in KwaZulu-Natal, South Africa Involved in management of resources Involved in decision making	Data will be collected via semi structured In-depth interviews	Informed Consent Researcher must ensure that participants are aware they are partaking in a research study. Avoiding Harm The researcher ensuring that they are careful about protecting participants from physical harm caused by their research. Confidentiality The researcher takes steps to protect that identity of participants from being discovered by others. Bias The desire of achieving a particular result, which the researcher may not be aware of. Voluntary Participation Participation is voluntary and may choose to withdraw.	A better understanding of how managers/ owners of SMEs manager, perceive and utilise resources needed to implement SLI. Suitable findings for successful implementation of SLI.	The South African Government should put measures in place by designing regulatory frameworks that encourages SLI i.e. rebates. SME owners should reinvest portions of their profits into SLI. SMEs should also lease tangible assets to reduce capital costs. SMEs should make use of supply chain financing. SMEs should invest in training and skill development i.e. blend various e-learning methods, encourage feedback environment. Leaders need to exhibit charismatic and transformational leadership styles
Research Problem	Secondary Questions/ Hypotheses/ Objectives	Key Concepts	Key Theories							
This study seeks to address the lack of understanding regarding the concept of SLI by SME's in KZN and identify the barriers to SLI defined in a South African context.	How does access to resources impact SME's ability to implement sustainability-led innovation? How does skills and capabilities within SME's impact their ability to introduce sustainability-led innovation? What role does leadership of SME's play in terms of their ability to implement sustainability-led innovation?	- Leadership - Small and Medium Enterprises - Sustainability-led innovation - Resources - Skills and capabilities	Resource-based view(RBV)							
Sampling	Data Analysis Method	Limitations	Anticipated Contribution							
Non-probability sampling Purposive sampling Sample size- 3	Thematic analysis	Small Sample size, only 3 participants Sample profile-limited to owners/managers Time-corona virus pandemic and limited by assignment deadlines. Geographical location-limited to KZN, South Africa	Add to the general body of knowledge. To ensure that owners and managers of SMEs understand the importance, management and efficient utilisation of resources and the impact of resources on sustainability and the competitive positioning of the organisation							