



Cape Peninsula
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**TRIPLE BOTTOM-LINE FRAMEWORK AS A TOOL FOR MEASURING THE
SUSTAINABILITY OF MANUFACTURING SMEs IN THE CAPE
METROPOLE**

by

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Signed

Date

ABSTRACT

Over the past two decades, the triple bottom line (TBL) framework has gained prominence as an acquainting tool to enhance the operations of various companies by providing lenses of sustainability. TBL is a contemporary tool for reporting and accounting, encompassing environmental and societal aspects of business operations. Different sectors and enterprises have become aware of TBL and are increasingly becoming adapted with utilising the TBL tool. It serves as a fundamental tool on matters of profitability and sustainability. The high failure rate of South African Small and Medium Enterprises (SMEs) remains a national challenge requiring attention. The survival battle that these SMEs face does not only threaten their sustainability but also impair their future competitive advantage. This is even more prevalent among manufacturing SMEs.

Manufacturing SMEs are commonly endowed with the potential capability for providing opportunities and eradicating poverty more sustainably. They act as catalysts for socio-economic growth and industrial development. At the same time, they are acknowledged for their extensive contribution towards the national Gross Domestic Product (GDP). They are recognised for being champions of job creation that promotes rural economies and rural development. Manufacturing SMEs in urbanised and peri-urban centres such as the Cape Metropole are becoming more actively engaged in environmental and social programs. Although they are increasingly becoming active, SMEs operating in emerging markets such as South Africa are still struggling with issues pertaining to sustainability, a focal matter of this study.

This research was conducted with the main objective to determine the extent to which manufacturing SMEs in South Africa utilise the TBL framework as a tool to measure the sustainability of their enterprises. The researcher would want to know if all manufacturing SMEs operate with some form of sustainability lenses, focusing on balancing social and environmental programmes in their operations. It would be interesting to find the balance in the three pillars of sustainability. The subjects of this study were the manufacturing SMEs operating in the Cape Metropole, located in the Southern Peninsula of the Western Cape Province, with a coastline of 294 km.

The importance of this study lies in the fact that until now, there has been relatively limited research conducted in the Cape Metropole concerning the research topic of this nature. The study focuses on providing the content which obtain a comprehensive understanding of sustainable business advancement, and also the research that investigated the knowledge of SMEs' management on the importance of acknowledging and finding balance in the three pillars of sustainability. The study is also pursued to establish SMEs' accounting for social and environmental aspects of operations, resulting in a better rate of their sustainability.

This study applied a quantitative design to purposively select a sample of 200 respondents who were considered the decision-makers of manufacturing SMEs in the Cape Metropole. The researcher distributed questionnaires to the directors of operations, supervisors, owners, and managers. These respondents were classified to be at the decision-making equivalent positions in manufacturing SMEs. The respondents were also deemed to be suitable to report the decisions made regarding the operational strategies and the results of the environmental and social agendas implemented by manufacturing SMEs.

As such, for this study, the importance lies in providing the proof to whether there exists a relationship between the dimensions of sustainability, business performance, and the usage of TBL within manufacturing SMEs. Stemming from the results, it is revealed that manufacturing SMEs' drive for profitability at the expense of sustainability and their sparse investment on environmental and social programmes, threatens their efforts to induce positive business outcomes. The latter mentioned behaviour affected their business sustainability as well as their future business performance. Furthermore, it was discovered to be the possible reason that abrades their potential leverage for competitiveness. The study concludes by highlighting the implications of such behaviours and attitudes which led to the high failure rate of manufacturing SMEs, as well as proposing future possible research.

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GLOSSARY

1.SMEs	Small Medium Enterprises
2. SMMEs	Small Medium Micro Enterprises
3. TBL	Triple Bottom Line
4.CoCT	City of Cape Town
5. PwC	PricewaterhouseCoopers
6. ISO	The International Organization for Standardization
7. DTI	Department of Trade and Industry
8.FS	Financial Statements

CHAPTER ONE

BACKGROUND AND RESEARCH PROBLEM

1.1 BACKGROUND

In recent years, an expanded familiarity with the importance of business sustainability and environmental concerns has pushed organisations to utilise natural resources effectively. The efficient method of using limited resources exhorted businesses to have sustainable operations that do not trade off the capacity of future generations to address their own issues and needs (Kuhlman & Farrington, 2010). The idea of triple-bottom line (TBL) has, over the past two decades, been adopted and widely used in accountancy as a sustainability framework to assess the performance of different enterprises within their specific context (Slapper & Hall, 2011).

The application of the TBL framework as a tool to measure the sustainability of enterprises, particularly in the field of Small and Medium Enterprises (SMEs), remains problematic (Charlebois, 2013). The latter was confirmed by the statement made by Bos-Brouwers (2010) who highlighted sustainability themes and activities towards large companies without considering the significance and contribution of SMEs. Furthermore, sustainability policies in general, instruments and theories barely focus on SMEs. The focus of this study addresses the need for SMEs' sustainable manufacturing by investigating the TBL framework as a measuring tool for sustainability.

A study conducted by Kuhlman and Farrington (2010) provided a background for the concept of sustainability, a term that was originally coined in forestry in 1713 (with the word 'Nachhaltigkeit', a German concept for sustainability). Sustainability in forestry was then explained as a notion to harvest less than the forest yields in its new growth. In contrary, McKenzie (2004) opined that the conceptualisation of sustainability emerged after agitation about the environmental well-being in the 1960s, which affected wealth. Furthermore, he postulated that the environmental degradation was the repercussions of unconscionable resource management.

In an endeavour to restore harmony on earth, the concept of sustainable development was then projected in the 1987 Brundtland Report. The report that was detailed in recognition of the former Norwegian Prime Minister, Gro Harlem Brundtland's, role as the Chair of the World Commission on the Environment and Development. The report aimed to develop goals that accelerate the progress of sustainability endeavours, and at the same time, sustain the ability of natural ecosystems, economic progress, and social justice (Finkbeiner, Schau, Lehmann & Traverso, 2010).

Sustainability was adopted as a common political goal when the issue of the environment became gradually significant to the whole world (McKenzie, 2004). The Earth Summit, held at the United Nations Conference on Environment and Development (UNCED) in June 1992 in Rio de Janeiro, formulated Agenda 21 to provide a meaning to the notion of development sustainability. Agenda 21 was detailed to serve as an international blueprint for sustainable development to steer the process of interpreting and pursuing sustainability. The focus of Agenda 21 was to guide the sustainable development of all sectors of the society within their specific contexts (Du Plessis, 2002). One of the main objectives of Agenda 21 was to form a global partnership for sustainable development to address the critical problems the world currently faces, and to prepare for future challenges (Spangenberg, Pfahl & Deller, 2002).

Over the past three decades, before Elkington pioneered the TBL as a concept of sustainability, environmentalists were struggling to find frameworks and suitable ways to measure sustainability (Slapper & Hall, 2011). Multiple research outputs across academic disciplines were composed about sustainability and several assessment frameworks and certification systems were developed. The challenge, therefore, was the comprehensive evaluation system for measuring and assessing sustainability collectively (Goh, 2018). A study by Goodland (2002) suggested the road to achieve sustainability as a collective output from measuring the value of impact and assessing the variables of the social, environmental, economic, and human aspects (on which this study will not focus).

Medel, Garcia, Enriquez and Anido (2011) illustrated sustainability as one of the major concerns industrialised societies face. Furthermore, they noted that the premeditated objective for all companies around the world is to maintain the balance in the organisations' financial, social and ecological performances. Millon (2015) suggested that companies should invest in non-shareholder well-being to enhance long-term corporate and shareholder profitability. In other words, sustainable development enjoined companies to change their out-dated traditional way of running business that was economical driven. This sustainability approach of doing business commanded the organisations to restore friendly relationships between financial performances and, environmental and social contributions. The three-way pointed relationship could assist companies in reporting substantial information on all facets of sustainability (Jamali, 2006).

The growth and ascendancy of SMEs around the globe over the past two decades have underscored the need for the sustainability of the sector. The sector is recognised as the engine for the growth of economies, in the developed world as well as in emerging markets such as South Africa (Ladzani & Seeletse, 2012). A study by Naudé (1998) highlighted the important value of SMEs in the economic growth and their unavoidable link to economic empowerment, which deemed them a road to sustainable development of the country. The

latter encouraged policymakers to consider their current state and attracted the attention of researchers.

Furthermore, Naudé (1998) suggested that investing specifically in manufacturing SMEs' development and sustainability would address the current state of the economy, as well as be a tremendous contribution to the future stable and sustained economic development of South Africa. Over the years, research has shown that most SMEs are prone to experience challenges regarding measuring the sustainability of their enterprises. Consequently, their vulnerability to failures was unavoidable (Bourlakis, Maglaras, Aktas, Gallear & Fotopoulos, 2014).

The United States Small Business Administration (SBA) documented failures and reported that approximately 24 per cent of all newly operating SMEs became unsuccessful within two years. Furthermore, they estimated that 63 per cent of SMEs failed to make it past six years of existence (Wheelen & Hunger, 1998). These results were bearing a similar degree of resemblance to failures in Australia, United Kingdom, Japan, Taiwan, and Hong Kong. These failures justified why the SME sector was generally crowned with the highest failure rates compared to the large companies (Terziovski, 2010).

Bowler, Dawood and Page (2007) reported from an African context and discovered that 40 per cent of newly operating SMEs generally struggled to make it past their first year. Furthermore, they documented that 60 per cent failed within their second year and 90 per cent became unsuccessful in their first 10 years of existence. Manufacturing SMEs were also included in the above statistics.

Since the end of the Apartheid regime, SMEs have thrived in South Africa but progress towards its revitalisations has had mixed results, as the sector is unsustainable with a high failure rate (Khoza, Groenewald & Schachtebeck, 2018). The 2007 budget speech by former Minister of Finance, Mr Trevor Manuel, accentuated a loss of millions of Rands and opportunities due to the weak sustainability of the SME sector (Bruwer, 2010). Urban and Naidoo (2012) observed more than a 50 per cent failure rate of South African SMEs. A study by Ngubane, Mayekiso, Fitshane, Sikota, Matsoso and Bruwer (2015) conducted in the manufacturing SMME sector of the Western Cape, noted that approximately 80 per cent of the SMMEs in South Africa failed within their first year of existence. Furthermore, they noted that 70 to 80 per cent fail in their first four years of trading. South Africa was then generally noted as one of the countries with highest failure rate of newly operating SMEs in the world.

The piling evidence points to SMEs' focus on short-term success as the causal factor setting them up for failure before reaching the feat of a five-year milestone (Bruwer, 2010). Sifumba, Mothibi, Ezeonwuka, Qeke and Matsoso (2017) confirmed the exigency that entails swift business sustainability endeavours to address manufacturing SMEs' surviving issues. In part,

the sector attracted the need for sustainability as necessitated by Ford (2007:5) who aptly noted that: “A business that makes nothing but money is poor kind of business”. This statement was emphasised to dislodge the traditional attitude, linking entrepreneurship only to wealth and profit generation.

The sustainable way of running a business should consider the value of social and ecological aspects and replace the old-fashioned mentality of focusing only on wealth and profit generation (Majid & Koe, 2012). Blackhurst, Cantor and O’ Donnell (2012) complemented this idea and highlighted that measuring the success of the business should not only consider the financial performance because other non-financial aspects are crucial in the long-term success and sustainability. Singh, Olugu and Fallahpour (2014) posited the need for manufacturing SMEs to measure their sustainability endeavours, and to identify the feeble and unsatisfactory spheres in the three aspects of TBL. Those identified weak variables that require more contemplation and attention should be used as a benchmark when evaluating sustainability. The decision-makers must focus on addressing their improvement in the strategizing process. Furthermore, they must find suitable ways to improve the overall sustainability of their businesses.

The complexity of pursuing sustainability is not the only challenge manufacturing SMEs face, but another endeavour that requires efforts is measuring the degree to which those SMEs are sustainable (Slapper & Hall, 2011). The debate for business sustainability has become a viral subject globally since the mid-1990s. The discussion was around the efforts to develop sustainability tools, providing strong platforms for measuring sustainability and the extent to which businesses can be sustainable. Quinn and Baltes (2007) asserted that the challenges of the 21st century require businesses to radically change their old-fashion ways of running their businesses. The improved methodology commands businesses to shift their focus to paying attention to other aspects that affect business sustainability. Furthermore, they suggested that accounting for non-financial performances gives justice to social and environmental spheres, other than only focusing on reporting quarterly financial statements.

A study by Elkington (1994) discovered the new-fangled TBL framework that quantified the performance measures of corporates in America. Jamali (2006) noted that except for TBL tool, up to date, no exact management framework is responsible for linking these fundamental, yet unlike, three pillars of sustainability. Quinn and Baltes (2007) advocated for the TBL framework as a tool that assists the businesses to operate within sustainability lenses. They, furthermore, emphasised that organisations that utilised this TBL tool focused on the wider scope of doing business, which is not based only on the economic affect they have but also on the ecological and social value they might have added or destroyed.

Manufacturing SMEs became aware of their failures, and their fear of losing the competitive advantage became a wake-up call for them to seek ways that can address their concerns and issues pertaining to their sustainability (Sraun & Singh, 2017). Sustainability issues were not the only challenges faced. Sustainable manufacturing was also outlined as an area of concern that needed to be addressed urgently. This concern was established by various authors supporting Global Research for IMS2020 Vision promoted by the European Commission to prepare a roadmap for future (2020) manufacturing research (Garetti & Taisch, 2012).

The TBL framework, as otherwise ascribed to as the three Ps (People, Planet and Profits), or known as the three Es (Ecological, Economical and Ethical) or 3BL, could be the solution (Goodland, 1995). Slapper and Hall (2011) discovered the TBL framework as an important tool that could address these problems, as it goes beyond the old traditional way of reporting profits, measuring shareholders' value, and return on investment. Companies that have employed TBL went further than accounting for profits to involve the value of environmental and social aspects to achieve the sustainability goals (Slapper & Hall, 2011).

Tripathi, Kaushal and Sharma (2013) advocated for the TBL accounting framework with its three following bottom lines:

- The economic prosperity (the firms' focus is on making and sustaining profit margins which are signified by the firm's earnings and shareholders' value).
- The company concern on the quality of the environment (the firm's concern for the planet or the environment where the firm operates).
- The advocates also acknowledged the company's concern on the improvement of social justice (where the firm focuses mainly on stakeholders including the employees, communities, suppliers and clientele).

The call for TBLs aspects amalgamation could not be ignored when endeavouring to pursue sustainable growth and development of manufacturing SMEs. Consequently, the TBL framework was recommended to be an essential tool that must be attempted by any business since it is considered absolutely necessary for the benefits including competitive advantage (Jamali, 2006).

1.2 STATEMENT OF RESEARCH PROBLEM

The notion of sustainability is increasingly becoming an extremely popular agenda in South African business circles (Burns, Audouin & Weaver, 2006). It has been widely featured in some areas such as the development sector and large companies. A few scholarly works,

however, exist in the context of advancing the sustainability of manufacturing SMEs (Luken & Stares, 2005). The research mostly highlighted and identified SMEs' failures. A limited number of studies conducted in the developing republics such as South Africa, however, focus on combating failure rates and address the sustainability issues of manufacturing SMEs. As a result, the South African manufacturing SMEs' failure rate is approximately 70 per cent noted within their first year of trading (Rabie, Cant & Wiid, 2016).

A study by Massa, Farneti and Scappini (2015) highlighted the SMEs' failures as due to lack of knowledge, shortage of information and limited experience about sustainability reporting. Furthermore, they mentioned the existence of obstructions that prevent the manufacturing SMEs from successfully achieving a holistic approach of sustainable business development. The management of the entire process of sustainability and failures to disclose sustainability information that could frame, as well as itemise the aspects that weakens the entire process, were among the obstructions mentioned.

Smith and Sharicz (2011) defined TBL sustainability as the result of the organisation's activities demonstrating its ability to maintain the viable business operations (including economic viability as appropriate) whether on voluntarily or governed by law, while not negatively affecting any social or ecological systems. According to Ogoro and Osiemo (2014), the TBL framework was largely adopted by most Kenyan commercial banks in the making of their strategic sourcing decisions. Most of these commercial banks scored benefits and deals including the maximised profits and sustained competitive advantages. The TBL framework was also successfully utilised by the US construction sectors to assess the direct and indirect impact on their sustainability (Kucukvar & Tatari, 2013). Despite the TBLs success in sustaining other sectors, South African SMEs, including those who operate in the manufacturing sectors of the Cape Metropole, are struggling to integrate and balance sustainability dimensions into their mainstream operations during the accounting periods (Ladzani & Seeletse, 2012).

The case study conducted in the UK by Castka, Balzarova, Bamber and Sharp (2004) indicated that most SMEs do not fully adopt the TBL sustainability way of running business, as they are engaged with at least a part of the TBL/ Corporate social responsibility (CSR) umbrella. These SMEs, however, are unaware of their deeds and are clueless about their engagements.

According to Ramasobana and Fatoki (2014), investigated the extent to which SMEs in South Africa attempted to practice sustainable ways of running businesses and barriers that affected the complete achievement of those practices. The SMEs' indicated a high level of accountability and responsibility towards the suppliers and the clientele (stakeholders whom have direct influence) but a minimal level of concern for the communities and ecology. Yu

and Bell (2007) noted the inflating pressure ensuing from a comparison of SMEs with big enterprises as the contributory factor for SMEs' failures to build strategically strong relationships with the communities.

The International Federation of Accountants (IFAC, 2013) documented the SMEs' obsolete philosophical attitude of aligning sustainability measures and initiatives with large companies as one of the obstructions that hinder the success of their sustainability endeavours. The IFAC furthermore highlighted SMEs mentality influencing their attitudes by viewing sustainability measures as initiatives that bear unaffordable and unnecessary economic burdens as a role player in their reluctance to fully adopt the holistic approach of sustainable development. The scarcity of the instruments, frameworks and theories focusing strictly on SMEs assessing and measuring the complex environment, and social performances were part of the hindrance factors as well (Davies & Crane, 2010; IFAC, 2013).

Research has been done widely on the idea of sustainability elsewhere, building a case and piling evidence integrating the social, environmental and financial performances for sustainability of large businesses (Luken & Stares, 2005). Limited scholarly work, however, has been done on advising avenues of sustainability in the context of manufacturing SMEs in South Africa as a growing area of the economic, social and the environmental aspects. In addition, SMEs' challenges such as minimal understanding of carrying out the social responsibility of businesses, financial difficulties, lack of resources, and their limited knowledge were also identified as hindering factors. The lack of environmental frameworks and the deficiency of the policies developed to steer the process of assisting manufacturing SMEs to report the non-financial performances was also noted to be the factors hindering the overall SMEs' sustainability (Schaper, 2002).

Research evidence addressing SMEs' failures and advising on the management of sustainability issues of the manufacturing SMEs has been developed elsewhere in the world. There, however, is limited evidence reporting about advancing the sustainability of SMEs in South Africa, particularly attributed to the manufacturing sector of the Cape Metropole. According to Salimzadeh, Courvisanos and Nayak (2013), the contributory factors to the slow progress of SMEs achieving sustainability are failures to convert sustainability attitudes into management practices.

SMEs generally lack positive attitudes towards environmental issues, contributing to their failures to integrate them into their mainstream operations. Consequently, it is perceived that manufacturing SMEs operating in the Cape Metropole are among SMEs deemed to be unsustainable and lack the understanding of integrating the TBL dimensions to measure and maintain the sustainability of their enterprises.

1.3 RESEARCH PURPOSE

This research's main intention is to determine the extent to which the decision-makers of SMEs in the manufacturing sector of the Cape Metropole use the TBL framework as a tool to measure the sustainability of their enterprises. Precisely, the research was carried out to determine whether the decision-makers of manufacturing SMEs integrate the social and environmental performances into their mainstream operations to measure the sustainability of their enterprises (Slapper & Hall, 2011). It was of interest to the researcher to find the balance between the variables of the three pillars of sustainability, and thereby, establish if it result or translate to the sustainability of the mentioned manufacturing SMEs.

The manufacturing sector was preferred because it is part of the very fabric of South African nation. The sector is recognised for its role in developing the economy by contributions to the national GDP. The sector is also known for encouraging productivity, inspiring research and development, and for its investment in the regeneration of resources for the future (by renewing, recycling and reusing of resources). The sector has positive results on personal economic science as well.

Manufacturing is integral to the economy; it has been considered part of the development and creation of a global 'Great Power' by international trade via imports and exports. Producing turned into the most essential segment that greatly influences the South African economic growth and development. Manufacturing is the reason for global trade because of the goods produced, and by that virtue, the manufacturing sector creates many job opportunities. Services are also dependent on manufactured goods.

1.4 RESEARCH QUESTIONS AND OBJECTIVES

1.4.1 Research Question

The overarching question this study seeks to answer is: To what extent do the decision-makers of SMEs in the manufacturing sector of the Cape Metropole utilise the TBL framework as a tool to measure the sustainability of their enterprises?

1.4.2 Sub- Questions

The study will be guided by four research questions:

- To what extent do SMEs consider the importance of incorporating the components of the TBL framework for the purpose of reporting their profits?
- What factors contribute to the decision of business managers to fully adopt the TBL framework?

- What are the major challenges and opportunities in using the TBL framework as a tool to measure the sustainability of SMEs in the Cape Metropole, South Africa?
- How can SMEs integrate the three components of the TBL framework for measuring their sustainability and maximise profits?

1.4.3 Research Objective

This study's main objective is to determine the extent to which the decision-makers of SMEs operating in the manufacturing sector of the Cape Metropole utilise the TBL framework as a tool to measure the sustainability of their enterprises.

1.4.4 Specific Objectives

It is from these research questions that the study is guided by the following specific objectives:

- to determine the extent to which SMEs consider the importance of utilising the TBL framework as a reporting tool to measure the profitability of their enterprises;
- to identify factors that enhance or hinder how managers of SMEs make decisions to employ the TBL framework to its full potential;
- to determine the challenges and opportunities in using the TBL framework as a tool to ensure the sustainability of SMEs; and
- to determine how SMEs can utilise the TBL framework to ensure lengthy sustainable advancement and maximum profit.

1.5 MOTIVATION FOR THE STUDY

The sustainability of firms has become an important research area, since firms are the productive resources of the economy. Without support from firms, sustainable development is impossible to achieve. The high failure rate of SMEs in South Africa and the growing research substantiation from other spheres of the world called for the exigency of sustainable business advancement of the sector. The SME sector has always been acknowledged for its contribution and significance in the economic growth and the development of South Africa. Notwithstanding, the commended sector is still prone to the experience of challenges pertaining to sustainability.

Growing research has piled evidence highlighting the failures of SMEs, but limited research has been done on finding avenues to forestall those challenges. Mabesele (2009), Bruwer (2010), Maduekwe (2015) and Sifumba et al. (2017) noted challenges SMEs face that translate to failures. These authors conducted research in the SME sector of the Cape

Metropole. Most of these authors specifically focused on the manufacturing sector. The authors emphasised the quest for business sustainability, but limited research has been done on advising how sustainability can be attained by such manufacturing SMEs.

This study's focus is aligned with possible ways to avert failures by suggesting the TBL framework as a possible aid for manufacturing SMEs to benchmark their success and to be a guide in the pursuit of their sustainability. The appeal placed on businesses to consider the social and environmental value has prompted the need for this study. The study links environmental and the social performances into the mainstream operations to benchmark the long-term survival of manufacturing SMEs.

According to the authors' knowledge, limited research has been done so far, specifically addressing the sustainability issues of manufacturing SME sector of the Cape Metropole. The latter partly attributes to SMEs' limited understanding and knowledge of linking the social, environmental and financial performances as metrics to benchmark their long-term survival (Luken & Stares, 2005). Manufacturing SMEs are still struggling with the TBL approach and integrating its components into mainstream operations is still a challenge.

The literature shows limited studies conducted on advising the use of the TBL framework as a tool to measure sustainability of manufacturing SMEs, particularly in the Cape Metropole. The study conducted by Ladzani and Seeletse (2012), however, focused in the SMEs operating in Gauteng Province, who attempted to use the TBL tool to measure their business social responsibility and performance. The study suggested that the results do not necessary cover SMEs in the entire country and, therefore, they cannot be generalised to the remaining eight provinces. Consequently, little is understood about the extent to which manufacturing SMEs in South Africa use this tool to manage and benchmark the sustainability of their businesses.

It became necessary to fill this gap by covering the Cape Metropole, if only to avert the high failure rate of manufacturing SMEs that consequently results in a sluggish economy. Using the TBL tool could benefit manufacturing SMEs by opening many chances to increase revenues, decrease costs and build loyalty, as those are positive contributions in both short-term profitability and longer-term competitiveness (Luken & Stares, 2005).

Without research such as this, it would be impossible for institutions and policymakers to be informed about their interventions to advance the sustainability of the SME sector. It is also impossible for manufacturing SMEs to gauge the sustainability of their enterprises using the TBL framework as a tool. The TBL framework is critical for the survival of these entities. A study, such as this one, is important to inform and direct the government's interventions that are meant to aid and ensure that SMEs do not only survive but also, that they thrive.

This study exposes the decision-makers of manufacturing SMEs to the benefits of the strategies and initiatives adopted by their peers and even larger competitors that integrated TBL metrics to benchmark sustainability. These strategies and initiatives should provide sustainability lenses that enable and direct their endeavours to benchmark their businesses in their usage of TBL tool against the best practices, and possibly, adopt the best practices or improve on their current usage. Without research, such as this, the decision-makers of manufacturing SMEs can continue using their own weak strategies for managing businesses to their peril.

1.6 RESEARCH METHODOLOGY

This study adopted specific research design, tools and methods in order to solve the research problem in a pragmatic manner. However, it should be noted that this section only provides a summary of the research design, tools and methods that were used in this study, as they are explained in greater depth in Chapter Three. In particular, the summary pertains to research philosophy and approach, data collection and analysis.

1.6.1 Research Philosophy and Approach

Research philosophy is sometimes referred to as the research paradigm (Rolfe, 2006). The research methods are designed to create new and truthful knowledge, but they might differ in their fitness for purpose (Venkatesh, Brown & Bala, 2013). Decisions on which one to follow should be based on the research question, the purpose of the study, and the context of the study (Venkatesh et al., 2013). The proverb of a pragmatic theoretical perception is that the methodology and techniques that should be chosen, should be considered by their capacity to answer the question the study seeks to address, and satisfy the aims and objectives of the researched study (Cornish & Gillespie, 2009; Johnson & Onwuegbuzie, 2004).

Two major philosophies of research methodologies are used in social science, namely qualitative and quantitative approaches (Bouma, Ling & Wilkinson, 2012). These two basic philosophies have two distinct epistemologies, which are positivism and interpretivism. The distinction between these approaches is the fact that the positivist paradigm favours the scientific quantitative methods, while interpretivists favour humanistic qualitative methods.

This research study focuses on the TBL framework as a tool to measure the sustainability of the manufacturing SMEs. This research lands itself in an environment where a positivist approach is the most ideal. The main objective of this research is to determine the extent to which the decision-makers of manufacturing SMEs of the Cape Metropole utilise the TBL framework as a tool to measure the sustainability of their enterprises. The positivist approach was chosen on the basis that it depends on the assumption of the objective reality and it is

measurable utilising strategies that are independent from the researcher and the research instruments. In this way, knowledge resulting from positivist research is deemed objective and quantifiable.

This study then falls under the ambit of the quantitative research paradigm (Ahmad, 2012; Bruwer, 2010; Mabesele, 2009; Maduekwe, 2015). This research envisages that the findings will develop new and truthful knowledge that can clarify if the TBL framework is serving as the suitable tool for measuring the sustainability of manufacturing SMEs. The researcher envisages that the findings will provide direction about sustaining SMEs and contribute in finding solutions to mitigate fundamental factors and challenges facing manufacturing SMEs' sustainability. These solutions can contribute to avert the failures of manufacturing SMEs.

1.6.2 The Target Population

The population of this study consisted of the SMEs operating in the manufacturing sector of the Cape Metropole. The targeted population comprised of SMEs in the sector concerned with manufacturing and with a track record of operating for more than a year.

1.6.3 The Sample population and sampling technique

According to Collis and Hussey (2013), a sample comprises some members of a targeted populace, which means a sample is a sufficient part of the targeted population that represent the entire population. The purposive sampling technique was used in this study to select 200 manufacturing SMEs in the Cape Metropole. According to Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2014), the chosen purposive sampling is an example of nonprobability sampling used when the size of the populace studied by the researcher is unknown and not every element of the population has an opportunity of being chosen. This method was deemed appropriate for this study because it involves the sample drawn as the portion of the population encompassing the characteristics, the qualities of the population, and served the purpose of this study (De Vos, Strydom, Fouché & Delpont, 2011). Moreover, the method has been widely used in research by various scholars as attested by the likes of Bruwer (2010), Maduekwe (2015) and Ndwiga (2011).

1.6.4 Research instrument / questionnaire

According to Sifumba et al. (2017), a questionnaire survey primarily falls within the purview of the positivistic research paradigm. Close-ended questionnaires were used as a tool to assist the researcher in gathering large quantities of data. The researcher, therefore, administered the questionnaires using two approaches, which were by mail or hand-delivered to business owners and/or the managers of the manufacturing SMEs operating in the Cape Metropole.

1.6.5 Data collection methods

The researcher collected data using a survey questionnaire. According to Remenyi, Williams, Money and Swartz (2002), questionnaires are generally used to gather evidence of large quantities to possibly convert them into numbers (quantitative). A survey questionnaire was in paper form and was filled in by the respondents. A questionnaire is a research official document comprising a series of inquiries and different prompts to collect information from respondents.

Primary data were collected from owners or managers of the selected manufacturing SMEs using self-administered closed-ended questionnaires. The questionnaire was divided into five sections to ensure clarity. This instrument was considered to be logical in gathering an extensive volume of data from a large number of respondents within a brief timeframe and it was convenient for a researcher, as it is cost effective (Brynard & Hanekom, 2006; Maduekwe, 2015). In addition, a questionnaire survey was deemed helpful for gathering information from the respondents, keeping in mind the goal of directing factual examinations to sum-up the results of the population (Maduekwe, 2015).

1.6.6 Data analysis

Descriptive statistics were used to describe basic features and the characteristics of the respondents surveyed in this study to provide simple summaries and frequencies about the sample and the reliability of the data. The aggregated data were analysed to serve as empirical evidence for the pertinent findings of this research. A total of 200 structured questionnaires were disseminated to respondents. The returned questionnaires were scrutinised for data preparation the same way and the documents were attached respectively. This was happening for the appropriate data collected around the Cape Metropole. After data collection, the summary of responses was first entered into the summary sheets on excel and the exported to SPSS 24.0 for further statistical analysis. In the analysis, the researcher followed three central steps:

- **Data preparation:** This involved cleaning and organising data collected from participants.
- **Descriptive statistics:** This involved describing the data collected. In this case, descriptive statistics such as displaying means, standard deviations, frequencies, percentages, cumulative frequencies and cumulative percentages were used to measure the participants' perception with respect to the statements on the questionnaire tool. All descriptive statistics are covered in greater depth in Chapter Three.

- **Inferential statistics:** This involved testing the assumptions derived from the theory and reviewed from previous research. In particular, regression analysis and t-tests were used as measures of association. The measure of association in this case relates to establishing if the variables on the dimensions that were dependent on each other, in order to draw conclusions about an additional meaning of the data.

1.6.7 Data findings and reporting

Applied research is the research project intended to apply its findings to mitigate and/or solve a certain existing problem. The author of this research discussed the findings from the study to assist in the mitigation and/or probably solve the identified research problem. In essence, this type of research was designed solely with the intention to solve or mitigate an existing problem, to combat manufacturing SMEs failures and ensure their sustainability (Collis & Hussey, 2013). Although this study focused on manufacturing SMEs, the findings might be applicable to other SMEs operating across other sectors in the Cape Metropole as well as in South Africa. The problem has bearing in the sustainability of manufacturing SMEs and consequently, affects the growth and development of the country's economy.

1.7 ETHICAL CONSIDERATIONS

The ethics in research is the application of ethical principles by the researcher in the process of piloting scientific studies. The ethics includes the protection of the information and informants who provided the information. In the case of this study, the information gathered was strictly confidential and solely utilised for the aim and purpose of this study. Research sources who partook in the survey were thoroughly informed about their anonymity and their protection was guaranteed before they commenced with the survey. Participants reflexively granted consent by dialogue before gathering the information. This was to ensure the researcher's consideration and the compliance with research ethics as per the requirements of the Ethics committee. The involvement of human participants in the study required the researcher to seek an approval and ethics clearance certificate from the Cape Peninsula University of Technology's Ethics committee before commencing with data collection. The information and the informants were protected with the highest degree of confidentiality and the information gathered was used solely for this research.

1.8 DELINEATION OF RESEARCH

The research focus was drawn in the centre of manufacturing SMEs in the Cape Metropole as well-defined in the Small Business Act of 1996 (South Africa, 1996) and revised in the Small Business Amendment Act of 2003 (South Africa, 2003). The enterprises should have

hired in total between 20 to 200 full-time equivalents of paid employees. The business had to be operating in the manufacturing sector for at least more than a year.

1.9 SIGNIFICANCE AND CONTRIBUTION OF RESEARCH

This study is significant in several ways. First, according to Watkins (2008) and Bruwer (2010), the research should contribute to the body of knowledge. This study contributes to the under-researched area of the SME's sustainable business management practice. Current literature is predominantly from the developed markets (Stewart & Gapp, 2014). This research was conducted with the aim to add value regarding highlighting new debates in the discourse of sustainability of SMEs, particularly in the manufacturing sectors of Cape Metropole in South Africa. Second, the findings might highlight on how to improve the operationalisation of manufacturing SMEs. Third, the study might provide insights in the extent to which TBL framework is used as a tool to measure sustainability of manufacturing SMEs, to raise lessons on how to avert manufacturing SMEs' failures, and enable decision-makers and practitioners to measure the sustainability. Fourth, this study might provide insights on sustainability as a known concept and highlight levels of management in the manufacturing sector of the SME and policymakers on how to improve the sustainability of SMEs. Furthermore, this research was conducted to better the knowledge of SMEs' management on the importance of acknowledging the three pillars of sustainability that ensures that people and planet considerations, if integrated and accounted for in profit reporting, will result in a better rate of sustainability for manufacturing SMEs.

CHAPTER TWO LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter (chapter 1) discussed the outline of the study, the definition of the problem, the key objectives and the research questions. Chapter 2 provides literature on SMEs operating in the manufacturing sector, which is the focus of the study. The key variables are identified, and the direction of research process is provided, concentrating on explaining manufacturing SMEs and what the TBL framework is in general. The emphasis of this study is projected on the extent to which TBL is employed by manufacturing SMEs to understanding the impact on their sustainability.

This chapter reviewed prior studies on the perceptions of SMEs regarding the effectiveness of the TBL framework. While discussing TBL within manufacturing SME industry is the main aim of this chapter, the scope of the literature review is expanded to embrace an overview of SMEs, in order to provide an understanding of the definition of SMEs, role of SMEs in an economy, and government support for SMEs. The chapter explored how SMEs attempted to integrate the concepts to use the TBL framework to its full potential, focusing on prior research conducted on factors hindering SMEs in utilising the TBL framework as a tool to measure their sustainability. Lastly, the chapter looked at how the environment, social and economic (TBL) concepts are integrated into the purpose of reporting profits and further look at how these concepts interrelate.

The South African government projected a target of 24 million jobs to be created through the contribution of SMEs. These anticipated jobs will result in a curtailment of the unemployment rate from 24.9 per cent in June 2012 to 14 per cent by 2020. These anticipated statistics will then be followed by the estimated six per cent in 2030 (NDP, 2012). This study focuses on the SME sector regarded as one of the priority sectors of the South African economy. This sector aims to create opportunities for growth and development by providing and creating jobs opportunities and improving the development of entrepreneurial capacity for social benefits. Particularly, this study focuses on the manufacturing SMEs. The manufacturing SMEs' absorption capacity and its ability to create jobs has positively contributed to eradication of poverty and diminished extreme hunger.

This study was conducted with the intention to inform the implementation of one of the objectives of the African Union that promote sustainable economy and social development. This research was also conducted to support one of the imperative objectives of the Western Cape government, which aims to mainstream the sustainability and efficiency of SMEs by promoting social inclusion. The SMEs sector has greatly influenced the economy, as it has been bestowed with the potential capability to reduce the unemployment and financial

hardships. Lastly, this study is aligned with the global strategic objective of supporting environmental sustainability, which is addressed by investigating the environmental component of the TBL dimensionality.

2.2 SMALL AND MEDIUM ENTERPRISES IN SOUTH AFRICA

The issue of what constitutes a small or medium enterprise is not alien and is the major concern of the literature. Secondary research conducted by Bowler et al. (2007) and Van Scheers (2011) noted that there are no universally conformed definitions of small businesses. The differences in countries where people adopt particular standards for particular purposes have influenced different definitions and resulted in serious impediments to formulate the ubiquitous definition.

This category was accorded different definitions by scholars and authors. Although the terms SME and SMME are of an equivalent use worldwide, there is no definition that is common to expound these terms, as MSME is also used (Micro, Small and Medium-sized Enterprises) (Robu, 2013). The location where the SME is situated, as well as the specific legislation that governs the country of location, greatly influences countless definitions of SMEs (Leopoulos, 2006).

Table 2.1 demonstrates a synthesis about the different approaches of SMEs.

Table 2.1: Different approaches to the SME notion

No.	Approach categories		
	Criteria	Name	Dominant characteristics
1	Economy sphere	Generalised	Establish different defining criteria of small and medium enterprises for all activity sectors
		Differentiate	Using various criteria of delineation of SMEs by considering the field of activity: transport, telecommunications, trade, etc.
2	Number of indicators Used	Uni-dimensional	Using the definition of SMEs as a single indicator; the most common indicator is the number of employees
		Multi-dimensional	Define the size of SMEs based on several indicators; the most commonly used are the number of employees, turnover and capital

(Source: Nicolescu & Nicolescu, 2008: 60)

The South African National Small Business Act 102 of 1996 (South Africa, 1996) was later revised by Act 29 of 2003 (South Africa, 2003). The Act classified small organisations into four classes, namely micro-enterprises (which include survivalist enterprises), very small enterprises, small enterprises and medium enterprises. The research conducted by Smit and

Watkins (2012) highlighted the distinguishing factor of these categories as the number of employees, except for micro-enterprises. Furthermore, Smit and Watkins (2012), and South Africa (1996; 2003) further clarified the criterion as also depending on the turnover level.

Table 2.2: Definition of SMMEs given in the National Small Business Act

Enterprise Size	Number of Employees	Annual Turnover (in South African Rand)	Gross Assets Excl. Fixed Property
Medium	Fewer than 100 to 200 depending on the industry	Less than R4 million to R50 million, depending on the industry	Less than R2 million to R18 million, depending on the industry
Small	Fewer than 50	Less than R2 million to R25 million, depending on the industry	Less than R2 million to R4.5 million, depending on the industry
Very Small	Fewer than 10 to 20 depending on the industry	Less than R200 000 to R500 000, depending on the industry	Less than R150 000 to R500 000, depending on the industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

Source: (Maduekwe, 2015)

From the above, the key contrast is the definition of SMEs in South Africa, as outlined by Act 102 of 1996. The SMEs in South Africa are categorised by their sizes and income levels. For this study, SMEs will be classified as shown in Table 2.3

Table 2.3 Classification of SMEs for the purpose of this study

Category	Description
Small Enterprise	20 – 50 employees.
Medium Enterprise	51 – 200 employees

Source: (South Africa, 2003).

The study focused only on manufacturing SMEs since such entities could have attained a certain size and sophistication that the study required (Maduekwe, 2015) to investigate the extent to which the TBL framework was used to measure sustainability. Besides, very small and micro enterprises typically lack adequate resources. Maduekwe (2015) explained that SMEs often possess the requisite resources. They might have the capacity and the potential to implement and utilise the TBL framework. The very small and micro enterprises that include survivalists, self-hired persons and those working from the poorest stratum of the population were excluded (Berry, 2002). These firms comprised of street-vendor enterprises, backyard service businesses, occasional home-based manufacturers, and the owners of the home-based evening jobs (SEDA, 2016). It, therefore, was impossible and an unfair practice

to test the micro and the very small enterprises in using the TBL framework, as they were not expected to be fully aware of the tool and sustainability measures.

2.2.1 Small and Medium enterprises in the manufacturing sector

Over the past decades, manufacturing SMEs have been playing a crucial role as the driving force behind socio-economic growth and industrial development and, acting as prime agents of change and growth of emerging economies (Qeke & Dubihlela, 2018). Principally, they dominated a large part of the business establishments. Roughly 90 per cent and more of all businesses worldwide account as SMEs and the larger portion is operating as manufacturing SMEs; hence, the demand to sustain these enterprises was necessitated (Moore & Manring, 2009). Manufacturing SMEs have been endowed with the potential of providing opportunities and eradicating poverty more sustainably. They are recognised for their active role in environmental and social programmes. Manufacturing SMEs became an area of concern as their positive contribution to the economy could not be overlooked.

The manufacturing SME sector was reported to have employed at least 20 per cent of the regional workforce and accounting for eight per cent of all exports in the UK (Moore & Manring, 2009). They approximately contribute around 85 per cent of employment in the manufacturing sector of Ghana and further account for around 70 per cent to Ghana's GDP. The manufacturing SME sector occupied about 92 per cent of the total business establishments of Ghana (Abor & Quartey, 2010). Lastly, SMEs account for 96.6 per cent of total organisation establishments in the manufacturing sector of Malaysia (Singh, Olugu & Musa, 2016). The data indicate that manufacturing SMEs are indeed valuable contributors to the economy worldwide.

In South Africa, manufacturing SMEs are known for their pivotal contribution of between 52 to 57 per cent to GDP and their provision of employment of about 61 per cent (Abor & Quartey, 2010). Recent data suggest that manufacturing SMEs act as catalysts for prosperous economic progression as well as the improvement of human resources. South African manufacturing SMEs are also famous for dominating the manufacturing industry. They account for 58 per cent of total SMEs' establishments, championed with absorbing private and public rejected employees, and endowed with the potential of creating opportunities for economic development and entrepreneurship (Ramukumba, 2014). It can be confirmed that manufacturing SMEs are globally significant and are key drivers of the economy. The entire business sector, including the service sector, is dependent on them.

The same commended manufacturing SME sector with tremendous contributions in the growth of the economy and development is susceptible to challenges, which affect their sustainability and set them up for failure. A study by Moore and Manring (2009) revealed that manufacturing SMEs are responsible for a significant amount of economic and environmental

impacts. Manufacturing SMEs in the UK account for at least 70 per cent of the pollution despite their contribution of 30 to 40 per cent in the GDP.

Manufacturing SMEs in developing markets such as South Africa are considered potential social and the economic growth prospects. They are known for being vehicles of entrepreneurship and employment opportunities, integration between the local economy and regional development, innovation, competition, supply chain, and procurement development. The manufacturing SME sector, however, is still struggling with sustainability issues. Authors such as Fatoki (2012), and Ngary, Smit, Bruwer and Ukpere (2014) are of the communal view that in general, SMEs inclusive of those operating as manufacturing concerns are significantly struggling with sustainability issues. The attention they require from academics and practitioners can aid in their development and finding concerted solutions to overcome their sustainability issues (Sifumba et al., 2017).

2.2.2 Challenges facing manufacturing Small and Medium enterprises

The manufacturing SME sector is among the priority sectors recognised as catalysts of hope for the agenda of the radical economic transformation of South Africa. Re-industrialising South Africa's economy was noted the first point on the agenda, where the government promised to create conditions of industrialised economy through manufacturing and beneficiation, or the processing of raw materials (Ashman & Newman, 2018). The government has promised to promote a diverse economy to generate mass employment by investing in the development of the manufacturing SME sector (Bhorat, Buthelezi, Chipkin, Duma, Mondi, Peter, Qobo, Swilling & Friedenstein, 2017). The manufacturing SME sector, so far, is increasingly gaining popularity as drivers for diminishing unemployment, given that the formal area keeps on providing employment in urban and peri-urban sectors (Agwu & Emeti, 2014).

Ardic, Mylenko and Saltane (2012) estimated the aggregate monetary yields, and that half of the GDP to be from SMEs in South Africa and it is likewise evaluated that they contribute around 60 per cent of the labour force (SEDA, 2016). Notwithstanding, the preceding common notion, manufacturing SMEs face challenges that affect their sustainability and require urgent attention (Sifumba et al., 2017). Manufacturing SMEs in South Africa generally confront various difficulties (Lee, 2009).

The SMEs' counterparts from developed republics, pressurise them as customers and partners from developing countries to adopt and engage in the agenda of CSR/TBL for the sake of competitive advantage (Moore & Manring, 2009). They, however, use physiognomies disadvantages as excuses for non-compliance and non-engagement, which is costing them sustainability (Enderle, 2004). These physiognomies refer to personalised management, finance, scarcity of resources and limitations, flexibility, horizontal structure, limited

customers, restricted access to the markets, and the lack of knowledge about modern technology (Alshawi, Missi & Irani, 2011; Ciliberti, Pontrandolfo & Scozzi, 2008).

A study by SEDA (2016) noted the inability for SMEs (in general, including the manufacturing sector) to access markets as one of the major factors threatening their longevity. It turned out to be true that SMEs are inspired to put resources into natural measures more by outside pressures than by inward reasons and that affects the adaptability of competitive advantage. The presentation of an ace dynamic technique inside manufacturing SMEs is risky, their lack of resources and skills required to strategize is a challenging matter. SMEs in the manufacturing sector frequently do not possess these skills and resources, negatively affecting the overall competitive advantage (Masurel, 2007).

Research by the Department of Trade and Industry (DTI, 2008) highlighted some obstacles that also confront manufacturing SMEs to translate into slower growth. Having found that the lion's share of South Africa's SMEs once in a while make it due past their early stages going past an average of 3.5 years. Enderle (2004) confirmed that SMEs are tiny fishes swimming defencelessly, following in the footsteps of gigantic whales bearing too much pressure of high expectations placed on them. The unfair gap between SMEs and large companies and the pressure placed on SMEs is unfair since SMEs are still struggling with limited time and resources while facing survival battles. The limited knowledge of manufacturing SMEs about investing in the TBL could be a gap needed to assist and overcome these difficulties.

A study by Bruwer (2010) highlighted SMEs' weakness when it comes to prioritising, which seem them tackling short-term surviving issues compared to long-term goals. Their strategic decision-making is worrisome and their tendency of living from hand-to-mouth is affecting their future competitive advantage that could translate into the enterprise development. The growing debate is on mechanisms for smoothing enterprises' networking and innovation as their turnaround strategy (Chipika & Wilson, 2006).

The results of the field study by Egbu, Hari and Renukappa (2005) reported numerous manufacturing SMEs appear to have casual correspondence systems that suits their affordability. These correspondence systems, however, are suitable for short-term problem-solving and not long-term strategic decision-making because they have a fast turnaround response to internal problem-solving. The need for networking with other organisations among themselves was necessary and it could play a tremendous role in advancing and overcoming long-term issues they might encounter. Despite regularly lacking time and resource limitations, recognising and utilising the imperative outside wellsprings of scientific and technological expertise through networking advices would influence the development of manufacturing SMEs businesses (Egbu et al., 2005).

Sustainability issues are not the only challenge for SMEs sector. Manufacturing operations are complemented by countless social trepidation that influences the different phases of the production processes (Kemp, 1994; Seuring & Muller, 2008). The negative effect of social programmes on manufacturing costs might be performance measures (producing costs) depending on a transient perspective. One of the social challenges is that employees have a relatively great number of responsibilities due to a horizontal structure and shortage of capacity. The latter does not only affect their performance but also has a tremendous effect on productivity. The challenge of manpower and productivity is increased by a lack of knowledge of advanced technologies. The inception of using flexible working hours and beefing up security measures to increase production volume and costs has a potential to generate profits for the time being but it does not guarantee sustainability in the long-term (Gimenez, Sierra & Rodon 2012).

According to Olugu, Wong and Shaharoun (2011), SMEs are stated to be struggling not only with resource limitations, but also facing dire consequences of numerous laws and rules. These laws and rules have been prescribed for manufacturing operations and subsequent products by many countries, and SMEs still battle to address these concerns.

One of the reasons manufacturing SMEs battle to address challenges is that owners have limited external contacts. They exercise control over their businesses' operations unaware of environmental changes. The lack of appropriate education and training about environmental changes could be the limitation to the manufacturing SMEs' innovative environment (Madrid-Guijarro, Garcia & Van Auken, 2009). Egbu, et al. (2005) discovered SMEs' tendency of sharing knowledge through casual systems. These casual systems, however, are ineffective when gathering the useful information. These SMEs must consider networking as a suitable solution to connect with contacts that can assist with providing solutions to their problems. Darcy, Hill, McCabe and McGovern (2014) noted the useful information they could obtain from networking that can contribute to advising SMEs about sophisticated strategy formulation and the implementation of sustainability tools.

2.2.3 The Small and Medium enterprises' case for corporate sustainability

The case of corporate sustainability is understood as the company's value of enhancing the ecological and social effects as their approach to achieve economic sustainability (Dyllick & Hockerts, 2002). The notion of corporate sustainability is increasingly influenced by the nature of the firms' operations (Lee, 2009). Lybaert (1998) noted that the mission of the most SMEs is to generate and maximise profits, to avoid bankruptcy, and all other reasons that could have their firms sacrificed. In essence, the dominant motivation for most SME businesses is the profitability of their operations (Williamson, Lynch-Wood, & Ramsay, 2006). This motivation might be what costs them their sustainability.

The Responsible Business Forum is not against SMEs' motivation of generating and maximising profits. They, however, suggested that SMEs should direct their focus on sustaining the ability of economic, environmental and social elements of their business as the approach to outsmart the great challenge faced by business entities and management areas (Kadłubek, 2015). Dyllick and Hockerts (2002) suggested that a corporation can only be truly sustainable if it addresses two or more cases of sustainable development; the ecological and social case of sustainability.

The study by Scholtens (2006) found no direct or simple one-to-one relationship between "financial and sustainable development". The literature, however, confirmed the relationship between financial growth and sustainable development as the guide to steer the direction of business operations. This process suggests that the firms should not operate beyond (or close to) the environmental carrying capacity, and suggest the need to address the 'societal case' for financial sustainability to be visible and be truly achievable (Dyllick & Hockerts, 2002). SMEs' mission should go beyond generating profits and address the biggest concern that is affecting the sustainability of enterprises. Sachs (2012), and Xing, Liang and Xu (2013) supported the recent literature that highlight the impossible generation of profits in both time and perspective while disregarding non-financial performance measures that concern the social and environmental aspects of business operations.

The sound economic performance and profit generation was considered important in the past, as it was expected to guarantee corporate success for companies and shareholders' values. Currently, the inflating pressures ensuing from environmental degradation and social concerns drove businesses to be led by the so-called TBL (Lee, 2009). Organisations must target enterprise-specific sustainability endeavours to meet TBL requirements and must contribute positively to both short-term profitability and longer-term competitiveness (Luken, & Stares, 2005). The insight by Coetzee (2017) highlighted the attention and prominence that sustainability gained throughout the past decades. The study explained that sustainability should revolve around profitability and growth. Profitability and sustainability should be given equal consideration as prime objectives and drive to encourage SMEs.

The main survival drive of SMEs should be investing in sustainability to increase opportunities for profit generation and avoid threats that challenge profitability growth (Moore & Manring, 2009). The literature is in favour that there should be no isolation between sustainability and profitability. Williamson et al. (2006) suggested using the CSR or TBL approach for running organisations as the best suitable way to ensure companies generate profits in a socially and environmentally responsible way to achieve business sustainability. The 'business case' for CSR or TBL appears to be the strongest debate and discourse must be addressed by tackling the systemic social and environmental problems as indicators and measures. Furthermore, they explained that tackling social issues at the workplace can

positively progress the sustainability of the environmental improvement measures (Luken & Stares, 2005).

The extent to which SMEs adopted the CSR/TBL approach of running sustainable business was researched in the case study conducted by Castka et al. (2004), who surveyed the feasibility of CSR for SMEs from a UK perspective. Most SMEs were engaged with at least part of the CSR umbrella. These SMEs, however, were unaware of their deeds and were clueless about their engagement. Luken and Stares (2005) presented data from the context of developing markets, which pointed out that the rising series of social and environmental requirements deluged SMEs. The pressures ensuing from global customers and suppliers submerge them with the fear of losing their competitive edge.

The insufficient knowledge of business scenarios that attributes to obstacles and drivers of SMEs-CSR relationships and the absence of solid body of evidence is also confirmed as the major contributor hindrance to the full adoption of CSR/TBL by SMEs (Perrini, 2006). SMEs, therefore, tend to concentrate on internal issues over which they could practice control. Most responsible SMEs focus on employee issues, enhancing employee skills and team building, although that is not enough. Using morale and motivation of employees within the organisation could be used as a social indicator. SMEs must further enhance the effect of employees on community and environmental initiatives and use it as a drive to pursue sustainability (Castka et al., 2004). The lack of public, government, community, and media attention is the setback that must be addressed, as it could serve as a possible update to SMEs on environmental matters and issues (Prabawani, 2013).

2.2.4 Sustaining manufacturing Small Medium enterprises

Most research pursuing to evaluate organisational sustainability has settled scores within the confines of large multinational companies, excluding the small to medium-sized enterprises, and more specifically, in the field of the manufacturing sector (Darcy et al., 2014). This sector is increasingly maneuvering its way to thrive, as well as seeking the attention of social and environmental awareness. Sifumba et al. (2017) suggested that the attention that manufacturing SMEs seek requires academics and practitioners to cooperate and find amicable solutions to address significant sustainability issues.

Not only does manufacturing SMEs require attention for organisational sustainability but there is also underlying demand for sustainable manufacturing. Sustainable manufacturing implies the creation of products utilising minimum resources with insignificant negative effects on the environment and safe for society at large to consume at an affordable cost (Singh et al., 2014). Moore and Manring, (2009) asserted that manufacturing SMEs might not acknowledge their regularly noteworthy ecological impacts (in the UK, for example, SMEs

could be accountable for up to 70 per cent of all industrial pollution). The research evidence has also attributed ecosystem imbalances mainly due to manufacturing operations (Chouikhi, Khatab & Rezg, 2014).

While the district comprises of numerous and various sources of economies, a typical attribute is the importance of a sizeable, rapidly growing and significantly expanding SME sector (Harvie & Lee, 2002). SMEs in the developing countries have been serving as a backbone in the economy and assisted communities in the development, and at the same time, became catalysts of hope in the improvement of rural economies. Included in these are manufacturing SMEs who played a pivotal role in the sector by having a positive effect on personal economic science. Their lifespan, however, is in question since they are battling with issues of sustainability. The literature reported that SMEs in South Africa have been mostly known for their collapse in less than an average of five years (Bruwer, 2010). This has demanded urgent attention and exigent quest of a framework that could combat the challenges of SMEs' sustainability.

The SME sector is highlighted for struggling without receiving enough attention from the government and their lack of resources, knowledge, expertise, finance was noted among other reasons for them being set up for failure. South African revelation of approximately 70 to 80 per cent failure rate of SMEs within the first four years called for sustainability issues to be addressed as a matter of urgency in the sector, specifically, the manufacturing industry (Ngubane et al., 2015). Due to the regulations imposed by stakeholders and partly because of threats imposed by traditional old-fashioned manufacturing practices, manufacturing sustainability is increasingly becoming a necessity in the manufacturing SME sector (Singh et al., 2014). It became of paramount importance for manufacturing SMEs to integrate their sustainability philosophy in their daily manufacturing operations (Singh, Olugu, Musa, & Mahat, 2018).

A study by Seuring and Muller (2008) sighted the perspective of sustainability as commonly ascribed to the idea of TBL framework, which encompasses these three aspects, namely environmental, social and economic dimensions. The research has been done widely within the confines of large multinational organisations on the issue of TBL. Up to this date, however, there is still a limited discussion covering the context of TBL in the SME sector (Davies & Crane, 2010; Jenkins, 2006). The argument heated that most theoretical frameworks or models advising sustainability and/or environmental management are not applicable to address the needs of SMEs (Perez-Sanchez, Barton & Bower, 2003). Graham and Bertels (2006) discovered unsuccessful attempts and applications proven by existing sustainability portfolio frameworks and tools in the context of SMEs. Slapper and Hall (2011) argued in the defence of TBL, as a flexible tool, a one-size-fits-all tool that companies should apply for the accommodation and suitability of their needs.

The economic performance and profits alone can no longer guarantee an assurance of companies' long-term survival. When engaging about sustainability for strategic planning and decision-making purposes, a company must incorporate non-financial performances, such as social activities and environmental impacts (Sezen & Çankaya, 2013). Manufacturing SMEs must start to produce their products under economically sound and safe processes (Singh et al., 2018). They should also consider offering employees specialised training and motivation to enhance or maintain their productivity. Their competitiveness can be expanded by their involvement in the communities where they operate for benefits of deals, such as loyalty and labour retention (ITA, 2007). It is advisable for SMEs to strive and minimise negative environmental effects and conserve natural resources. These endeavours can contribute to their sustainability aim and improve profit generation.

Manufacturing SMEs must increase their competitive advantages and market shares by adopting sustainable manufacturing to enhance the overall performance of the organisation to attain sustainability (Singh et al., 2016). Florida (1996) endorsed zero-emission strategies as strong indicators to move to the environmentally-conscious manufacturing, and the elimination of the environmentally-damaging by-products from the production process. Manufacturing SMEs should explore activities concerning environmental cognisant manufacturing and efforts that could advance manufacturing productivity and performance (Burke & Gaughran, 2006).

Sustainability can be achievable if the manufacturing costs are reduced, and waste and defects kept at minimal levels. The increase can be seen in resource efficiency and the effectiveness of manpower productivity (Hargroves, Desha & Weisaecker 2016). Waste minimisation and increase in resource efficiency will address the problem of resource limitations of SMEs while community involvement will boost competitiveness by improving the organisational image (Singh et al., 2018). Chipika and Wilson (2006) suggested networking as one of the essential strategies to promote the development of SMEs by innovation that could advise on how these SMEs can be developed and maintained in a competitive environment.

Manufacturing SMEs could apply a corporate green sustainability strategy matrix and adopt the green manufacturing to enhance their environmental performance. Such a strategy matrix could render numerous benefits, including cost savings ensuing from eco-efficiency, boosted corporate image, strengthening relationships with local communities, and access to emerging green markets and an upper hand in competitive advantage (Lee, 2009). A study conducted from a China perspective by Zhu and Sarkis (2004) in the manufacturing sector proved the significant relationship between green initiative and environmental performance. Furthermore, the benefits of adopting green manufacturing can produce a smaller amount of waste and defects, fewer resources and energy consumption, and little environmental

pollution. The latter can be a reference of the positive outcomes of sustainability by improving the environmental impact (Sezen & Çankaya, 2013).

Most executives of SMEs are sceptical about early-bird investing as they believe that green management does not bring the benefits of financial reward but bears an extra cost-burden (Lee, 2009). The lack of knowledge is manifested by most manufacturing SMEs who aligned green investment as pertinent to large companies (Banerjee, 2001). The latter is due to limited studies on green management that relates to SMEs in business management literature (Lee, 2009). Furthermore, Lee (2009) highlighted the overcharging question that executives of the organisations seek to address is about the integration of environmental strategies into business operations for profitable results.

In summary, to sustain SMEs generally, including those operating as manufacturing concern, there must be a proven balance that exist in the three Ps that are Profit, People and Planet, otherwise known as the three Es, which are Economy, Equity and Environment, or best alluded to as TBL. This means that the SMEs should not compromise one of the Ps while seeking to achieve the best results in the other Ps. According to the existing literature that this study has reviewed, the TBL framework ideally became the existing tool that can currently give the balance of the three pillars of sustainability that are interdependent and yet interconnected (Jamali, 2006).

2.3 TRIPLE BOTTOM LINE EXPOUNDED

TBL is the term commonly ascribed to John Elkington, the prominent chair, co-founder of sustainability and the sustainable business consultant (Elkington, 2004). The idea of TBL as produced by Elkington (1998) focused on the refinement of the financial and social aspects of sustainability, which were historically consumed by an environmental measure of the sustainability (Govindan, Khodaverdi & Jafarian, 2013). The TBL approach, otherwise known as the corporate social responsibility (CSR), has increasingly become a subject of much research (Govindan et al., 2013). The policymakers defined the TBL as the idea where organisations incorporate the social and environmental activities into the main business operations and the voluntary constant interaction with the stakeholders (Williamson et al., 2006).

2.3.1 Importance of Triple Bottom Line

Researchers such as Schilizzi (2002) have argued that organisations' fundamental application of TBL has always been about enhancing public images. Meanwhile, other scholars (Ozanne, Phipps, Weaver, Carrington, Luchs, Catlin, Gupta, Santos, Scott, & Williams, 2016) have argued that the TBL is about engaging in lawful environmental and

socially responsible activities, while they applied the idea as the acknowledgement and representation of the compact made among three components (Brown, Dillard & Marshall, 2006; CICR, 2004).

According to Tullberg (2012), TBL has been an eminent motto to acquaint businesses with a model that evaluates environmental and social effect. Many organisations battle to coordinate their solid level of sustainability concerns with similarly solid activities, given the complex nature of overseeing numerous sustainability-related issues (Kiron, Kruschwitz, Haanaes, Reeves, Fuisz-Kehrbach & Kell, 2015). Hubbard (2009) explained the idea of TBL as based on firms' possibility to measure and benchmark its performance relating to relationships with a comprehensive scope of stakeholders. Stakeholders of any company also comprise local communities and governments, and not only those stakeholders that were recognised in the traditional philosophy of running a business with whom it has immediate, transactional connections (for example, workers, suppliers and clients).

2.3.2 Underpinning Theories of Triple Bottom Line

The fundamental theory of the TBL is based on the evolving three-dimensional definition of sustainable development that surfaced in the 1990s after the release of the Sustainability Reporting Guidelines in August 2002, held at the World Summit on Sustainable Development (Lamberton, 2005; Van den Bergh, 1996). Organisations are progressively assessed inside the general population circle, and inside their own particular associations, as indicated by the degree to which they are perceived when they advance this nexus of ideals, as though it is not an effortless aim (Ozanne et al., 2016).

TBL emerged as a tool for measuring business performance as based on the stakeholders' theory. The TBL tool became the groundswell of public opinion in many countries and was recognised as business responsibility that goes beyond creating economic value (Hubbard, 2009). Norman and MacDonald (2004) concurred that is almost a platitude that firms will struggle in the long-term if it consistently disregards the interests of the key stakeholders. The concept of TBL, as guided by the stakeholders' theory, demanded the responsibility of the company to lie with stakeholders rather than the shareholders. According to Brenner and Cochran (1991), and Rowley (1997), a stakeholder theory of the firm should define and forecast how organisations operate under various conditions. In this case, 'stakeholders' refer to those who either directly or indirectly influenced the firm's actions. The comprehensive scope of stakeholders should include workers, consumers, suppliers, communities representing local residents, government agencies, and those whom the business owes.

According to Van der Linden and Freeman (2017), the stakeholder theory in the business entity should be regarded as an indicator for coordinating stakeholder interests, instead of maximising shareholders' (owners) profit. Companies should engage with various types of stakeholders for the benefits of deals that result in the generation of profits.

Companies should invest in processes that will enable them to produce safe products that are less harmful and have an insignificant effect on the environment, provide job opportunities, avoiding excessive harm to the environment, protect human rights, and respect the integrity of democratic governments. The latter could expose them to ideals of benefits and positive incentives that could impact on profits. The idea of TBL has been acknowledged and promoted by most advocates from both inside and outside of the corporate world. It emphasised firms' wide range obligations to behave responsibly towards stakeholders (Norman & MacDonald, 2004). This idea further required the companies to commit into balancing and refining environmental and social effects without decrementing economic performance (Williamson et al., 2006).

Despite the fact that TBL has been warmly welcomed, with most literature explicitly written to advocate and introduce the idea to encourage the adoption, it has been argued and critiqued for its difficult and incoherent methodical way to define (Slapper & Hall, 2011). The procedure or formula (analogous to the calculations on a corporate income statement) to be used to benchmark the calculation of two additional and non-financial bottom lines were a boiling issue in the literature (Norman & MacDonald, 2004). The senseless perception, therefore, grew around the idea of the 3BL, and the prominence of taking all three 'bottom lines' was described as a novelty by Norman and MacDonald (2004).

Elkington (2004) objected and maintained that the theory of TBL language is being viewed contradictory, to what the tool might offer when put in practice. The theory encourages parallel activities rather than true integration. He advised that it is still early days to assess the methodology and once the idea gains the general desirability and acknowledgement, genuine progress in social and environmental bottom lines will be attained.

Elkington (2004) insisted that the TBL agenda is much more of a comprehensive approach and it needed to be given a chance. TBL involves an extensive diversified range of stakeholders and it coordinates throughout many areas. Norman and MacDonald (2004) argued there is still a boiling issue that is deep between the traditional bottom line and both social and ecological dimensions. Elkington (2004) asserts that the issue is because the TBL agenda has not yet gained the desired acceptance since it is currently understood at a surface level.

The TBLs philosophy identifies the new and enlarged responsibility for businesses of today to promote not only the integrity of the natural environment but also contribute to the health

of the society in general (Henderson, 2001; Miller, Buys, & Summerville, 2007). Mitchell (2008) believes that sustainability can be achieved through TBL and the integration of the three prongs of economic prosperity, environmental quality and social justice. This heuristic approach and process is used with the aim to conceptualise sustainability and provide the framework for reporting under the guidelines of sustainability (Elkington, 1998).

2.4 CONTEMPORARY STUDIES ON TRIPLE BOTTOM LINE

TBL is recognised as a successful framework to assist in measuring the sustainability of the companies and organisations in the suitability of their specifications, requirements, sizes and needs (Slapper & Hall, 2011). The TBL tool might have been defined as difficult to quantify but the tool assists companies to operate in the lenses of sustainability, accountability and responsibility. Many companies have declared holism as the prerequisite to guide the sustainability initiatives and using TBL reporting as a boosting mechanism for organisational credentials enhances organisations' cognitive validity, and also is responsible for boosting companies' status and further improve the reputation (Sridhar, 2012).

According to the study by Gimenez et al. (2012), environmental and social programmes benefit companies regarding their effect on the TBL. The companies who believe in the TBL framework as the vanguard of the company's success are destined for greatness since they are on the lookout for the three prongs that sustain. Those companies invest in building value chain resources, focus on expenses and investments that do not make short-term economic sense but do make TBL sense (Glavas & Mish, 2015).

Some researchers described ecological activities as the exorbitant initiatives that outbalance economic performances (e.g. Waley & Whitehead, 1994; Gimenez et al., 2012). The literature, however, argues for the cost saving benefits that can be achieved by companies who integrate environmental obligations in their economic strategies. The investment could result in the resource reduction and productivity, at the same time expand revenue generation from strengthened stakeholder relations and branded image (Gimenez et al., 2012).

The growth in both research and implementation of sustainable development has been delayed by the intricacy innate in the combination of decisions that have seen numerous interdependent factors involved. It has a bearing on the economic, environmental and social performances of the business. Ioannou and Serafeim (2017) noted developing social (e.g. poverty, weakening social equality, and defilement) and ecological (e.g. environmental change, water utilisation, and waste) challenges that have created renewed pressures on organisations through shareholders, investors and scope of non-shareholding stakeholders,

which could embrace a more efficient approach towards risk management and sustainability reporting.

Companies that produce TBL reports are demonstrating an increased transparency and accountability by increasing stakeholders' knowledge about the impact the company has on the society where it operates, in addition to its financial performance (Jackson, Boswell & Davis, 2011). These firms show having purpose other than the maximisation of shareholder returns since they do not focus only on competitive advantage but also on collaboration and stewardship. Their purpose is to achieve by operationalising the value of a TBL constructing the phenomenon with a long-term progressive dimension, which is accessible to customers in the market place in the form of TBL value propositions (Glavas & Mish, 2015).

According to Öztürk and Özçelik (2014), organisations that absorb activities that intersect social, environmental, and economic performance, positively affect the natural environment and society. Their costs and benefits are aligned with advantages of using standards and certifications based on organisational cultures. They also reveal both positive and negative aspects for them and at the same time, they offer leadership for systemic intelligence across the channels of social and environmental contexts in which they operate. Lastly, they gain long-term economic success and competitive advantage.

2.5 SOME TRIPLE BOTTOM LINE ASSUMPTIONS

It is now a common practice that most enterprises are starting to report in all three areas, and the positive results in most of these organisations appears to be measured in line with the association between firm size and TBL reporting. The emergent awareness required the necessity for organisations to balance their social and environmental performances with their operations to measure sustainability (Jennifer-Ho & Taylor (2007).

The difference between the ancient history of companies and today is that profit is no longer the corporation's sole objective and drive since other aspects of non-financial performances must be considered. Chief among the mentioned non-financial measures is social and environmental issues that trigger many interests including those of stakeholders. Companies must build relationships with its stakeholders for success of the organisation and that often leads to sustainability (Russo & Perrini, 2010).

This study is conducted on the manufacturing industry given its impact on environment, people and economy that provide new prospects that significantly contribute to sustainability of SMEs (Gimenez et al., 2012). According to Luken and Stares (2005), the rising social and environmental requirements are reasonably putting SMEs in fear of losing their competitive edge. The fear, however, over shines the benefits that positively contribute to both short-term profitability and longer-term competitiveness. The study conducted by Gimenez et al. (2012)

reflected the contribution of size and, environmental and social strategic orientation together as variances in economic performance, which positively affect sustainability. Pimenova and Van der Vorst (2004) noted several financial incentives exist which are aligned to the environmental and social improvements of SMEs. SMEs are short-sighted regarding their access due to limited knowledge and resources.

The ecological developments in most organisations are geared for ecological sustainability aiming to reduce the use of harmful substances production, and minimise the environmental pollution as well as reduce the exploitation of valuable resources (Griessler & Littig, 2005). Due to the growing global issue of climate change and the awareness of environmental pressure, the increasing efficiency of operations and sustainability is necessitated for organisations to reduce the environmental impacts. According to Brown et al. (2006), organisations significantly affect the environment through their operations and activities. Parker, Redmond and Simpson (2009) revealed that 60 per cent of all carbon dioxide emissions and 70 per cent of all pollution in the UK to be from SMEs. SMEs, however, are often confronted with major challenges including scarcity of resources, deficiency of knowledge and limited technical capabilities to counteract their negative ecological impacts.

It, therefore, is in the interest of this research to test the effect of considering the environment in the TBL dimensionality and whether it leads to attainment of sustainability. Gadenne, Kennedy and McKeivern (2009) reported several studies that revealed the concerns of SMEs' decision-makers about their organisations' environmental impact and their curiosity about finding the ecological practices that could benefit their businesses in the future. Lack of financial resources and time, however, were hindrances that resulted to a less positive environmental attitude and sparse investments in the ecological dimension (Gadenne et al., 2009).

The social dimension of TBL is based on stakeholders who have acquired relevance in the organisation through relations, whether direct or indirect. SME practitioners recognise stakeholders for their strong influence in business management and sustainability (Perrini, 2006). There are positive benefits linked to business opportunities through market prospects, production efficiency, human competence and the enhancement of competitive relationships when there is involvement in social responsibility that result in sustainability outcomes.

Perrini (2006), highlighted the positive relationships between social responsibility and business opportunities regarding the market opportunities, productivity, human competence and the improvement of the competitive context. A study from the UK revealed that SMEs' social responsibility appears the main driver of the environmental improvement, and their main perceived benefit is an improved image (Pimenova & Van Der Vorst, 2004). The latter is evident, as these dimensions are intertwined and they positively affect each other. The

enhancement of one-dimension results in improvement of the other. According to Gimenez et al. (2012), SMEs' operations are the vanguard of personnel employment with the maximum footprint and effect on the external community due to its significant outcome on sustainability's social dimension. This research, therefore, seeks to find what influence the social dimension has on sustainability.

2.6 COMPONENTS OF TRIPLE BOTTOM LINE

The TBL approach, as defined by the CEO of VanCity (one of Canada's largest credit unions), is the approach to be adopted by businesses that considers environmental, social and financial results in the initiation, implementation and progress of corporate business strategy (Norman & MacDonald, 2004). Slapper and Hall (2011) posit that TBL has gained prominence, as numerous organisations and non-profit associations have adopted the TBL sustainability system to assess their performance, and a comparative approach has picked up economy with governments at the federal, state and local levels.

Davies and Crane (2010) described the TBL framework as the common phrase that references CSR, and a practice that moves organisations away from the single bottom line philosophy (economic). Moreover, its mandate is concentrating on diminishing or negating organisations' negative effects on environment and expanding or enhancing positive impact. In other words, the TBL approach of running a sustainable business requires businesses to consider the natural environment and people. Integrating and managing the three, yet important, legs of sustainability, however, is a challenge that companies are struggling to master (Jamali, 2006). Slapper and Hall (2011) are of the opinion that the challenge is not only on defining and integrating the dimensions of TBL framework but also, measuring them is tricky since there is no financial value attached to social and ecological aspects. Norman and MacDonald (2004) attested that one of many persevering proverbs of modern management is "if you fail measure, what are the possibilities of managing".

Research by Painter-Morland (2006) explained that TBL reporting is an important source of moral resuscitation in business life since it reframes business success in a way that promotes ethics management and CSR activities. Willard (2012) concurs that good environmental and social activity can make business sense since it bears benefits that address sustainability issues systematically. The environmental and social coordinated efforts can assume a critical part in accomplishing the TBL advantages and add to a reasonable improvement of the society (Govindan et al., 2013).

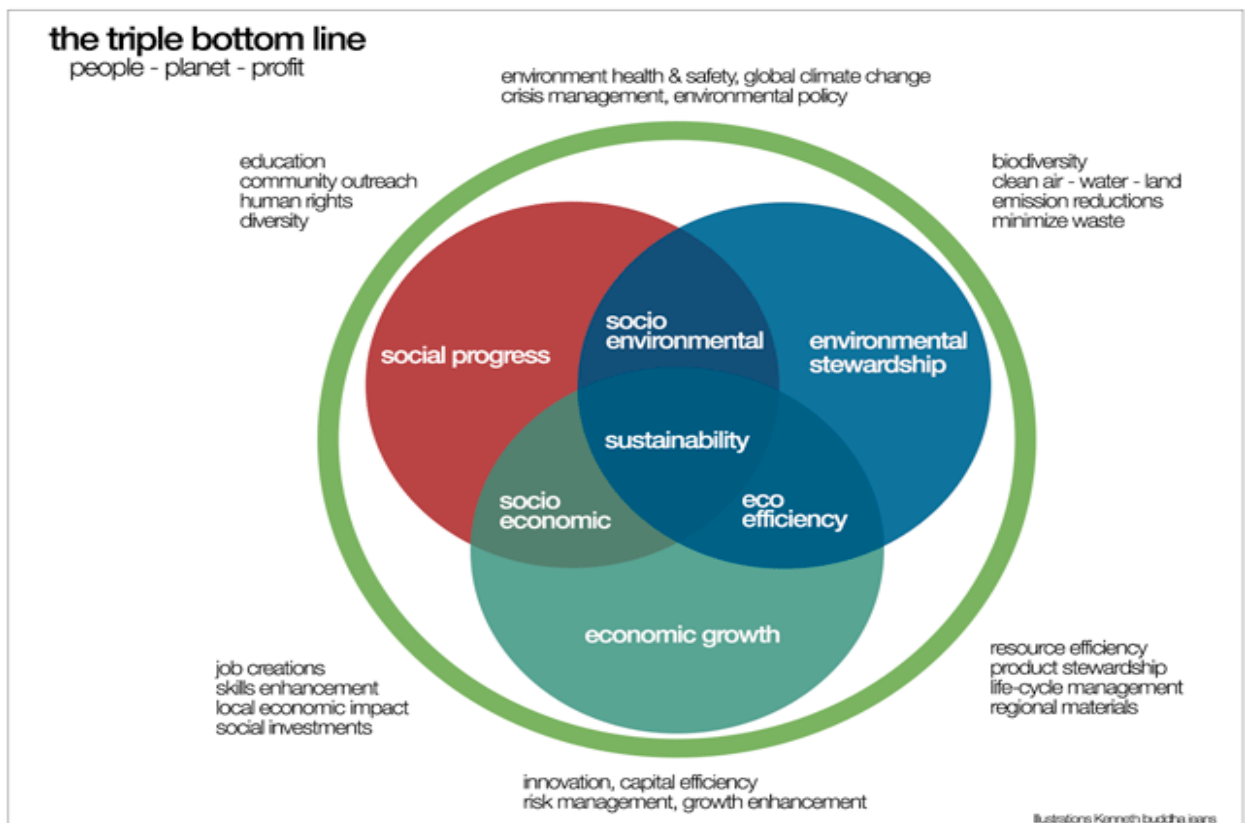
Masurel (2007) motivated that there is no doubt that the interconnection of 'planet' and 'people' is important in the process of chasing profits, so businesses should go back to basics, which is sustainable entrepreneurship. Schaper (2002) is of the opinion that

sustainability can be foreseen as a win-win situation in the long-term if companies can ensure that the environment is protected when they endeavour to achieve and pursue economic growth and the development of their enterprise, and as such, work hand-in-hand instead of creating competition between the two.

Figure 2.1 demonstrates the benefits of the interdependent, yet interconnected, three components encompassing sustainability (Willard, 2012). Figure 2.1 demonstrates that the three dimensions are interconnected and there are benefits such as social progress, economic growth and environmental stewardship (Seyfang, 2005). In other words, sustainability can be achieved by taking care of the socio-environment, in the process of being eco-efficient and address the socio-economic issues.

Willard (2012) explained this diagram as the three overlapping circles model. The meaning and the interpretation of the TBL model differs from one business to another depending on how business leaders for that specific business decide to view it. Most leaders would prefer one dimension to be dominant over the other two. The importance of this model, however, lies in acknowledging the intersection and the relationship of economic, environmental, and social factors.

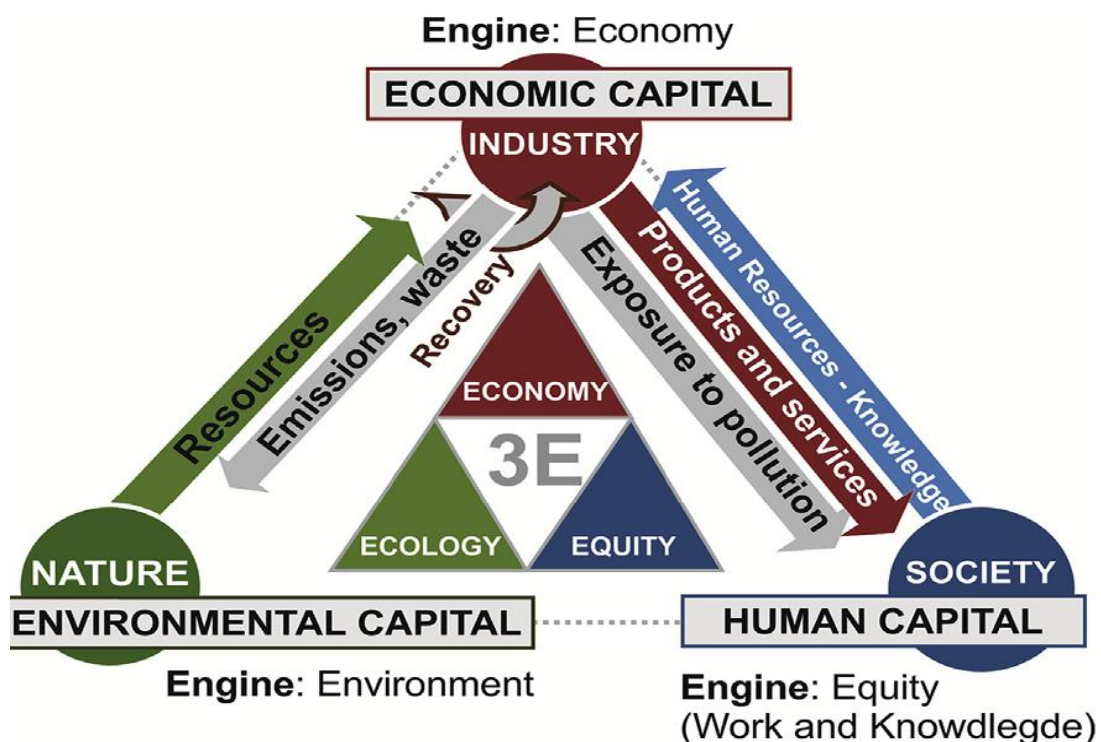
Figure 2.1: Triple-Bottom Line Sustainability Accounting Model



Source: (Lyngaas, 2013: 1)

The TBL framework is also sometimes presented as triple Es, otherwise known as Triple Ps as shown in Figure 2.2. The key elements are presented to illustrate the economic factors of economical capital affecting the industry and influencing the economic dimension. The presentation of equity through human capital in the social dimension that are influencing the sustainability and the environment are presented by the variables, which affect adding value and destroying nature and ecology. The figure demonstrates the manufacturing process as a field of choice in the study.

Figure 2.2: The Triple 'E' framework



Source: (Álvarez, Bárcena & González, 2017: 3891)

Figure 2.2 explains the manufacturing process as the advancement that is portrayed by three developments. First, the focus is directed on finding the solutions of economic and technical feasibility. Second, it considers the environmental energy and functional efficiency (Gómez-Parra, Álvarez-Alcón, Salguero, Batista, and Marcos, 2013). Last, it combines the above two approaches by incorporating social requirements (Álvarez et al., 2017).

The social demands for the goods and services should be satisfied. Satisfying these demands, however, affects the environment. The impact is by the immense contribution of manufacturing stages and the consideration of products', services' or industrial systems' lifecycle's results (Álvarez et al., 2017). This figure is advocating that businesses must consider the social and economic factors of the industrial activities and ensure that they are cyclical, harmless and efficient to avoid damaging surrounding areas (Álvarez et al., 2017).

2.6.1 Influences of the economic dimension

The economic dimension refers to financial feasibility that addresses issues of competitive markets, job creation and marketing spaces for the benefit of long-term profitability (Jamali, 2006). Hubbard (2009) highlighted the legal requirement for organisations across the world to outline their corporate performance in their financial statements. Economic performances influence the stakeholders' economic circumstances, and the economic systems at local, national, and/or international levels (Sezen & Çankaya, 2013). Fauzi, Svensson & Rahman (2010) opined that corporate performance as an element of the market system are reflected in how the company interrelates with the financial factor and customer product markets.

Fauzi et al. (2010) explained financial markets as where the corporate performance is assessed in the form of satisfying shareholders and creditors through financial indicators. They explained the factor market as the corporate performance evaluated through the corporate's ability to pay the suppliers and other production owners in time and the agreed amount. Finally, Ekwueme, Egbunike, and Onyali (2013) highlighted the corporate performance in the perspective of the customer-product market, as based on the ability of the organisation to provide quality to customers at an affordable value, which is the net effect and thus, will be demonstrated in the corporate income. Furthermore, as explained by Zhu and Sarkis (2004), economic performance includes profitability, revenue growth, an increase in market share, and an increase in productivity.

The channel that is traditionally used to inform the stakeholders about the accounting and economic performance of the corporation is annual reports (Finch, 2005; Reddy & Gordon, 2010). Sitharam (2014) reported that SMEs regard the preparation of financial statements as an important main feature of adopting accountability, continuity and compliance with laws and regulations. Furthermore, the road to building a positive business image involves credible record-keeping that brings fairness and transparency to SMEs' stakeholders.

Economic sustainability became progressively comprehensive to allude to producing added value in a wider extensive sense, as opposed to routine financial accounting. It encompasses the systematic management of resources by reducing operational costs and attracting new business by rigorous business integrity policies. They achieve this by reducing the cost of doing business by increasing productivity through a motivated and dedicated workforce, offering opportunity for the incorporation of socially responsible investment indices, and attract a new range of investors (Jamali, 2006). The economic proportion includes the systematic management of reducing operating costs, increase labour productivity, investing in research and development, and investments in grooming additional groups of human capital (Jamali, 2006).

Sifumba et al. (2017) and Urban and Naidoo (2012) suggest that skills are crucial to the sustainability of any SMEs; hence, skills upgrades should be considered of the highest importance and be prioritised for SMEs. Furthermore, Phillips (2006) concurred that there is a lot of economic loss and waste due to the training of around 60 to 90 per cent that is not applied in the job. Organisations can avoid it by taking advantage of processes helping with guaranteeing that the correct projects are offered to suitable individuals to accomplish the correct outcomes. In other words, waste can be avoided by training and hiring suitable candidates for suitable positions.

According to Sherwood (2007), in contrast, the constant utilisation of raw materials and discarding waste left the industrialised system open and unsustainable. Consequently, there is no regard for abundance and shortage of the raw materials utilised as inputs or how waste from any production or process can be recycled and re-used. After some time, however, Sherwood (2007) opined that the firms and other organisations eventually should rely on the sustainable use of renewable natural resources.

According to Moore and Manring (2009), SMEs must network, keeping in mind the goal to get the size and efficiencies expected to contend. Through the accomplishment of such systems, the individual SMEs should trust that the accomplishment of the entire collaboration is paramount to individual SME victories. Networking SMEs' managers are likely to achieve financial and organisational efficiency, which empowers the advancement of innovations and markets fundamental to accomplish sustainable development (Moore & Manring, 2009).

2.6.2 Influences of the social dimension

Businesses must make money and at the same time profitable companies should support their communities. Phillips (2006) explained that profitable businesses bolster communities, beneficent occasions, and invest in education and welfare. Productive individuals bolster the economy, fund-raisers and feel more secure to volunteer their time. Attention to social benefit is not lawful, but rather individuals' consciousness and values are evolving. Once more, it is a given that every one of the 3BL promoters trust that enterprises have social duties that go past augmenting shareholder value. The employments of TBL are essentially synonymous with corporate social responsibility (CSR) (Norman & MacDonald, 2004).

The idea of CSR is not alien as it was around since the 1950s (Mitchell, 2008). Ekwueme et al. (2013) opined that CSR emerged in the late 1980s as a mark for a rationality of financial development in business. CSR introduced an agenda that values not only those who gain can persist into future eras but also those who supports their endeavours. Mitchell (2008) opined that companies can adapt to a culture that engage their stakeholders when responding to CSR agendas. The social agenda is about showing the organisation's progress to employees and other stakeholders about the investments they make in local

communities. Companies should operate with the practices that promote the human rights and dignity of employees (Phillips, 2006). Furthermore, he explained that organisations must build the opportunities that will be programmes for employees to partake in community development projects, and then, the assessment of these results can relate to the business.

Norman and MacDonald (2004) suggested that TBL is vital for the future even if its approach within some firms may not be entirely for social advantages. The company's social performance indicators that the various TBL advocates proposed for social benchmarks included, but not limited to, charitable donations, numerous measures of employee satisfaction and reliability of services that gains loyalty, and perceptions in the community. Florida (1996) revealed that social programmes, employees participating in the programmes and training have been positively influencing the environmental improvement.

2.6.3 Influences of the environmental dimension

The consumers' consciousness about their personal environmental impact would rather see them investing more in the environmentally friendly products (Öztürk & Özçelik, 2014). Intentionally putting resources into environmental measures and concerns is part of demonstrating an earth-agreeable mentality or demonstrating some type of economical business enterprise. For the private sector, this is a part of sustainable business enterprise: attempting to discover a harmony between planet, profit and people (Masurel, 2007). Lee (2009) opined that there is a line of argument that circulates about developing demands for businesses to secure and protect the earth. Organisations are sceptical of whether that will increase the cost burden and subsequently, will have fewer resources to upsurge productivity that might result in their loss of competitiveness in the market.

The UN 1987s Brundtland Report (WCED, 1987) flagged the agenda of social and economic dimension where the need of addressing them in an integrated way would make sense if real progress was to be made in the environment (Elkington, 2004). The general proposition of the goodness of economic growth for the environment has to draw support from the few measures of the environmental quality and environmental sensitive programs. The increasing environmental degradation became an urgent agenda needed business attention as well since the damage was going beyond the improvement of environmental calibre (Arrow, Bolin, Costanza, Dasgupta, Folke, Holling, Jansson, Levin, Mäler, Perrings & Pimentel, 1995).

On the surface level, environmental responsibility inside a firm can take at least one of an assortment of various activities, including ventures to diminish, recycle and re-use crude materials, waste materials, limiting the effect of transportation, energy and water utilisation by a firm, giving or adding to ecological gatherings, the appropriation of a formal ecological arrangement (for example, the ISO 14000 standard), as well as reductions in pollution by the organisation (Schaper, 2002). Masurel (2007) concurred with the latter author that the

mentality of the private sector in this regard can be reflected in various ways. The proficient utilisation of vitality, restricting waste production and constraining contamination appear to be the most critical angles of organisations' environmental conduct.

Masurel (2007) proposed that to develop the environmentally sensitive attitude, mentality and conduct, research must be applied as the structure of educational programmes. Masurel (2007) assessed various stage models of corporate greening, i.e. the procedure by which organisations can get to be all the more ecologically responsible in their operations. King and Lenox (2001) found evidence that firms whose downside risk is minimal and that face the greatest scrutiny are more likely to be early adopters of standards.

The US Toxic Release Inventory (1987), the Chemical Manufacturers' Association Responsibility Care (1988), and the Coalition for Environmentally Responsible Economies Valdez Principles (1989), which was succeeded by the International Chamber of Commerce Business Charter for Sustainable Development (1991) and UN Earth Summit followed with Agenda 21 (1992), as they were the earlier drivers of environmental reporting (Sherwood, 2007). Rothenberg, Pil, and Maxwell (2001) found the link between green lean practices and resource efficiency, which means that manufacturing SMEs can influence the environmental management practices and perhaps improve resource use. The environmental issues that could reduce emissions conserve resources to improve resource efficiency and continuous improvement serves to improve environmental efficiency.

One of the reasons many businesses are so concerned about the environmental agenda is the fact that it is the main priority in the research of the emerging generations of university graduates (Elkington, 1998). Bell (1993) emphasised that we live in a world where the future of the next generation is in the hands of the present generation. The present generation can help by not only conserving resources but also by using them in an innovative way that can develop new resources out of them. While creating new resources, the implications of resource consumption must be well understood, the use of energy and the effects must be studied for the firm's ecological integrity to be meaningful (Jamali, 2006).

Jamali (2006) explains that the role of the environmental dimension is to measure the impact the organisation has on living and non-living systems such as the ecosystem, land, water and air. Jamali furthermore explained that the role of the company's environmental dimension includes ensuring compliance with applicable government regulations and laws, or taking initiatives that can promote environmental sustainability, such as energy efficiency, greening, recycle and re-use, water conservation, energy conservation, and waste management. The latter can be achieved by planned in-house initiatives by each company and prioritising on how to put the resources in an efficient use.

The environmental dimension involves a comprehensive approach to deal with the organisation's operations, products, and facilities that include evaluating business' products, processes and services. The minimisation of waste, defects and emissions, maximising the efficiency and productivity of all assets and resources, and limiting practices could unfavourably influence the delight in the planet's assets by future eras (Jamali, 2006). In the process of developing new resources out of existing resources, the production should take place. Although in the past years, manufacturing and industrialised societies were regarded as mainly a source of the pollution problem. Recently, they also brought solutions by innovations (Cainell, De Marchi & Grandinetti, 2015).

Addressing the impacts of production activities on the environment has turned into a priority for firms because of increasing pressures from buyers, policymakers and the stakeholders at large. Research has confirmed that the stakeholders and policymakers are significant indicators, putting companies under duress to reduce environmental impacts (Antonietti, De Marchi, & Di Maria, 2017). Gimenez et al. (2012) suggested that companies should monitor activities within their own particular factories. Furthermore, they suggested that companies should implement environmentally friendly production.

Casey, Beaini, Pabi, Zammit and Amarnath (2017) concurred with the latter authors and further suggested that the scarce resources should be conserved for necessary usage. The water use should be kept as minimal as possible for the power production. Minimising the natural effects of water consumption for power production preserves ecological assets and ensures human wellbeing. Using productive electric innovations for water treatment, transport, desalination, industrial practices, and other uses can preserve energy (electricity), consequently, decreasing any imbedded water demand.

Gauthier (2005) and Sherwood (2007) analysed the decision-making tool. They described the analysis as governed by various international standards for organisations, for example, environmental management standards ISO 14000-14040-14043. The studies proposed that the different phases of a traditional evaluation of a product's life-cycle includes the extraction of raw materials, production processing, packaging, storage, distribution, use, recycling-destruction and reuse. Furthermore, keeping in mind that the goal is to evaluate the environmental criteria measurements at each phase of the production process, which incorporates and using energy, raw materials, water, and as well as the production of contaminating agents, toxic products, and defects.

According to the study by Gimenez et al. (2012), environmental sustainability is regularly identified when there is improvement in the waste decrease, pollution lessening, the energy effectiveness, reduction of emissions, a decrease in using hazardous/harmful/toxic materials, a reduction of frequent environmental accidents and waste management. Florida (1996)

opined that the efforts to lower the costs of waste management and disposal, reduce waste and emissions do not negatively affect corporate performance; instead, they improve it.

Lee (2008) indicated that the great potential for environmental improvements can be found if management practices can initiate a culture of organisational learning, refining innovation proficiency, and developing human resources to improve cost savings, which can be connected to the span of competitive advantage. The competitive advantages from turning an enterprise towards green sustainability can and should be realised. Lee (2009) opined that the visible ecological change in SMEs would not occur without reasonable empowering elements, so the enterprises have the pressure of whether they are willing to accept the challenge and form part of the solution.

Figure 2.3: The Sustainability Stool Metaphor



Source: (Willard, 2012: 1)

Figure 2.3 was explained by Willard (2012) as the three-leg stool reinforcing three components that sustainability encompasses, which are economic, social and environmental dimensions. It clearly demonstrates that, should one leg be weak, there will be instability in the other two legs. They might look separate, but they are equally connected (Willard, 2012). In other words, the quality of life revolves around acquiring genuine wealth through progress in the three pillars of sustainability. SMEs, therefore, must make genuine progress to acquire genuine wealth to improve their quality of life and be sustainable.

2.7 PERCEPTIONS OF SMALL MEDIUM ENTERPRISES REGARDING TRIPLE BOTTOM LINE

The TBL became a prominent tool to support companies with their sustainability goals. Many businesses across the globe, including non-profit organisations, have adopted and utilise the TBL framework to assess the performances of their enterprises, which further increased their interest in TBL accounting (Slapper & Hall, 2011). The report of the UK DTI project reported over nine in ten (91%) of SMEs describe their businesses as socially and environmentally responsible, and even a higher proportion believe that their organisations have responsible business practices (DTI, 2002a).

Slapper and Hall, (2011) perceived the TBL notion as a good idea because its flexibility allows organisations to utilise it suitably for their specific needs. The Centre for the Creative Leadership (CCL) research paper surveyed the leaders of SMEs, of whom 73 per cent of the respondents reported that the TBL tool is currently important to organisational success, while 87 per cent believed and agreed that the notion is going to be relevant and crucial in the future. According to Buckley (2003), the TBL tool is known for its ability to assess transparent accounting by considering all costs and benefits, as it is not enough to cater for benefits alone while ignoring costs (Quinn & Baltes, 2007).

The literature has reported a limited number of studies that reported the perceptions of SMEs in other spheres of the world and even large companies about the feasibility of TBL framework as the sustainability benchmarking tool. The case study was conducted in the UK for the Department and Trade Industry project (DTI, 2002a). SMEs were defined as ventures with less than 250 employees, and the turnover of less than 40 million Euros (£27 million). The sample of 200 managing directors were interviewed through the methodology of group discussions organised by Aberdeen, Chesterfield, Hastings, Manchester and Preston chambers of commerce. Over 25 per cent of the respondents who took the quantitative survey were owners who managed their businesses. Those respondents were in similar equivalent positions with the respondents featured in this study. The vast majority of SMEs believed that organisations such as themselves should pay significant attention to social and environmental responsibilities. The latter statement was confirmed by the 81 per cent of the surveyed SMEs with 100 or more employees who believed that the TBL/CSR activities contributed to the success of their business (and only 9% disagree).

The study conducted by Jamali (2006) has criticised the feasibility of TBL and refers to it as a complex and multi-faceted framework. At the same time, Williams and Siegel (2001), cited in Castka, et al. (2004), also mentioned that it has not produced significant proof that organisations who have adopted TBL can really outperform different organisations. The studies revealed that SMEs believed in the need of their enterprises to carefully consider

social and environmental obligations. In general, most SME owners/managers trust that the environment is an important issue and reinforced the protection of nature. Reactions to these propositions are oftentimes clear and are usually in the vicinity of 80 to 90 per cent. In any case, awareness of formal environmental management frameworks, particular national laws and additionally, remediation procedures, is by and large exceptionally poor and constrained (Schaper, 2002).

As pointed out by Parrish (2010), because of the expanding awareness of sustainable development since the 1970s, business visionaries are oftentimes asking themselves what role they can play in correcting the issue of social and ecological degradation (Majid & Koe, 2012). Masurel (2007) highlighted that the SMEs' inspiration to put resources into natural issues might not be to enhance the environment as such. SMEs, however, do also appear to be indirectly concerned about the actual environment. Furthermore, Schaper (2002) explained that even though SME entrepreneurs generally believe that the environment is essential, they do appear to reflect on such in their practices, which is all talk with no actions, as they experience a huge challenge in environmental management.

2.8 FACTORS INHIBITING FULL ADOPTION OF TRIPLE BOTTOM LINE

Due to the impact of the decision-makers who fail to express their opinions in linguistic terms instead of in crisp value, there is vagueness in the manufacturing SMEs decision-making (Singh et al., 2018); especially, decisions regarding to whether SMEs fully adopt the TBL approach. Prabawani (2013) noted that SMEs at large are struggling with the challenges due to restricted assets and capabilities. The fact that the SMEs receive less public, government, community, and as well as media attention contributes to the lack of awareness with issues affecting sustainability, specifically, those pertaining to the environmental aspect. SMEs' key people (owners or managers and supervisors) frequently believe that their businesses do not have a significant effect on the natural and social environment (Masurel, 2007). Such SMEs, especially those who are operating as manufacturing concerns that the study focused on, however, are manufacturing products in the natural environment and using the resources generated from the natural environment. These SMEs hired labourers to represent the social sphere and manufacturing in the communities for the consumers from these communities.

It, therefore, can be explicitly stated that the operations of all organisations, including those operating as manufacturing SMEs, do affect the social and natural environments (Will, 2008). Individual SMEs could demonstrate the minimal ecological effect through their processes and operations and pollutions and emissions. Collective SMEs, however, generate the significant impact not only when they benefit the economy but also when they are value-adding or destroying the social and natural environment (Masurel, 2007).

Manufacturing SMEs pay little attention to the environmental impact and environmental practices, as they believe that the value and cost of those practices are not pertinent to them (Castka et al., 2004). Using their struggles of scarce resources and depth of knowledge as hindrance factor, they shift responsibility to large operations since they are located in the same industrial sites, and they often escape their portion of accountability ratio. This is unlike their counterparts (especially in the wealthy developed economies) who are accountable, because they are likely to be located within the services sector, which obviously has not such 'dirty' industrial practices (Schaper, 2002).

The research by the DTI (2002) noted SMEs' fears centre around the bureaucracy that the TBL plan might bring since it is displayed as way too perplex or too complex. Castka et al. (2004) further noted the fear of administration, time and cost as a fundamental boundary to further engagement. The shortcomings of the SMEs hindering the full adoption are based on the perceptions and not the experiences of most SMEs who engaged in the TBL plan, and those that adopted the TBL tool. These obstructions, therefore, are based on the perceptions rather than reality.

The study conducted by Robins (2006) pointed out the TBL framework weaknesses such as, the conflict existing between the stakeholders. Furthermore, the author accentuated that the TBL tool does not provide help for a company manager who compromise the wishes of one group against those of another group of stakeholders. The TBL tool does not indicate clear direction how to prioritise stakeholders, but it emphasises the satisfaction and inclusivity of all stakeholders. Hubbard (2009) revealed that it is difficult to quantify, as it does not necessarily have a quantifiable unit of measure to account for totals of all three bottom lines. Despite of the mentioned weaknesses, Robin (2006) maintained his argument in favour of the TBL tool that considers the needs of all the company stakeholders and never leaving any outside. In essence, if the TBL tool addresses the interests of all key stakeholders and satisfying their needs, the prioritising issue should be an internal matter. In deciding, the SMEs should ensure that stakeholders are given equal importance, not compromising the wellness of one for the sake of the health of the other.

The decay of the natural environment constitutes risks and pressure to commit to intensifying environmental sensitivity but on the other hand, there are benefits of deals and opportunities for business organisations. The organisations that are committed to comply do have a chance to succeed and thrive, as they are lawfully operating under the guidelines of the frameworks to follow environmental regulations (Melville, 2010). Hubbard (2009), however, highlighted the difficulties and the complexity of following and being guided by the unreliable and unclear environmental management frameworks. For instance, ISO 14001 meets the necessities of management accounting and reporting, and to react to community requests for transparency, the system performance is not stated (Bansal, 2002).

According to Lee (2009), the bigger firms, especially multinational enterprises, have been building up the capacities expected to accomplish the TBL in the course of their operations. On the contrary, SMEs do not have economies of scale, and often have minimal knowledge, deficiency of expertise, shortage of skills, and restricted access to finance and human resources to roll out the coveted improvements within their operations (Lee, 2009). In addition, it is regularly viewed that the methodologies are barely engaged in the production process or the product when the SMEs endeavour to change. In this way, SMEs frequently have a restricted view on the course of future advancements and tend to handle green issues specifically narrow (Lee, 2009).

Using the TBL tool in the SMEs has received relatively little attention as compared to large companies (Perrini, 2006). There is also a little collection of writing on SMEs encounters in industrialised nations and an exceptionally limited amount of writing in developing countries (Luken & Stares, 2005; Raynard & Forstater, 2002; Perrini, 2006).

2.9 PERCEPTIONS REGARDING EFFECTIVENESS OF SUSTAINABILITY MEASURES

Elkington suggested the expanded measure of success to companies that does not only constitute the traditional bottom line of financial performance, which is often referred to as return on investments (ROI) or profit (Slapper & Hall, 2011). This expansion went as far as measuring the effect of business operations to two more additional dimensions to address the concerns of social and environmental justice. At the same time, it assesses the value of two additional dimensions in the success and sustainability of the business (Savitz, 2013). Robins (2006) defined TBL reporting as a prominent mechanism that has been given serious attention in recent years for urging businesses to account for the entire effect of their commercial activities, instead of only considering financial performance. Phillips (2006) opined that to date, literally thousands of companies grow their return on investment because of the connection aligned between the three pillars of sustainability. Furthermore, financial growth and progress were achieved by those associations whose pioneers made cognisant choices regarding societal, natural, and economic values. It, therefore, can be envisaged that a business doing that correctly, tends to do well (Phillips, 2006).

Savitz (2013) explained that financial reporting cannot be presented only in numbers, as sustainability does not sum up to an exact accurate figure. Table 2.4 suggests that the financial report should include pages of management discussions and analysis since there is no numeric way to measure the environmental and social benefits.

Table 2.4: The Triple Bottom Line table

	Economic	Environmental	Social
Typical Measures	Sales, profits, ROI	Pollutants emitted	Health and safety record
	Taxes paid	Carbon footprint	Community impacts
	Monetary flows	Recycling and reuse	Human rights; privacy
	Jobs created	Water and energy use	Product responsibility
	Supplier relations	Product impacts	Employee relations
	Total	Total	Total

Source: (Savitz, 2013: 6)

Knoepfel (2001), cited in Castka et al. (2004), for example, contended that an in-depth examination between the segments of the Dow Jones Sustainability Group Index (DJSI) and those of its benchmark, the Dow Jones Global Index, indicates better average returns on equity on investments and on resources for the sustainable companies. The mentioned benchmark segments, therefore, delivered more predictable results to companies who were sustainable for a long-term and could not address the challenges of SMEs. Slapper and Hall (2011) maintained that the TBL is a one-size-fits-all tool, and it was designed to address companies' issues as per their needs and context. Norman and MacDonald (2004) noted that the TBLs emphasis on companies lies in the satisfaction of stakeholders' interests. They made the following statement that organisations cannot succeed in the long-term if they continuously disregard the interests of the key stakeholders. The success of TBL could be benchmarked by the general satisfaction and commitments to communities, workers, clients, and suppliers (to mention, four partners) and it must be measured, calculated and reported (Norman & MacDonald, 2004).

The idea of the TBL concept suggests that organisations should not partake in socially and environmentally responsible conduct only for the sake of financial gains to be obtained in the process (Gimenez et al., 2012). One of the statements made by Masurel (2007) was that companies should commit to realise the value and the effect they added or destroyed in the social and environmental well-being. Furthermore, the author mentioned the interconnection existing between the three dimensions and the relationship existing between their variables. He explained the significant relationship between planet and people that could be possibly be attained by SMEs operating in a more environment friendly way of generating profits. Those SMEs who were proven to consider the well-being of their employees attained increased

profits through the improvement of the working conditions, which subsequently motivated employees to take fewer sick leave and thus, resulted in increased levels of productivity.

According to the study by Moore and Manring (2009), SMEs can be successful and thrive if they consider coordinating social and environmental sustainability endeavours into financial projections as their key business objectives. The possibility of growth could open doors for expansions through advancement of their chances for quick learning. Jamali (2006) posited that environmental reporting is increasingly gaining attention following a financial reporting. The literature established the further challenge that companies should also address and include when reporting, the influence and effect of the social dimension through assessing the variables using indicators such as the community, employee and supplier relationships.

In summary, it can be perceived that SMEs could achieve the desired profits if they can tackle environmental issues and social concerns. SMEs operating in an environmentally conscious way, therefore, does not only protect the planet but also consider the employees' well-being and subsequently, tackling social and environmental justice simultaneously (Muda, Sidauruk & Siregar, 2018). There is no way the environment can be protected unless the social justice issues are addressed. The economical sustainability, therefore, can be measured through the health and wellbeing of the environment and society (Beltrán, Hacker & Begun, 2016).

2.10 THE CONCEPT OF SUSTAINABILITY

Sustainability has gained increased attention from both media and academia (Bohman Carlzon & Jakobsson, 2013). Sustainable development has become the most pre-eminent interest for all aspects of societal daily activities. Over the previous decades, consequent upon the quick exhaustion of natural resources, sustainability progressively emerged to be a critical concern to business research and business practice. Most activist assertions around TBL are also worried over wealth dissimilarity and corporate social responsibility, particularly in emerging economies (Govindan et al., 2013). In the 1960s, the Club of Rome study had a discussion on limits of growth. The debate was re-ignited, and it brought a new understanding that environmental effects and natural resource requests must be restricted, resulting in environmental legislation in several nations (Bijlani & Mierzwa, 2011; Meadows et al., 1972).

Several models and definitions were introduced in an effort to make the concept of sustainability graspable (Paramanathan, Farrukh, Phaal & Probert, 2004). The failure to reach unanimity of the meaning of sustainable development or sustainability lead to a common level of accord that was universally accepted; the integration of environmental, economic and social aspects (Cowell, Wehrmeyer, Argust, & Robertson, 1999). The thrust of

human growth on the natural systems and limited resources prompted the need of a discussion on sustainability issues as never before (Bohman et al., 2013).

The study conducted by Bijlani and Mierzwa (2011) revealed the exigency call for business sustainability as necessitated. The conclusion drawn highlighted that the world would suffer a scarcity of non-renewable assets or resources on which the industrial base depends. The piecemeal ways to that are used to deal and address tackling issues would not be fruitful. The recommended suggestion to avoid collapse, therefore, included to limit the population, contamination, and a cessation of economic growth. The suggestion was made because there were no major changes in existing conditions of the uneven relationship of the three pillars of sustainability, which are natural, economic and social dimensions (Bijlani & Mierzwa, 2011).

The expansion of criticism about the negative environmental and social effect of multinational enterprises was seen in the 1990s. According to Aras and Crowther (2008), this represented another influx of attention after a prior one that began in the 1970s that went on for 10 years and drove a period of economic challenges in the 1980s. The latter mentioned dilemma called for improved government interventions, as it weakened the advancement of markets that could result in increased levels of global exchange and investment (Kolk, 2003).

Corporate worries on sustainability ascended out of a noteworthy defining moment in the civil argument and debate on the environmental justice and sustainability that began with the UN Conference on the Human Environment at Stockholm (Bijlani & Mierzwa, 2011). Since then, the Brundtland's historic point report (WCED, 1987) on sustainable development was published and distributed, and over the years, it has fortified the interest in frameworks of governance that are equipped for putting society on a more reasonable and sustainable track (Jordan, 2008). The only way that brought sense about the sustainable development was the moral imperatives of meeting the needs, safeguarding equity and respecting environmental limits (Holden, Linnerud & Banister, 2017).

Even though Jordan (2008) opined that there should be no centrally determined blueprint for sustainable development, its functional importance must essentially be developed out of an intelligent procedure of social discourse and reflections. If so, frameworks of governance are expected to guide and direct these collective discussions towards an agreeable level of accord. Initially, the 1992 Earth Summit in Rio was asked to investigate what these governance frameworks might resemble (Jordan, 2008), as the World Bank wanted to address challenges faced by human race, the accomplishment of sustainable and equitable developed economy (Cicmil, Ecclestone & Collins, 2017).

Back in 1992, the Agenda 21 was detailed as the universal blueprint for sustainable advancement (United Nations, 1992). All the divisions of the society have been seeking to

translate sustainability and sustainable development within their specific context and were catered for in the Agenda 21 (Du Plessis, 2002). Although the Agenda 21 hardly constituted slick and clean plan about addressing sustainability and achieving sustainable development, the wrangle about how to “govern for sustainable improvement” kept on running.

The second governance-related question raised was about the feasibility of the advancement and how it will be executed. After a lesson that has been agonisingly learnt since 1987 about planet degradation, brought the concern of economic improvement, which does not happen in a programmed or destined way. It, therefore, was suggested that it should be precisely examined, transparently talked about, and be centrally planned (Jordan, 2008).

Most of the research focused on the environmental/green and social dimensions combined (Miemczyk & Luzzini, 2016). It, however, produced less evidence on the level of the investment in sustainability (economic dimension of the triangular). It, therefore, became important for companies to understand that the level of investment and constituent functions have a great impact on their firm’s sustainability (Miemczyk & Luzzini, 2016). Hence, this study focused on encapsulating the relationship between three prongs of the TBL concept to address the issue of SMEs sustainability.

2.10.1 Addressing Sustainability Issues

The Millennium Summit held in 2000 by the United Nations established the eight international development goals for the year 2015 through the Millennium Development Goals (MDGs). This subsequently followed the adoption of the United Nations Millennium Declaration (United Nations, 2001). The world pioneers were dedicated to the significant decrease of the quantity of the increasingly undernourished people by 2015 (Eickhout, Bouwman & Van Zeijts, 2006).

The MDGs emphasised that the global community view the need for drive and the bigger picture to improve the standard of living and perceive the significance of accomplishing feasible and sustainable economic growth for the entire world (Eickhout et al., 2006). The measurements of the seventh MDG (which is to ensure environmental sustainability), however, were poorly elaborated on and quantified regarding monetary values (Eickhout et al., 2006). The United Nations General Assembly reasoned that the selection of indicators for environmental MDG would be virtue and require the promotion of refinement (United Nations, 2001). The greenhouse gas emissions, extent of forest areas, accessibility of a better quality and purified water sources can be used as indicators.

Some observers have noted that the vagueness in the quantifiable measurements of social and environmental bottom lines has been the tool’s most notable shortcoming (Lele, 1991). The sustainable advancement, however, is not objectively determinable using the standard

or fixed quantity measured in monetary terms (Stirling, 1999). The innovative strain between core principle standards, willingness to re-translate and adaption of social and environmental activities gives the sustainable improvement its fortitude (Kates, Parris, & Leiserowitz, 2005). Elkington (1994) formulated the term TBL as a methodological measurement of sustainability performance (Jackson et al., 2011).

The three dimensions that sustainability encompasses are not alien in the literature, as they came to prominence during the 1980s to address the environmental conflict of degradation (Mitchel, 2008). The initiatives to restore environmental health were taken not to compromise the resources needed for future use. The convention of the society has had the proponents of the TBL approach to argue and pose a call to businesses to act in the interest of the public and consider natural, economic and social systems as the requirement (Brown et al., 2006).

Schilizzi (2004) explained that these three essential elements do not only benefit the public but also improve the business performance and measure the success of a business. Schilizzi (2004) further explained the financial aspect in the private sector as an achievement of securing stewardship and obtaining investors in market places. The environmental dimension is the reflection of consistent compliance with government regulations and stewardship to develop a class of the clients. Social execution reflects the management of stakeholders, or the creation and building of partnerships with the labour force, and the neighbouring population.

According to Dutta (2011), the emergence of the TBL approach was to strongly advance the managers to outsmart the attitude of investing in the singular, obsolete financial bottom line, to further consider two additional “bottom lines”. These additional bottom lines are social and environmental aspects. Fauzi et al. (2010) noted an underlying limitation in the old-fashioned traditional reporting, which is its focus on the economic reports. The implications of focusing on the singular approach corporate performance were not only liable for imbalances in the financial aspect and non-financial aspect, but also fail to accommodate and provide for other parties outside the market system (Fauzi et al., 2010).

Price Waterhouse Coopers (2002) and Robins (2006) highlighted the disadvantage of the singular approach created an inflexible image of other different stakeholders in corporate performance. The organisation excluded other parties outside the market system, communities and government (external stakeholders). Fauzi et al. (2010) alluded the TBL approach as a proactive all-inclusive approach to put shareholders at ease with the increased transparency and accountability through an expanded framework for decision-making. The TBL also provided companies a confidence of reporting their finances while taking the responsibility of their actions. SMEs can address inflating pressures ensuing from

different stakeholders, be liable for their performance, and meet expectations of various stakeholders at the same time.

The TBL framework might have been critiqued as a novelty, as it is a tool that focuses only on measuring, assessing and reporting. It, however, has benefited the individuals who utilise the dialect, as they are now regarded as pieces of a significantly bigger development here and there and are distinguished by the acronym SEAAR: social and ethical accounting, auditing and reporting (Norman & MacDonald, 2004). This movement (to use that phrase freely) has developed in leaps and bounds over the previous decades and it has created the assortment contending principles. These principles are accompanied by the standard-setting bodies comprising of Global Reporting Initiative (GRI), the SA 8000 from Social Accountability International, AA 1000 from Responsibility, and, parts of different ISO standards (Norman & MacDonald, 2004).

2.10.2 Sustainability and the Small Medium enterprises

Sustainability strategies make numerous synergistic impacts on the SMEs working co-operatively and additionally, bring systemic advantages for the lodge. Furthermore, the sustainable SMEs have advantages of creating market spaces for highly competitive networks where large enterprises become less successful (Moore & Manring, 2009). The eighth of the 17 steps of sustainability development goals (SDGS) to a better world promotes the sustained, inclusive and sustainable economic growth, which provides full and productive employment and decent work for all. The provision has been made for this objective, which contains a reference to the requirement for “formalization and development of micro-, small- and medium-sized enterprises, through viability financial services” (UN Sustainable Development Goals, 2017).

SMEs, being the heart of an economy and the role they play in the global economy has been and continues to be tremendously significant in contributing to both GDP and the creation of employment opportunities (Agwu & Emeti, 2014). According to Ramukumba (2014), SMEs comprises more than 90 per cent of African business operations, subsidise up to over 50 per cent of African employment, and contributing more than half to GDP. The SME sector demonstrated the optimistic signs in South Africa, Mauritius and North Africa. Tehseen and Ramayah (2015) confirmed that SMEs are crucial in both the economic growth and sustainable development of any economy. SMEs are considered the backbone of the economy that dominates and represents roughly 95 to 99 per cent of all companies, while accounting for more than 95 per cent of manufacturing enterprises and secured more than 60 to 70 per cent job creations (Robu, 2013). Their significant role and their importance in the growth and development of the economy cannot be overlooked.

A study by Tambunan (2008) attested that SMEs have been the key sources of employment generation and output growth in both the developing and developed worlds as well. Sifumba et al. (2017) noted their contribution of 51 to 57 per cent towards GDP of the South African economy. Another essential figure, at least 80 per cent of all worldwide ventures are SMEs, employing not more than 250 representatives (OECD, 2002 cited in Moore & Manring, 2009). SMEs constitute 85 per cent of the business sphere in the USA (Akerman, 1999). The SME sector dominated 99 per cent of the European Union business (Ciliberti et al., 2008). Approximately, 99 per cent of the endeavours in the UK are SMEs (Walker & Preuss, 2008). Lastly, SMEs represent not less than 70 per cent of the world's business creation (O'Laoire, 1996). The precise assumption, however, was that 95 per cent of worldwide endeavours account as SMEs and there was a developing demand for their sustainable development as a matter of urgency (Moore & Manring, 2009).

A study by Pandya (2012) observes that the crucial role SMEs play in developing countries could improve income distribution, as well as job creation, poverty reduction and export growth. In essence, SMEs have the potential to lead to the development of entrepreneurship, industry development, and the growth of rural economies. It was further observed by Tambunan (2011) that the SMEs in developing countries, more so than developed countries, have a more social and economically vital role to play. They are believed to be responsible for generating wealth in rural areas through rural economies, at the same time, employing a material labour force from their local economies. Not only are SMEs considered a driving force behind economies, but they have the potential to provide opportunities to prospective entrepreneurs and they have the potential to develop their skills (Herath & Mahmood, 2013).

Despite the fact that SMEs in developing countries act as prime agents of change, they are still struggling with technology and advancement rather than in developed countries, and that is an additional issue affecting sustainability (Perrini, 2006). One of the key reasons SMEs are still battling with the sustainability issues, is the absence of management frameworks that frequently address the bigger picture in the context of SMEs. Some SMEs do not conform to the external policies and frameworks, as they voluntarily comply with systems. SMEs are also not well informed about the reasons behind adopting and complying with certain strategies, for instance, some firms would just implement TBL for enhancing image, but not finding it as an obligation to spend on the environment and the social fabric of the country to secure for the future (Fig, 2005).

Masurel (2007) revealed an insight into a "common knowledge" that SMEs are falling behind in the process of developing a sustainable state of mind. SMEs appear to act distinctively only to a specific degree; a circumstance that cannot generally be managed ideally in the every-now-and-again-situation. The TBL sustainable approach could be beneficial for SMEs

(including manufacturing) because of its benefits such as internal cost saving, open and new competitive markets, and beneficial uses for defects and waste (Tsoufas & Pappis, 2006).

2.11 CONCLUSION

This chapter started off with an overview of SMEs. Stemming from this, it was noted that SMEs were introduced worldwide in an attempt to improve the economy, curb unemployment and alleviate poverty. The chapter also provided important insights into the evolution of sustainability and components of business sustainability. The chapter then outlined the critical components of sustainability within manufacturing SMEs. In this case, it was established that the three components of sustainability, namely; social, environmental and economic factors affect the sustainability of SMEs.

Firms are crucial in facilitating sustainable development since they are regarded as the productive resources of the economy (Chang, Zuo, Zhao, Zillante, Gan, & Soebarto, 2017). The adoption of the TBL framework has the potential to improve the sustainability of SMEs in this increasingly important manufacturing sector, particularly, as it relates to manufacturing SMEs. The approach has been critiqued and noted as a novelty and, at the same time, cited as bearing the economic burden of social and environmental measures, which are regarded unnecessary and considered difficult to measure (Norman & MacDonald, 2004). The very same environmental and social measures, if integrated into operations, can be the key drivers of sustainability. Their consideration, integration and improvement can potentially achieve sound economic conditions. The adoption of the TBL approach has the potential to enable manufacturing SMEs to embrace the sensitive environmental and social programmes in an effort to develop and grow economically sustainable businesses.

This TBL approach could enable manufacturing SMEs to leverage on their drive for profits at the same time encouraging the strong emphasis on minimising the degradation of the planet and trade-off resources. The SMEs can use the TBL tool to benchmark their effect on social justice by the protection and inclusivity of all the stakeholders concerned. This TBL tool has been proven to have sustained different sectors and the researcher deemed it fit to be tested in the manufacturing SMEs with an intention to address their sustainability challenges.

The literature advocates using the TBL tool for the potential benefits of profitability in the long-term by the investment and sensitivity in social and environmental programmes. The drivers can be creating strong relationships with local communities and other stakeholders to improve the brand and reputation, and also gain loyalty and support. Investing in the environmentally sensitive and friendly programmes could regenerate the resources that are vital to the operation of the business and can enhance the competitive advantage. The profits

can be generated and maximised at the same time, sustainability can also be attained (Bertea, 2010; Qeke & Dubihlela, 2018).

The TBL approach is a win-win situation for manufacturing SMEs. The investment on social and environmental programmes, which are often regarded as a burden, could translate to return on investment through financial means (Schaper, 2002). SMEs might think they cannot afford to invest in the environment since they do not significantly account for the negative effect as individuals through their collective impact is significant.

When manufacturing SMEs decide to save the planet and invest in ecology through greening means, the significant effect could be seen on the resource retention through the recycle, renew and re-use methods. There is a possibility of sustaining resources for a better future for the country not to run out of its wealth, for it depends on these manufactured products and resources. The return on the social investment could translate to social justice, which significantly affects the sustainability of the manufacturing SMEs, and at the same time, improve standard of living.

TBL potentially creates strong relationships between the companies and suppliers. This could translate to the growth of local economies through the manufacturing of South African products. In other words, sustainable enterprises can be achieved by strengthening relationships with suppliers and consumers. These relationships can be attained by loyalty, support and confidence in the local consumers to invest in and consuming local products. The potential growth in exports could lead to the financial injection in the economy as well as social growth and development.

The charity contributions do not only relieve SMEs of tax burdens but also have the potential to bridge the economic gap between rich and poor, as it is a form of investment. These donations help to better people's lives, e.g. bursary give-aways do not only help awardees, but they are also giving people a chance. The investment made through them could gain those SMEs' labour retention, the awardees could qualify and work for the same companies for a better future. Hiring from local communities does not only diminish unemployment but retain the loyalty and support for the business, at the same time, it also boosts the economy of the country while decreasing the staggering rate of unemployment.

The decision that the manufacturing SMEs should take about adopting the TBL framework should not only be influenced by the benefits to be gained, but also their role and contribution in the investment that will benefit the future generations. They might view investing in the social and environmental dimension as an economic burden they cannot really afford, but the literature confirmed that the investment in sustainability pillars might aid them. The TBL approach can be a remedy or a solution to their sustainability issues. The investments they make today will reap benefits that bridge the economic gap by sustaining the future of their

enterprises by decreasing, if not totally mitigating, the rate of failures in this business sector. The sustainable SMEs will not only strengthen and develop the economy of the country but will also address social issues. Manufacturing SMEs, therefore, should take a sound decision to invest today for the better benefits to secure the future.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The core function of this chapter is to coherently explain the research process and the methods used to collect data that seek to answer the research question. It provides an in-depth discussion of the research design and methodology that have been adopted in this study. It describes the process from data collection to analysis of the application of the TBL framework as a tool for measuring the sustainability of the SME manufacturing sector. The prerequisite was to define the research methodology, which is expressed as a systematic manner and a wider scope that constitutes not only the logic of the research but also research methods with which it is coupled. The justification behind the methods and techniques reckoned to be the most suitable and used to address and/or solve the research question was also detailed in this chapter (Kothari, 2004). Trafford and Leshem, (2008), and Matsoso (2014) deemed it necessary for the researcher to provide the cogent explanations of design strategies undertaken for readers to appreciate their work. This chapter covered the following sections:

Section 3.2 detailed the theoretical framework that the study adopted. Section 3.3 constituted the discussion of the research philosophy and approach, aiming to explain what informs the study and how it was approached. The quantitative approach that deemed the study to reckon positivist epistemology as most ideal was also detailed in Section 3.4 explicitly. Section 3.5 explained the research design while Section 3.6 addressed the population that was targeted and the sampling techniques that the study employed. Section 3.7 elaborated more on the data collection instrument (questionnaire) and explains in detail the questionnaire-survey method that the study adopted.

The process that was followed when collecting the data is explained in detail in Section 3.8. Section 3.9 explained stages and steps taken for the preparation of the data for analysis; it included the editing, coding, capturing and cleaning stage. The Section 3.10 explained all the forms of statistics employed in the purpose of analysing the data. The study then channelled to Section 3.11 where the reliability and the validity of the study were justified for validating the reliability of the results obtained. Section 3.12 detailed the limitations of the questionnaire survey that was deemed suitable to be employed in the study. Section 3.13 dealt with the ethical considerations where the informed consent was explained, and the respondents' confidentiality and anonymity were assured as per CPUT Ethics committee. Section 3.14 summarised the entire chapter.

3.2 THEORETICAL FRAMEWORK

The expansion of internal auditing research demands a critical evaluation of the proven and evolving theories that relates to the field (Mihret, 2014). The purpose of this theoretical framework, therefore, aims at explaining the existing TBL theory focusing on manufacturing SMEs' practices for measuring sustainability. A research of this nature obviously requires a lens to guide the direction of the study. The lens, therefore, has been termed as a theoretical framework for researchers. According to Sekaran and Bougie (2003), theoretical framework is "a conceptual model of how one makes logical sense of the relationship among several factors that have been identified as essential to the problem".

3.2.1. Institutional Theory

The institutional theory was used in this study. It was developed by DiMaggio and Powell (1983). Institutional theory clarifies how organisational practices and structures are shaped by changes brought about by pressures, including both internal and external sources such as regulations and laws, or by the professions (Mihret, James & Mula, 2010). DiMaggio and Powell (1983) posited that organisations tend to conform to regulations out of expedience (to avoid punishment). When faced with the uncertainty, for example, due to institutional pressure, they, however, tend to organise themselves in a manner that is similar to other organisations in the same environment to exhibit conformity (DiMaggio and Powell 1983); a process called isomorphism.

The isomorphism process takes place in three ways such as coercive, mimetic and normative (DiMaggio & Powell, 1983). This isomorphism process could happen by virtue of being legally sanctioned (coercive or legislative pressure), morally authorised (normative pressure) or culturally supported (mimetic or cultural-cognitive pressure) (DiMaggio & Powell, 1983; Scott, 2008; 2001).

Institutional theory attempts to answer the question of how and why organisations behave as they do, with inherent consequences (Greenwood, Oliver, Suddaby & Sahlin, 2008). Institutional theory is appropriate, as it addresses the political and cultural differences unique to the manufacturing SMEs' environment. The theoretical framework of this study provided the researcher with a context for organising the examination of the identified research problem and its attendant data collection processes (Creswell, 2009).

Currently, no scientific research focusing on the development of an institutional theory for manufacturing SMEs has been conducted. This study is an attempt to assist the departments, government and scholars in manufacturing SMEs to develop such a framework. Various concepts such as rationalised myths, de-coupling, cultural persistence, stability, deinstitutionalisation, environment, organisation, isomorphism, change, relational

networks, organisational field, institutional context, and legitimacy (Currie & Swanson, 2009) underpin this theory. The last concept, which is legitimacy, anchors the analysis of the contextual aspect of this study.

3.2.3. Triple Bottom line and the stakeholder's theory

Sustainability has become a mantra for the 21st century and the sustainable development has evolved over the past three decades and particularly, how it is applicable to the business context (Dyllick & Hockerts, 2002). As a result, the TBL approach gained a wider support since 1990 (Chang et al., 2017). This theory was introduced by Elkington in (1994). Elkington, in 1994, defined a TBL as an accounting framework that went beyond the traditional measures of profits, the returns on the investment, and the shareholders' value to include the environmental and social dimensions.

Elkington (1997) as cited in Robins (2006) posited that TBL framework was promoted to encourage businesses to migrate from a one-dimensional, "Friedmanite" fixation on profit, to resort to more holistic and socially acceptable posture, where social responsibility standards are higher and, in which sustainability is successfully achieved (Elkington, 1997). In other words, the TBL implies that businesses should give parity of treatment to the three dimensions of business impact without giving unique weight on their financial results. Contrary to traditional measures and reporting of profits, the TBL framework focused on more than only an economic value of business activities, by adding two more balance sheets covering the social and environmental impacts of the business.

The TBL orientation is the traditional measurement of profits including two new dimensions, namely:

- environmental considerations; and
- the interpretation of the moral and ethically accepted principles which underlies the social justice.

Sustainable development is the degree of allowance for present generation to satisfy their existing needs for the long-term. In other words, the sustainability should be directed towards the relationships between nature and the society (WCED, 1987). The concepts of ecological sustainability politically encouraged organisations to shift their focus towards environmentally friendly way of life (e.g. by means of a socio-ecological tax reform), which, at the same time, lead to some positive socio-political effects (e.g. reduction of working hours, gender equality).

The myth about the pillar model of sustainable development is the fact that it gives priority to the ecological dimension. Based on that, the main objective of the sustainable development is to preserve the ecological systems and resources necessary for the economic and social

life, as that is a significant prerequisite for meeting the future needs of humanity (Griessler & Littig, 2005). The concept of the TBL demands the company's responsibility to lie with the stakeholders rather than the shareholders. The TBL operating decision is the continuing commitment by businesses to behave ethically and contribute to the economic development, while at the same time, improving the quality of life of the workforce and their families as well as of the local community and society at large. In other words, the TBL as guided by the stakeholder's theory focuses on wider group of constituents rather than simply focusing on shareholders or those stakeholders with a direct relationship with the business (Mallin, 2009). Thus, the broader group of stakeholders include, but is not limited to, the shareholders, employees, suppliers, customers, creditors, communities in the vicinity of the company's operations, government and the general public who can aid the performance of manufacturing SMEs and who, in turn, owe their fiduciary duties not only to shareholders but also to a wide group of stakeholders.

Post, Preston and Sachs (2002) posited that the stakeholder model is not a zero-sum-game, but it is a positive-sum-game that can lead to benefits for all or most critical stakeholders in the long-term. In other words, proponents who support the theory are of the view that to meet only the shareholders' needs (for example, the maximisation of profit for the organisation), is short-term thinking. It is vital for top management (that is, owner-managers and the professional managers) to identify and reconcile diverse stakeholders' interests by recognising organisational obligations to wider and more ethically concerned constituencies to ensure the long-term sustainability and growth of an organisation (Simmons, 2004). This view is consistent with other advocates who posit that being a responsible corporate citizen requires organisations as juristic persons to pursue both profits and social-ecological responsibilities (Carroll & Buchholtz, 2014).

3.3 RESEARCH PHILOSOPHY AND APPROACH

According to Shah and Gorley (2006), the research philosophy is at times alluded to as the research paradigm. It is designed to create new and truthful knowledge, but it might differ in fitness and suitability, as it depends on the purpose of the study undertaken (Venkatesh et al., 2013). The underlying proportion of this study attempted to determine reasons and/or causes for the existing condition of SMEs' failures and sustainability issues. Its descriptive nature adopts a causal approach that seeks to explain the causes/reasons of failures in balancing and finding the relationship among variables of the TBL framework that thereafter cause the SMEs' failures.

There is a need to assist this significant contributor of the economy, yet, the most failing sector (SME sector) in the business environment. The failure rate is estimated at around 80 per cent, which resulted in South Africa to be red flagged as one of the countries in the world

possessing the highest failure rate of SMEs (Ngubane et al., 2015; Qeke & Dubihlela, 2018). The latter prompted the researcher to invest positive energy in the current vexatious statistics that show the battle faced by this entrepreneurial environment and has negative implications to the stagnant economy that is deteriorating due to losses.

The secondary need was to emphasise the existing sustainability framework that could be the solution to aid the SME sector and avert the trend of entrepreneurial despair, has also been a motivating factor for this research. The antecedent research experience of the SMME sector and the growing demand for the research further boosted the researcher's confidence to conduct more studies in the sector. The researcher has the expertise and is experienced in determining the appropriate respondents considering the influence they have in the day-to-day management of businesses, and the strategy formulation and implementation within the selected population. Cooper and Schindler (2011), cited in Lose (2016), define a research approach as planning and structuring the investigation to gather the responses to answer the research questions. The decision about which one to follow should be based on the research question, purpose of the study, and the context of the study (Venkatesh et al., 2013).

There are two major philosophies of research approach, namely qualitative and quantitative approaches (Bouma et al., 2012). The quantitative research paradigm refers to gaining comprehension by elucidating human behaviour in contrast with the qualitative paradigm, which refers to attaining the understanding by describing human behaviour (Pellissier, 2010). These philosophies have two distinct epistemologies, namely positivism and interpretative. To give the rationale of the choice of approach, the following section unpacks the important choice of following the quantitative approach that deemed the positivist research paradigm as most ideal rather than the qualitative, otherwise known as interpretivism.

3.4 POSITIVIST RESEARCH PARADIGM

This study is based on empirical research that tailed a positivist research paradigm towards attaining the necessary data that provide answers to research questions and solutions to the research problem. The study also requires extensive interaction with people. The primary focus of the study is to capture the truth that already exists (Coetsee, 2010; Easterby-Smith, Thorpe & Jackson, 2008). Matsoso (2014) is of the opinion that there is a possibility of describing, explaining and predicting the phenomenon being studied by finding the truth in empirical means. The primary purpose of this research was to determine the extent to which the decision-makers of SMEs in the manufacturing sector utilise the TBL framework as a tool to measure the sustainability of their businesses in the Cape Metropole. To address this objective, quantitative data was required to determine the percentage of SMEs in the manufacturing sector that employs the TBL framework.

Accordingly, positivist epistemology was deemed appropriate in addressing the objectives of the study because of its quantitative nature. Provided its quantitative nature, the positivist paradigm has an aspect that increases the generalisability of research findings since it allows large samples to be drawn from the population. According to Maduekwe (2015), a positive paradigm is based on the idea that the reality is objective and can be measured using the metrics that are independent of the research instruments used to conduct the study and the researcher conducting the research itself. For this study, it was employed for these reasons. To begin with, it was more of the target approach than the interpretivism paradigm. It depends on quantitative data, which are more reliable, convincing and verifiable than the qualitative data on which the latter paradigm (interpretivism) depends (Du Plooy, Cilliers, Davis & Bezuidenhout, 2014; Maduekwe, 2015; Matveev, 2002).

Furthermore, a positivist paradigm required a precise structure that was consistent with using closed-ended questionnaires that were appropriate for the statistical analysis; hence, it was adopted. This paradigm also became suitable in the case of this study given the fact that it was fast, approachable and economical as time and resources were limited. Justifying the questionnaire was suitable, as it was designed in a full-scale administration and consisted of items adapted from prior published research to gather data from the respondents.

3.5 RESEARCH DESIGN

The impressive progress on the utilisation of the TBL tool by other sectors informed the main objective of this research. To determine the extent to which SMEs in the manufacturing sector utilise the TBL tool in an effort to sustain their enterprises informed the motivation behind this study. This research scrutinised the effect of integrating the financial, social and environmental dimension that the sustainability encompasses in an endeavour to sustain the struggling, yet, important sector that has notable contributions in the economy. This study was designed in a way that an overview of the experimental study was first conducted on the survey to deliver unambiguous research framework. The framework incorporated all aspects researched as pinpointed by the reviewers in the pilot study. The research methods utilised were also reckoned suitable to answer the research question (Pellissier, 2010).

3.6 SAMPLING PROCEDURES

3.6.1 Target population

The population refers to the large portion or the entire pool of the environment from where the sample that is investigated in this study was drawn and obtained (De Vos et al., 2011; Matsoso, 2014). The population targeted in this study, therefore, comprised of all SMEs operating in the manufacturing sector of the Cape Metropole. These SMEs included, but

were not limited to, the following industries: clothing and textile, chemical manufacturing, petroleum and plastic, electronics and the transport manufacturer, food and beverage manufacturing companies, metals, wood, leather and paper manufacturing companies.

This study gave an observation-type of research in comparing multiple population groups at a single point in time. The researcher employed a cross-sectional study in the selected sample, which typically involves the utilisation of cross-sectional regression in an effort to sort out the presence and magnitude of causal effects of one or more independent variables upon a dependent variable of interest at a particular point of time. The purposive non-probability sampling (known as selective or judgemental sampling method) was also used in this study. The assumption was that the processes the researcher was testing were basic and universal, to such an extent that they can be generalised beyond such a narrow sample. This method has been widely employed by various scholars with studies similar to this one (Bruwer, 2010; Maduekwe, 2015; Ndwiga, 2011).

3.6.2 Sampling frame

A sample frame represents the master list of all the members that qualify to be part of the study. Onwuegbuzie and Collins (2007) defines sample design as the process of choosing a portion, part or segment representing the population as a whole. Matsoso (2014) concurred with the above authors that sampling frame as a list from which a selection of research partakers representing the population is extracted. It also identifies the subjects or objects used in the study. It can further define a list of all units that are drawn from the population. It is also commonly alluded to as a sample frame (Bryman, 2012). For this study, the researcher used the door-to-door campaign because of the unavailable list of databases that derive all manufacturing SMEs operating in the Cape Metropole.

3.6.3 Sampling size

The size of the sample refers to the amount of basics to be included in the study. If a sample has two properties (representativeness and adequacy) when selected, then it is considered to be appropriate, sufficient and accurate for the study. Sample size is one of the four features of a study design that relates or connects to other attributes. It influences the detection of major differences, relationships or interactions of the variables (Peers, 1996). Inappropriate, inadequate, or excessive sample sizes can have a dire effect that could compromise the quality standard and the accuracy of the research. Schumann, Anderson, Scott and Lawson (2014) suggested that the competency of the research can be informed by the selection of an accurate sample size. The sample size is decided on by certain aspects of the study such as the significance or the rationale, unit of analysis as well as the intended process of data analysis.

For this study and since there is no exhaustive wide-ranging list of SMEs operating in the Cape Metropole, a target was set to identify 200 manufacturing SMEs. A sample size of 100+ was proven to be a success in previous studies similar to this one and conducted in different industries of the SMME sectors (Blanche, Blanche, Durrheim & Painter, 2006; Bruwer, 2010; Sifumba et al., 2017). Consequently, 200 representatives of the SMEs were part of the sample. These covered owners and/or managers and/or supervisors who the study reckoned to be the decision-makers of the SMEs and thus, were expected to be conversant about the TBL strategies employed by their organisations and sustainability.

3.6.4 Sampling technique

For this study, the researcher reckoned the non-probability purposive sampling technique appropriate, as it has the capability to identify the particular group of participants. The selected respondents were deemed suitable to provide detailed information since they have the capacity to be knowledgeable and informed about the topic to answer research question (Rule & John, 2011). The employment of purposive sampling helped to identify the 200 SMEs sampled. The reasons that justified the choice deemed purposive sampling suitable to be employed in this study. First, the method was utilised in light of the fact that it concentrated on a slight portion of the population and has been widely utilised by different scholars (Bruwer, 2010; Maduekwe, 2015; Ndwiga, 2011). Second, the technique is moderately simple to execute since there are guidelines to be followed on how a sample should be selected.

Third, due to the difficulty to obtain a comprehensive list of all manufacturing SMEs operating in the Cape Metropole from the officials of SEDA and DTI, the option of using other sampling methods such as random sampling was shuttered. Fourth, the researcher decided to conduct the survey on a door-to-door basis in the manufacturing areas of the Cape Metropole. During the campaign, the researcher excluded SMEs that did not meet the eligibility and the criteria aligned with this study. The researcher would ask if SMEs operated as a manufacturing SME before discussing the survey in detail. When the potential respondent is unavailable the researcher would ask to leave the questionnaire and contact details, so the filled-in questionnaire can be e-mailed back. Lastly, this method is popular and has been widely used by other researchers as well (Ndwinga, 2011).

3.7 DATA COLLECTION INSTRUMENT

Collis and Hussey (2003) opined that for the research to be conducted in a productive and efficient way the best opportunities should be created, the resources must be available to possibly organise the research. Moreover, for it to give a cognisant and legitimate course to

solid results, it must be directed efficiently, utilising proper techniques to gather and break down the information (Mabesele, 2009).

3.7.1 General description of the questionnaire

The questionnaire was formulated around the three components of the TBL framework that were investigated in the study, namely economic, social and environmental dimensions. The questionnaire constituted eight pages that included the consent letter (cover page). The reason for the cover page was to highlight the aim of the research study and to promise the respondents that any data they might unveil would be employed exclusively for this research. They were guaranteed that they will be kept confidential and anonymous, and that there were no risks concomitants to their participation in this study.

The survey started with general questions on the components of the TBL. It then channelled down to the frequency in using the TBL components as a tool, aiming to ensure the sustainability of the business. The respondents' perceptions on the effectiveness of the TBL strategies for sustainability measures and the components that could restrain or hinder their utilisation of the TBL tool to its full potential were probed. Questions on respondents' profile and their organisations' profile were asked last to not discourage the respondents from noting the inquiries that mattered most.

The respondents were encouraged to complete the questionnaire with a deliberate effort made as not to ask any question that would directly link the responses to respondents or particular manufacturing SMEs. In addition, sensitive questions such as those pertaining to income, revenue, payment of taxes, were avoided. The questionnaire was formulated to be user-friendly and only contained 14 closed-ended questions to encourage the respondents to partake and share their overview. The responses were asked on either a five-point Likert scale, yes/no answers, or multiple-choice questions. There were two questions in the demographic section that had an option "other" and only two had an option "why" provided. The "why" option required the respondents to choose to specify and elucidate on their answers. The time length required to complete the survey was minimised to approximately 15 minutes.

3.7.2 Description of the specific sections of the questionnaire

The questionnaire used in this research included five sections which were numbered from one to five as provided in the following subsections (see Appendix B).

3.7.2.1 Section One: Components of the Triple Bottom Line

Question One of the questionnaire initially explained the TBL paradigm/CSR approach. The corporation's ultimate success or well-being can and should be assessed by, not only its

traditional bottom line but also considering other influences and effects of the social/ethical and environmental performances.

After the explanation, the question followed: Is your company aware of the TBL reporting? The question required a “Yes” or “No” answer and was meant to determine those who were aware of the tool in question to proceed. The following question asked was: Would you consider your company as one who uses the TBL tool to report their profits? This particular question was asked to understand if the company considered and integrated all the three aspects of the TBL tool when reporting their profits.

Question Two gave a sampled list of operational components that would be usually considered in the sustainability and financial reports of many organisations. The respondents were asked to rate the overall progress made by their organisations comparing past years to measure or weigh the TBL components that enhance the sustainability. The rating was in the form of a five-point Likert scale (1 = Unacceptable, 2 = Improvement needed, 3 = Meets expectations, 4 = Exceeds Expectations and 5 = Exceptional). It was meant to ascertain the overall progress of the respondents’ businesses in comparison to the past years.

Part A

Financial dimension: the progress was rated in sales growth, return on sales, improvement on lessening the defects, product return rates, returns on equity, investments or total assets, productivity, acquisition of new customers, order cycle-time and marketing the organisation. The more exceptional the progress was for over the past years on these components, the stronger the financial dimension of the business is.

Part B

Environmental dimension: the progress is rated in energy consumption, water consumption as opposed to energy and water conservation, avoiding the pollution of the environment, utilisation of sinks absorb waste (quantity of solid waste), plantation of vegetation and nature conservation such as protecting trees and grass, recycling waste and reuse of waste and utilisation of emissions, effluent and waste of resources used for industry specific factor (e.g. GHG emissions). The more exceptional the progress was seen over the past years, the more the company was deemed to be taking an initiative in protecting the environment.

Part C

Social dimension: the progress is rated on the company employees’ capabilities, their training and development, employees’ recruitment process and the fair salaries (market related), customer satisfaction, supplier satisfaction, cooperation with local residents (e.g. the number of CSR activities organised), affiliation with governmental agencies to develop your

business strategies (e.g. SEDA, SEFA etc.), affiliation to non-governmental organisations and agencies such as the Chamber of Commerce to improve business network, supplier long-term relationship, and customer long-term relationship. The more exceptional the progress was made over the past years, the more the company was deemed socially responsible.

The more exceptional the overall progress made, the more extensively the business covered social and environmental issues into the decisions, goals, and the operations. The companies who made progress were deemed to be operating in the sustainability lenses using the TBL approach to reporting profits. These organisations would have adopted Ethical Business Practices.

3.7.2.2 Section Two: Utilisation of the Triple Bottom Line

Question Three: How frequent do these activities and strategies of the TBL approach take place in your company. These activities are meant to establish if your organisation is involved or does part of activities that strengthen relationships and ensure continuity.

The rating was in the form of a five-point Likert scale (1 =Never, 2 =Rarely, 3 = Sometimes, 4 = Frequently and 5 = Very Frequently). The 16 questions that were asked was to ascertain how frequent the respondents' businesses partake in these activities and involved these strategies of TBL. These strategies and activities included economic, environmental and social components without breaking them down. The more frequent those activities were taking place, the more organisations were considered to be operating under the sustainability umbrella, have strengthened the relationships with the stakeholders, and protected the environmental dimension to ensure the continuity of the organisations.

3.7.2.3 Section Three: Perceptions towards sustainability measures used

Question four of the questionnaire asked the respondents' perception on the contribution of sustainability measures towards success, growth and sustainability of businesses. According to Ravlin and Meglino (1987), there is a significant relationship and link between perceptions and attitudes that could influence and affect the decision-making process. The latter means that the perceptions and attitudes of individuals can influence their decision-making process. The assumption, therefore, lies in the way SME decision-makers perceived sustainability measures that could influence their decision-making process and business operations.

The question was: how effective did the decision-makers of manufacturing SMEs perceived the contribution of sustainability measures towards the growth, success and sustainability of their business? This question was in the form of a five-point Likert scale (1 = Very Ineffective; 2 = Ineffective; 3 = Neutral; 4 = Somewhat Effective; 5 = Very Effective). The 27 sub-questions that were asked were meant to inquire the respondents to rate and evaluate the

effectiveness or rather the importance of the contribution of sustainability measures towards growth, success and sustainability of businesses. The more effective the respondents rated the contribution of the sustainability measure; the more important they were perceived to influence the business operations and to affect the growth, success and sustainability of the business.

3.7.2.4 Section Four: Factors inhibiting SMEs from utilising TBL

Section Four of the questionnaire focused on the factors that inhibit or challenge the SMEs from fully adopting the TBL framework that recommends that companies commit to focus on the social and environmental concerns. The section comprised only two questions, namely Question Five and Question Six. Given that the TBL framework is not fully adopted by SMEs since it is difficult to integrate and quantify the three, unlike but important, pillars of TBL framework that sustainability encompasses.

Question Five asked: 'Are there any factors that inhibit or challenges your business from fully adopting TBL?' This question was in form of a 'Yes' or 'No'. An extra line was provided to allow respondents to elaborate on the challenges should they answer 'Yes'

The Question Six had 16 statements that required the respondents to rate their degree of disagreement or agreement under the following question: To what extent they agreed if listed statements were factors inhibiting or challenging businesses from fully adopting TBL tool.

These statements were indirectly meant to determine factors that inhibit or challenge SMEs from fully adopting the TBL tool. This section was informed by the prior literature that had indicated the existence of challenges and difficulties that SMEs experience in fully adopting and utilising the TBL tool. This question was structured in the form of a five-point Likert scale (SD = Strongly Disagree, D = Disagree, N = Neither Agree or Disagree, A = Agree, SA = Strongly Agree). Each of the sixteen statements linked to one of the three components of TBL (economic, social and environmental) on which the study has focused. The more strongly the respondents agreed with a particular statement, the more it was realised the challenge inhibiting the company to fully adopt the TBL tool and reap the benefits.

3.7.2.5 Section Five: Demographics, Respondent and business profile

Section Five of the questionnaire comprised of eight multiple-choice questions. These questions covered the demographic information of the respondents as well as the information pertaining to their businesses. They included questions about the respondents' position in the business, age, experience, the longevity of the business existence, highest educational qualification, number of employees in the business, type of industry the business under which it is operating, and lastly, the ethnicity of the respondent. These questions were deemed necessary to ensure that only suitable candidates completed the questionnaire. It

was also used to avail information that would be used for data analysis obtained in the other sections of the questionnaire to determine the extent to which the respondents' profile effect on their responses. Regarding the business profile, Section five covered questions on the industry under which the business was operating, as well as its number of employees. These questions were deemed necessary to ensure that only SMEs from the manufacturing sector participated in the survey.

3.8 DATA COLLECTION

Sapsford (1996) emphasised data collection as the most vital component of the overall content of the thesis in the case of academic research. Furthermore, the author defined it as an attempt to gather data in the form of the field study. It is also known for its non-experimental scientific inquiries, which intend to discover the relations and the interactions among the variables that are investigated in real structures (Weller & Romney, 1988).

In this study, the researcher hand-delivered the questionnaires to the respondents to complete in their own convenient time. This data-collection method was considered the most appropriate, as it has awarded the researcher an opportunity to introduce and explain the research topic to the respondents before completing the questionnaire. The researcher drew a clear picture that explained what the study is about and the respondents' willingness to participate increased.

Although the respondents had the freedom to complete the survey at their own convenience, in cases where the respondents were unable to complete the survey at the agreed time they were provided with an e-mail address to send the completed questionnaire. In the cases where they were not returning the questionnaire, the researcher would then set a follow-up appointment, whether telephonically or by e-mail, to collect the questionnaire on the agreed time. In most cases, the researcher would wait for respondents to fill the questionnaire. This approach was constructive since it increased the response rate and also saved time.

3.9 DATA PREPARATION

Data preparation is the fundamental phase of data analysis (Zhang, Zhang & Yang, 2003). This process covers and checks the accurateness of data before entering it for transformation into the computer (Cooper & Schindler, 2006). In an effort to prepare quality data, there is a need to pre-process the raw data. It was generally established that the data cleaning and the data preparation phases take approximately 80 per cent of the total data-engineering effort (Zhang et al., 2003). The preparation of the data is crucial for every research topic. This study went through four phases of data preparation namely, editing, coding, capturing and cleaning. These four phases that are thoroughly explained below were

undergone to provide surety that data gathered was complete and ready for analysis (Kumar, Aaker & Day 2002).

3.9.1 Data editing

Cooper and Schindler (2006) defined data editing as the process of detecting errors and data omissions and correct them when possible and certifies that the maximum data quality is achieved. The editing process improves the data quality by detecting and correcting errors (De Waal, Puts, & Daas, 2014). Editing is also the process of checking completeness, the consistency, unambiguousness, homogeneity, and legibility of data and preparing the data to be ready for coding and transferring to storage (Churchill & Iacobucci, 2005).

As advised by Malhotra (2004), the researcher should review questionnaires after completion of the field work to check the accuracy of the available questionnaires, and the completeness to prepare them for data analysis. In the process of editing, the substandard surveys were discarded and marked as rejects. As Zikmund (2000) suggested, the researcher should have available options such as using a neutral value where data was inserted to make it consistent and readable in case of item non-response. This served as a precursory type of data field editing, undertaken by the researcher during data preparation.

3.9.2 Data coding

Coding is the process of conveying and classifying a code to represent a specific response to a specific question with a numeric score or character symbols (Churchill et al., 2010; Malhotra, Birks, Palmer & Koenig-Lewis, 2003). The codes are commonly numbered symbols; however, typically they are broadly defined as the guidelines for interpreting, classifying, and recording data (Zikmund 2000).

The researcher used codes to permit data to be processed on the computer. In the study, there were two questions in the demographic that had an option "Other" and only two that had an option "why". These options, "other" required the respondents to select if their choice is not on the listed choices, and "why" to elucidate or justify their answer. There were also questions that requested "Yes" or "No" as a response, so the data-coding step was deemed necessary to set the computer to understand character responses and translate them to numerical responses.

3.9.3 Data capturing

Data capturing, as defined by Malhotra (2010), is a process of transporting coded information from the questionnaires or coding sheet straight into the computer by punching keys. In this study, the researcher used the Microsoft Excel programme to perform data capturing.

3.9.4 Data cleaning

McDaniel and Gates (2004) emphasised data cleaning as the most indispensable part of the data preparation process. The next step taken after the capturing and the storing of data in the computer for processing was to check for errors and omissions before sending it to the statistician for statistical analysis. In this study, before the Excel spreadsheet was sent to the statistician, the researcher thoroughly checked it for possible errors and omissions of the questions. As Zikmund and Babin (2007) have suggested, the process of transforming data to intelligence is riskier and more difficult if there are remaining errors in the data; therefore, data cleaning involved error checking and treatment of omitted answers, the substitution of neutral values, replacing imputed responses, and a deletion of the case-wise and pair-wise variables (Malhotra 2010).

3.10 DATA ANALYSIS

Data analysis is the discussion of the process of categorising, organising, manipulating and summarising the data with the intention of answering the research question at hand (De Vos, Strydom, Fouché & Delport, 2005). It is the transformation of raw data from the field into the meaningful and organised information for the research problem to be studied and tested so that the conclusions can be drawn (De Vos et al., 2005; Turner, Bititci & Nudurupati, 2005).

In this study, a Microsoft Excel spreadsheet was employed to enter all the data and then replicated to the Statistical Package for Social Sciences (Version 24.0 for Windows) programme. It is a statistical package that is mostly employed in statistics to cipher data and to run the statistical analysis. It is imperative to state that the selection of data analysis methods in this study were steered by the data analysis techniques utilised in previous researches in the fields of manufacturing SMEs and TBL.

- Descriptive statistics
- Reliability and validity analysis
- T- tests statistics
- Correlation analysis
- Regression analysis

Somekh and Lewin (2005) suggested tables as illustrations that can present data possibly in a more complex structure with a more straightforward arrangement and format. Graphs and charts are capable of presenting data visually and frequently highlight the patterns and issues that might be drawn when interpreting the data. Results were presented as tables, bar and pie charts.

3.10.1 Descriptive statistics

Descriptive statistical analysis is a method used to convert raw data into the results that are uncomplicated to understand and easy interpretable. Descriptive statistics are generally used to delineate basic characteristics and provide elementary summaries of the sample featured and measured. This study used descriptive statistics in an effort to analyse the composition and the normality of the data. Churchill et al. (2010) enumerated such statistics as measures of location (mean, median and mode), dispersion of variability (variance, standard deviation, range, interquartile range and coefficient of variation) and numerous methods of distribution (example skewness and kurtosis) as illustrated in Table 3.1 and 3.2 respectively.

Table 3.1: Measures of central location

MEASURES AND DESCRIPTIONS	
Mean	Mean or average is the arithmetic average value of the responses on a variable. The sum of the scores in a distribution is divided by the total number of scores. The mean or average is the most commonly used method of describing central tendency in descriptive statistics. The sum of the values for all observations of a variable divided by the number of observations (McDaniel & Gates, 2004).
Median	The median is the score found at the exact middle of the set of values. It is simply the number that divides the sample into two. A technique for finding the value below which 50 per cent of the observations fall (Churchill et al., 2010). The median can be computed all types of data except nominal data.
Mode	The first measure of central tendency is mode. It is a value that occurs most frequently (McDaniel & Gates, 2004). It is a value that has the highest frequency in a frequency distribution.

These measures were mostly used to achieve a complete consideration of the raw data and enable the data to be presented using tables and figures. For this study, percentages and graphs were used to summarise the responses of the respondents. In addition, arithmetic means were used to summarise and rank the responses of respondents to all the five-point Likert scale questions. For other questions, a standard deviation was computed to establish the level of accord of respondents' responses on a particular statement, with less than one indicating an agreement and more than one variable.

Table 3.2: Dispersion of Variability

DISPERSION OF VARIABILITY AND DESCRIPTION	
Variance	The sum of the squared differences between data values and the mean, divided by the count -1.
Std. deviation	The standard deviation is the square root of the calculated variance on a variable (Churchill et al., 2010). The sample standard deviation provides a convenient measure of the variation in responses for continuous measures.
Coefficient of variation	The coefficient of variation indicates how large the standard deviation is in relation to the mean.

3.10.2 Frequency Distribution

According to the study by Malhotra (2004), the initial stage of the descriptive techniques is the construction of frequency distributions. Malhotra (2010) defined the frequency distribution as a mathematical distribution with the intention to obtain a count of the several respondents associated with different values of one variable and to convey these counts in the form of percentages. The frequency distribution indicates the popularity of dissimilar values of the variables among the units of analysis (Tustin, Ligthelm, Martins & Van Wyk, 2005). The frequency distribution was employed to give the understanding of what the data is composed and characterised sample as explained in the Chapter 4.

3.10.3 Use of Graphs and Charts

The researcher could not rely on frequency distributions alone to present research findings. The graphs and charts such as line charts, pie charts, histograms and bar charts were also used to demonstrate outcomes. These charts were reckoned to be appropriate to deal with the nominal or the ordinal variables (Tustin et al., 2005). Data analysis results are frequently demonstrated by using graphs to depict absolute and relative magnitudes, variances, proportions and trends (Hair, Bush & Ortinau, 2000).

3.10.4 T-test statistics

The T-test used in this research was to assess significant differences that might have influenced the decision-making process by the decision-makers of the SMEs. This test aided the researcher to convey introductory analysis establishing where values concentrated within the sample and deduce that to the population. These analyses conclude and, in some cases, predict properties of a population based on the information acquired from the sample. They facilitate broader statements constructed about the relationships between the data (Mouton, 1996). There is a section in Chapter 4 that reports on independent t-tests statistics.

3.10.5 Correlation analysis

Correlation analysis includes the evaluation of strength or closeness of the relationship or joint variation between two variables at a time (Aaker, David, Kumar & Day, 2004). Correlation in this study was utilised to evaluate the degree to which the changes in one variable are concomitant with changes in another variable. This study used correlation analysis for satisfying two purposes. First, to discover the existence of the multi-collinearity, which is a condition for using parametric techniques in data analysis, and second, the need for the correlation analysis was to discover the relationships between variables investigated in this study (McDaniel & Gates, 2002).

The correlation coefficient (r) ranges from -1 to +1. When assessing the strong point of the correlation coefficient (r) a value of $r < 0.2$ specifies a frail or non-existent correlation. A value

between 0.2 and 0.4 a feeble correlation. A value amid 0.4 and 0.6 demonstrate a moderate level and a value between 0.6 and 0.8 a high level and > 0.8 , a very high correlation (Alpay, Bellur & Aydin, 2018). A value of zero to one indicates a positive relationship, suggesting that if values for one variable increase, so do those of the other. While a value between -1 and zero indicate a negative relationship, suggesting that as the values of one variable increase, those for the other decrease.

Zikmund and Babin (2007) suggested that if $r = 0$, there is no sign of correlation indicated. For the purpose of this study, the correlation analysis was deemed necessary. Multivariate regression and correlation analysis was used to measure the strength and closeness of the relationship of the three components of the TBL. Economic dimension sometimes alluded to as Financial Capital (EcoDi), the Environmental Dimension (EnvDi) and Social Dimension (SocDi) studied with the effectiveness of Sustainability Measurement (SusMe) as indicated and explained in detailed in Chapter 4.

3.10.6 Regression analysis

Regression analysis is an instrument used to originate an equation that relates the criteria variable to one or more predictor variables (Churchill & Iacobucci, 2006). Regression is a statistical technique that is used to relate two or more constructs. The purpose of regression analysis in this study is to contrive a framework equation relating the dependent variable to one or more independent variable. Aaker et al. (2004) explained regression as a model that can describe, predict and control the variable of interest based on the independent variable. Regression, therefore, is a tool that measures relationships and further integrates the relationship between two or more variables concurrently. Malhotra (2004) suggested that regression analysis can be employed for the following reasons:

- to define the structure or form of the relationship;
- to decide whether the independent variables clarify a significant variation in the variable reliant on one another, inter alia whether a relationship exists;
- to determine the extent to which the variation in the dependent variable can be explicated by the independent variables, inter alia strength of the relationships;
- to predict the values of the dependent variable on the independent variable; and
- to control and benchmark other independent variables when assessing the contributions of a specific variable or sets of variables.

Regression analysis was done in this study to examine the relationship that might exist between the variables, namely economic dimension (EcoDi), social dimension (SocDi) and environmental dimension (EnvDi) in Sustainability measurement (SusMe). Regression was also taken to test the hypotheses of this study as reported. The study employed Multivariate regression and correlation analysis, to respond to the following three questions.

- To what extent do SMEs consider the importance of incorporating components of the TBL framework for reporting their profits?

The reporting of the profit is also a part of sustainability. The profit is the economic dimension/financial capital of the SME and it has a direct impact in the sustainability of the SME. It is most likely the enterprise that is profitable to sustain itself rather than the one running at a loss joint with TBL components.

- What are the major challenges and opportunities in using the TBL framework as a tool to measure the sustainability of SMEs in the Cape Metropole, South Africa?
- How can SMEs integrate three components of the TBL framework for measuring their sustainability and maximise profits?

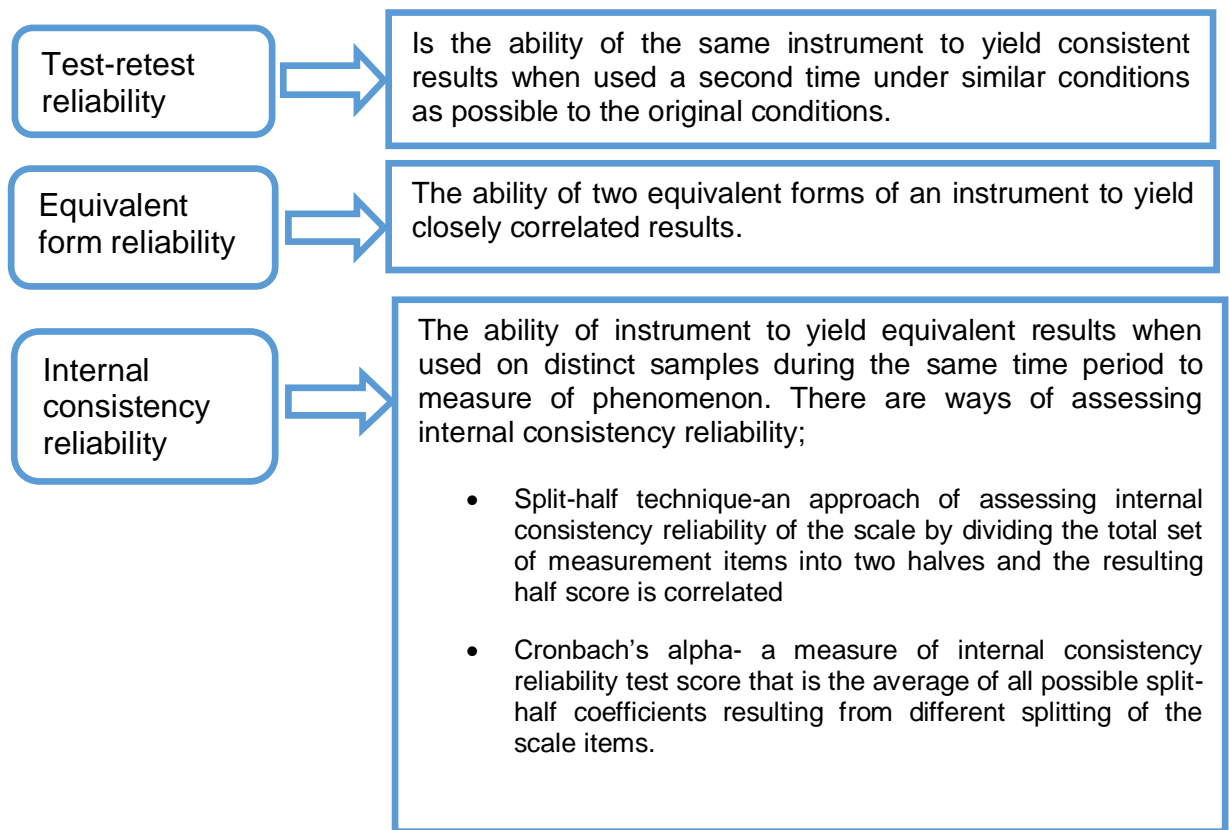
3.11 MEASURES TO ENSURE RELIABILITY AND VALIDITY

3.11.1 Reliability tests

The term reliability is a concept used for assessing or evaluating quantitative research and the notion is often used across all kinds of research. Golafshani (2003) explained reliability as a degree to which the measuring instrument is stable and reliable over time. In the sampling process, the reliability integrates accuracy and exactitude. A sampling process is reliable when it provides accurate results consistently over a large number of trials (Schott, Salvaggio & Volchok, 1988).

Generally, quantitative research employs experimental techniques and quantitative methods to test the hypotheses and generalise the outcomes of this test. The reliability is grounded on the scores and performances of any one variable. The scores are composed of the three components, which are the level of consistency of outcomes, the stability, and the similarity within a given period of time (Bashir, Afzal & Azeem, 2008). Accuracy is the absence of error, and precision occurs when accuracy misses the concept. The researcher carried out the reliability analysis at the pilot study and then in the main survey. The results for both pilot test and the main survey are reported in Chapter 4. Reliability statistics for the pilot study are shown in Table 4.1 while the reliability statistics for the main survey are reported.

Figure 3.1: Reliability assessment explained



Source: McDaniel and Gates (2004: 201).

This study employed the Cronbach alpha coefficient, which is considered the most common internal consistency estimate (Chen & Huang, 2012). The new developed measures accept the alpha value of 0.60; but 0.70 is considered the accurate benchmark (Nunnally, 1978). Alpay, Bellur and Aydin (2018) suggested the adequate scale of reliability to be accepted if it is a value above 70%. The strong correlation is signified by a high internal consistency, lead alpha coefficient being close to one. At the same time, feeble correlation would lead to an alpha coefficient correlation close to zero. The following was prescribed as generally accepted by researchers (Pietersen & Maree, 2007).

When the instrument is having no reliability, the scores will be zero or close to zero but, when an instrument secured high reliability, it will be close to one. This study employed coefficient alpha to calculate the reliability of measurement scales. The effortless way to determine if the items correlated was to calculate the item-to-total correlations. The study measured the reliability of the items and those with the correlations scores close to zero were disregarded. For this research, especially in field study, internal consistency reliability required only one administration and consequently, was the most effective. The composite reliability was performed in this study.

- 0.90- indicated high reliability
- 0.80- demonstrated moderate reliability
- 0.70- showed low reliability

3.11.2 Validity tests

Validity is the degree to which a measurement yields true meaning and scores of variables investigated (Golafshani, 2003). Sireci, Wainer and Braun (1998) defined the validity in the quantitative research as construct validity. The construct is the fundamental concept and notion that defines what data must be collected and how it must be gathered. Maree (2009) proposed that a measure or instrument can be confirmed valid if it measures what it is supposed to measure. Validity can be compromised if there are any source of error or bias in the way questions are posed. Below explained are types of validity.

3.11.2.1 Construct Validity

Construct validity is the condition of the construct covered by the instrument, is measured by various groups of related items and is used for standardisation (Maree, 2007). Essentially, it measures the relevancy of the questions included in the questionnaire, and testing if they are achieving the purpose of the study. Second, it evaluates if the survey instrument is measuring exactly what it should be measuring (Maduekwe, 2015). To establish the construct validity of a measure, it should be comprised of both theoretical and empirical work. The construct validity was established in the piloting testing stage. The questionnaire survey was distributed for review to four academics with vast experience in the questionnaire design to validate the measuring scales.

The four academics identified weak and vague questions that could damage the external validity in the study. The identified questions were corrected accordingly as per suggestions to ensure the content of the contrast validity. According to Maduekwe (2015), contrast validity is seen if the questions in questionnaire are linked to the original research questions, and that can improve the questionnaire by reducing bias questions. Furthermore, the author recommended that researchers should consider deriving their questions from sub-questions to enhance the construct validity. The questions asked in this study met the above criteria.

3.11.2.2 Convergent Validity

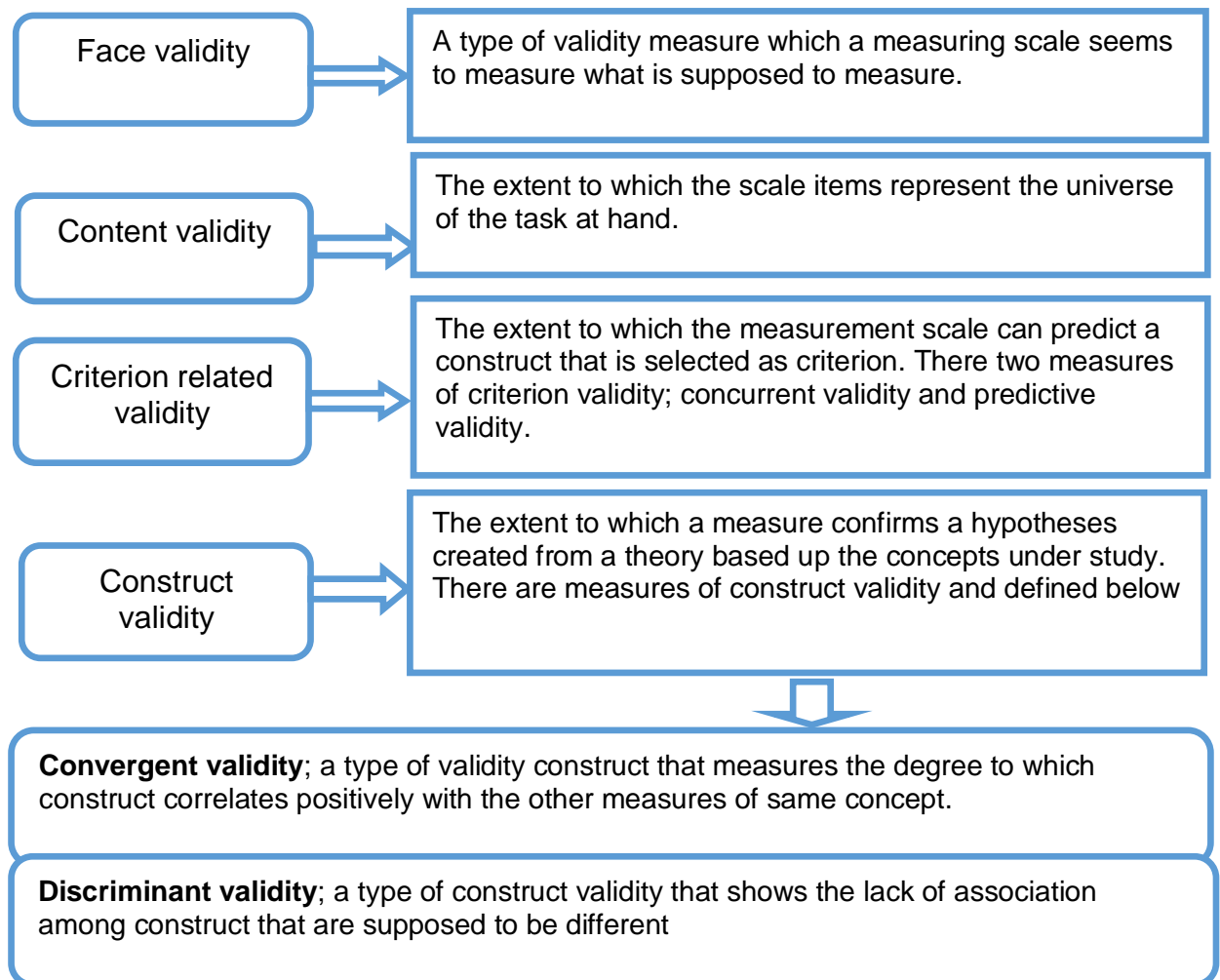
Convergent validity is an assessment and comparison of the outcomes for this research with those of the previous similar studies conducted. Convergent validity was ascertained by correlation analysis. McDaniel and Gates (2004) explained convergent validity as a reflection of the correlation degree among different measures claiming to measure the same concept. This study adopted the convergent validity to test the relationship of the variables and the interdependence of the components of TBL to sustainability measures. This was to answer

the following research question: How can SMEs integrate three components of the TBL framework for maximising profits and ensuring sustainability?

3.11.2.3 Discriminant Validity

Discriminant validity measures the degree to which the variables non-correlate with the constructs from which it is supposed to differ. Zikmund (2000) emphasised that discriminant validity includes demonstrating a lack of correlation between diverging variables. Figure 3.2 demonstrates the components explained above to examine the validity of this study. Validity can be examined in various forms, as illustrated in the figure.

Figure 3.2 Discriminant Validity



Source: McDaniel and Gates (2002: 259).

3.12 LIMITATIONS OF THE QUESTIONNAIRE SURVEY

The literature documented the limitations of the questionnaire instrument. Maduekwe (2015) reported non-response as the limitation occurring when the participants decline to answer some of the questions. In most cases, it is due to the fact that they do not possess the certain characteristics that other companies of the same level possess. Non-response bias

crumbles the randomness of the sample and, therefore, makes the population not fully representative of the study, and that aspect reduces the external validity of the findings (Vogt, Hall & Marteau, 2005). This research excluded questions pertaining to taxes and turnovers even though they form part of the financial component of sustainability. The latter was deliberated to encourage the participation of the respondents and reduce non-response. The data collection was scheduled at a time when most businesses, including manufacturing SMEs, were busy with financial year-ends and audits. To overcome the limitation of a low response-rate, the researcher visited some of the respondents more than twice to persuade them to complete the questionnaire; endless calls were initiated to check the availability of the respondents.

As already mentioned, the purposeful sampling method was employed to select the desired sample for the study. This could mean the sample selected might not be representative of the entire population, as the sample was also chosen non-randomly. This limitation was reduced by setting a target sample size of 200 SMEs from various types of industries operating under the manufacturing sector. The researcher persuaded the decision-makers to take part in the survey even when they had little interest in giving away information about their companies and strategies. The respondents could be sceptically reluctant since the study questioned operations and their involvement with regulated laws pertaining to environmental and social aspects. The study reduced this limitation because the part of the investigation pertained to the sustainability concerns that SMEs are interested in knowing and seek to address, and the components of the TBL. The respondents became eager to partake when the researcher explained the objectives of the study, which had benefits such as knowledge to be obtained from the outputs of this study. The benefits included knowledge about sustainability and the TBL, and the recommendations that could improve sustainability and the maintenance of competitive advantage, as that is every company's goal.

The respondents, who were approached to participate in this study comprised of the owners, managers and supervisors. The participants of this study varied from business to business with characteristics such as age, experience and qualifications varying. The demographics were also analysed to make sure that the respondents have different characteristics. The researcher encouraged the participation by deliberately keeping the close-ended questions short and concise.

Lastly, this study only focused on SMEs operating in the manufacturing sector of the Cape Metropole. The findings, therefore, might be applicable to the SMEs in other sectors in the Cape Metropole, as well as in other parts in South Africa. This limitation was overcome by investigating different industries within the sector when reviewing the literature. This study also considered the entire SME sector and acknowledged its contributions while also reviewing their challenges. The findings were discussed in the form of a universal application

regarding suitability and were not necessarily applicable to only the SMEs in the manufacturing sector. The findings were compared with those of the SMEs around the world, SMEs from different sectors and different types of industries to ensure their generalisation.

3.13 ETHICAL CONSIDERATIONS

The ethics were defined by Thomas (2011) and Matsoso (2014) as ideologies of conduct that concern right and wrong. Furthermore, Matsoso (2014) emphasised that they tail from the system of moral principles to be embraced by society or particular community of people. Bearing in mind that this research involved human participants as the subject of the study, the researcher had obtained a certificate of approval to conduct the research from the Cape Peninsula University of Technology's Ethics committee, before commencing data collection. The Ethics committee required the protection of respondents who partook in the study from any potentially negative repercussions that could arise because of participating in the research. The purpose of the study was clearly explained to the respondents in the cover letter (See Appendix A).

3.13.1 Informed Consent

The researcher explained to the respondents what the research entails and emphasised that respondents are allowed to withdraw from participating at any time, without any negative ramifications. This was part of the requirements the Ethics committee set, which obligated the researcher to comply. A researcher would give a consent letter to the participants and requested them to read and ask questions when they needed further clarity. Once the consent of the participants was obtained, the questionnaire was distributed to them. In cases where the researcher called and e-mailed the company, the consent letter would be attached as the first page of the survey to give clarity to the participants.

3.13.2 Confidentiality and Anonymity

The participants were guaranteed of their anonymity and their confidentiality. They were assured that their personal details were not going to be divulged to a third party. They were guaranteed that under no circumstances will their personal details be linked to their individual responses. In addition, before the participants completed the survey, they were informed that their information and responses would be kept confidential and the results of the survey would be reported anonymously in a manner to protect their identities and their enterprises (Maree, 2010).

3.14 SUMMARY

This chapter aimed to demonstrate how the research strategy and methods used to collect data in this study were derived to meet the objectives of this study. The chapter began with a discussion of the research paradigm adopted and justification of the survey-method used. The methodology adopted was expounded as encompassing the design, population, sampling technique, and data collection procedures deemed suitable for this study. Data preparation, data validity and reliability of this study, were unpacked for clarity and detail how the researcher avoided the preparations of the unreliable and invalidated data. The limitations of the questionnaire survey methodology adopted were then discussed alongside the ethical considerations. In conclusion, the methodology deemed appropriate for this study was discussed in this chapter to convey the research objectives of this study. The subsequent chapter is a presentation and analysis of the results from the data collected, it formulates results, discussions and findings of the study out of the process of data analysis.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF EMPIRICAL FINDINGS

4.1 INTRODUCTION

The overview of the methodology and the research modus operandi utilised in this study were provided and explained in the previous chapter. The composition of the sample selection as well as the development of the questionnaire survey that was employed to gather the data were described in detail to provide cogent understanding of the utilised techniques. The processes entailed in collecting, capturing, processing and analysing data were also provided and the statistical methods applied in the study to confirm the reliability and validity of the research tools were clearly stated.

The purpose of this chapter was to analyse and discuss the results of the questionnaire survey undertaken to investigate the TBL framework as a tool for measuring sustainability of manufacturing SMEs at Cape Metropole. This chapter emphasised on the outcomes of the empirical study through the analysis, interpretation and discussion of the results collected from managers, owner-managers and directors/supervisors of the manufacturing SMEs. The Statistical Packages for Social Sciences (SPSS version 24.0 for Windows) was employed to analyse the data.

The data was presented using descriptive statistics with the aim to organise and present the data in a more meaningful manner. The presentation and analysis of the results in this study is presented in six categories, according to the demographics of the surveyed SMEs and the descriptive results according to four objectives of the study. The descriptive results on the general questions regarding the TBL framework as a tool for ensuring sustainability of the SMEs are presented in a consecutive manner. In addition, analyses were presented to summarise the mass of collected data into interpretable results to enable the researcher to study the relations of the results to the research problems and draw conclusions.

4.2 RESTATEMENT OF RESEARCH OBJECTIVES

The purpose of this study was to determine the extent to which the decision-makers of SMEs in the manufacturing sector in the Cape Metropole utilise the TBL framework as a tool to measure their sustainability. To achieve the aim, these research objectives were formulated:

- to determine the extent to which SMEs consider the importance of utilising the TBL framework as a reporting tool to measure the profitability of their enterprises;

- to identify factors that enhance or hinder how managers of SMEs make decisions to employ the TBL framework to its full potential;
- to determine the challenges and opportunities in using the TBL framework as a tool to ensure the sustainability of SMEs; and
- to determine how the TBL framework can be utilised by SMEs to ensure lengthy sustainable advancement and maximum profit.

4.3 RESPONSE RATE

Given the lack of a comprehensive database of all the manufacturing SMEs operating in the Cape Metropole, the researcher established a target of 100 responses. To accomplish the targeted response rate, a sample of 200 questionnaires was selected using the purposeful sampling technique and were hand delivered on the door-to-door basis to the manufacturing SMEs operating at the Cape Metropole. The distribution of 200 questionnaires as opposed to only 100 that was targeted was deliberately done with anticipation that not all recipients would be eager and willing to participate in the survey. The other assumption was that by the period data collection is scheduled, the companies would be busy with year-end financial periods and audits. The targeted respondents were occupied, they had limited time to complete the survey and the data collection was scheduled for the certain period of the study.

In total, 108 completed questionnaires were received. Out of the 108 mentioned, only 103 usable questionnaires were returned that met the requirements and the criterion of the study, based on that they were completed by the targeted SMEs. The remaining five of the 108 questionnaires were from micro-enterprises and thus, were omitted since the study intended to investigate respondents from the SMEs.

Out of the 200 distributed questionnaires, only 103 usable questionnaires were reverted, resulting in a response rate of 51.5 per cent (see the Table 4.1). This response rate was attained by the door-to-door campaign of the hand delivery and the collection of the questionnaire. Sometimes it would be after perennial follow-ups that were meant to decrease the non-response bias. The attained response rate of 100+ was endorsed as satisfactory by Fowler (1988), cited in Maduekwe (2015). The response rate was also confirmed to be higher than the targeted response rate which is 100+. Bruwer (2010) confirmed that the sample of 100+ for SMEs in the Cape Metropole is likely to deliver credible results on behalf of the population. Abdel, Kader and Luther (2006); Ahmad (2012) and Maduekwe (2015) confirmed that the response rate was greater than that of comparable studies.

TABLE 4.1 Response Rate

	Number of Respondents	Percentage (per cent)
Targeted Respondents (total)	200	100 per cent
Collected feedbacks	108	54 per cent
Spoilt Questionnaire (micro-enterprises)	-5	-2.5 per cent
Valid Responses	103	51.5 per cent

(Source: Own source)

4.4 DATA CODING

Coding is the process of conveying and classifying a code to represent a specific response to a specific question with a numeric score or character. The purpose of data coding is to bring out the essence and meaning of the data that respondents have provided. Coding, therefore, can be described as attaching keywords to text segments. Coding plays an important role in the analysis of the data symbols (Malhotra & Birks, 2006; Churchill et al., 2010). In this study, the data was coded before it was imported into SPSS (version 24.0 for Windows).

The data regarding Economic Dimension/ Financial Capital was coded as EcoDi while EnvDi represented the components relating to Environmental Dimension. The data regarding Social Dimension was represented by SocDI and Sustainability Measures extracted from Section 3 were coded SusMe. Sustainability Measures relating to the Economic dimension were coded as SusMe-EcoDi, The Sustainability Measure representing the Environmental Dimension were coded as SusMe-Env and the coding SusMe-Soc was used to represent Sustainability Measures of Social Dimension (see Table 4.2 and 4.3).

4.5 DATA ANALYSIS

Statistical analysis was used to summarise and outline the quantitative data. The graphs and tables were employed to visualise and present the raw data in the study. This section assists to review the commonly used techniques/sources of quantitative data and the methods used for recruiting participants. This study also employed the Statistical Package for Social Sciences (Version 24.0 for Windows) programme; to code the data and lastly, to run the statistical analysis. Initially, the study discussed the descriptive statistics and demographic information, and then the findings of the research questions, which were guided by the four objectives of the study, clearly articulated after the sections where validity and reliability of the instruments were presented.

4.6 DESCRIPTIVE RESULTS OF THE STUDY

Descriptive statistics are meant to provide the simple summaries about the sample and the observations made. Some of the measures that are typically used to describe the sample include measures of the central tendencies such as arithmetic mean, mode, median and measures of dispersion such as standard deviation and variance (Thompson, 2009). After gathering the bulk of data in quantities, it was significant for the researcher to systematise and summarise the information into few concise descriptive measures (Wegner, 2012). This section presents the analyses pertaining to the results that were obtained from addressing the research objectives and the demographics of the respondents.

The four objectives were separately addressed in different sections. Each of the stated sections had a presentation that consisted of an introduction, analysis and the conclusion. Tables and diagrams were used where suitable to foster analysis and the presentation of processed data. The leading section provides the clear understanding of the respondents, and it is followed by the analyses of the biographical information of manufacturing SMEs who were identified as the participants of this study. The purpose for the identification of the participants was to provide an overview of the nature and the environment in which the study was conducted.

Generally, information relating to attitudes, emotions, opinions, characteristics, personalities and descriptions of people's environment, is gathered in different disciplines (including social sciences and business). The researcher might have used summated ratings and multiple-item scales such as Likert-type scale to quantify the constructs of interests that are not directly measurable (Gliem & Gliem, 2003). This study also used the abovementioned summated ratings and multiple-item scales to analyse data. McIver and Carmines (1981) opined that the multi-items provide social scientists with an advantage to generalise the results even though they rarely possess the sufficient information to estimate their measurement properties. At the same time, they have the potential to provide the degree of validity, accuracy, and reliability as though this is often unknowable. For this study, the percentages, graphs and tables were employed to summarise the responses of the respondents. In addition, an arithmetic mean was used to summarise and rank the responses of respondents to all the five-point Likert scale questions. For these questions, a standard deviation was computed to determine the level of agreement of respondents' responses on a particular statement, with less than one indicating an agreement and more than one indicating a disagreement.

4.6.1 Unit of Analysis

Identifying unit of analysis is the most vital step in designing a research project. According to Cooper and Schindler (2011), who was cited by Lose (2016), the unit of analysis is the entity being studied and it enables the researcher to decide on how to analyse the data gathered

for the study. Terre Blanche et al. (2006), cited in Matsoso (2014), concurred with Lose (2016) that the group of people, organisations or a person being studied can be referred to as a unit of analysis. In this study, the manufacturing SMEs from whom the researcher gathered the information and data and who answered the question, “To what extent do manufacturing SMEs use the TBL framework as a tool to measure the sustainability of their enterprises?” were considered the units of analyses. The respondents that completed the surveys were the owners, managers, and supervisors and were all referred to as units of analysis. Individual characteristics such as the number of years these SMEs existed for, number of years in the position held by respondents, education, and age were branded in the research to outline a portrait of the groups of 103 entities being studied. Hence, this study had a question that focused on demographics to ensure that the studied units were suitable and appropriate for the criterion of the study.

4.6.2 Respondents’ Personal and Business Profiles

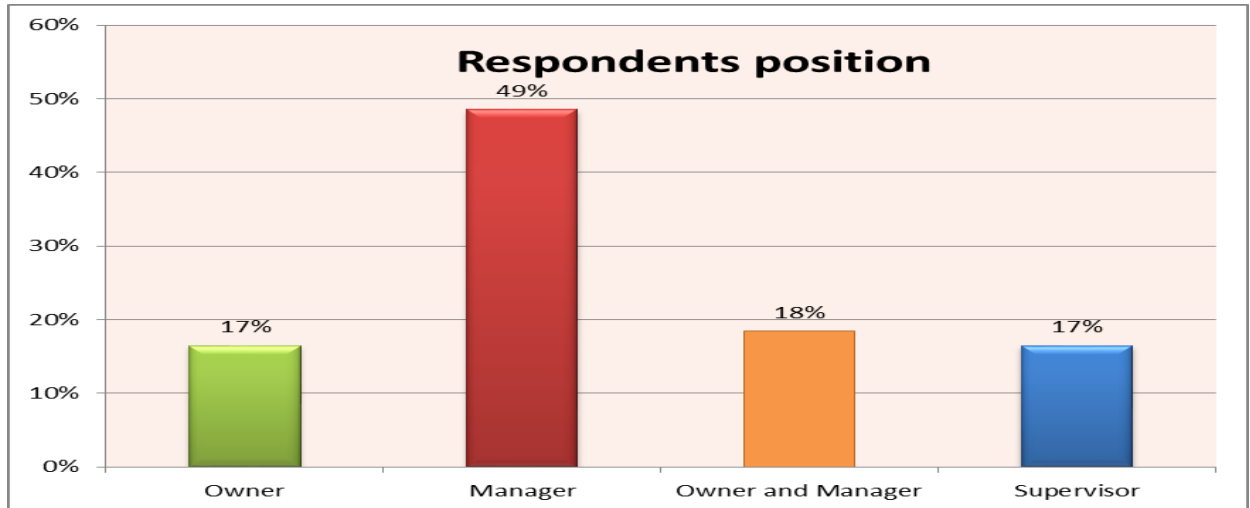
The purpose of Section Five of the questionnaire was asked for the respondents to provide their personal and business profiles. The demographic information asked related to positions they held, age, years of experience in the position, highest level of education and ethnicity. This section was done to ascertain whether the respondents were decision-makers of SMEs, and were the appropriate respondents targeted by this study. In addition, the respondents were then asked to provide the business profile information pertaining to the industry of operation, number of employees, and the longevity of business in question. This was asked to confirm that only respondents from SMEs operating in the manufacturing sector were surveyed, and that the business was not newly opened and had the track record to comment on its sustainability.

4.6.2.1 Respondents’ Position in the business

Regarding the respondents’ position in their businesses as analysed by Figure 4.1, the results indicated that 49 per cent of the respondents were managers, while 17 per cent were the owners of their business and 18 per cent assumed these positions simultaneously. The remaining 17 per cent of responses were from the supervisors of the operations (the course of the study is less citing supervisors). These results were confirmed in the study by Coppa and Sriramesh (2013) who noted archetypal SMEs demonstrate no distinction between the owner and the manager. Most SMEs are family businesses, so it is possible that owners can assume owner/manager position simultaneously.

It, therefore, can be confirmed that most of the respondents who participated in this study were owners and managers or assumed both positions at the same time. This analysis can confirm that the people surveyed were indeed the appropriate respondents who were targeted by the study, the decision-makers of SMEs as concurred by Maduekwe (2015).

Figure: 4.1 Respondents Position

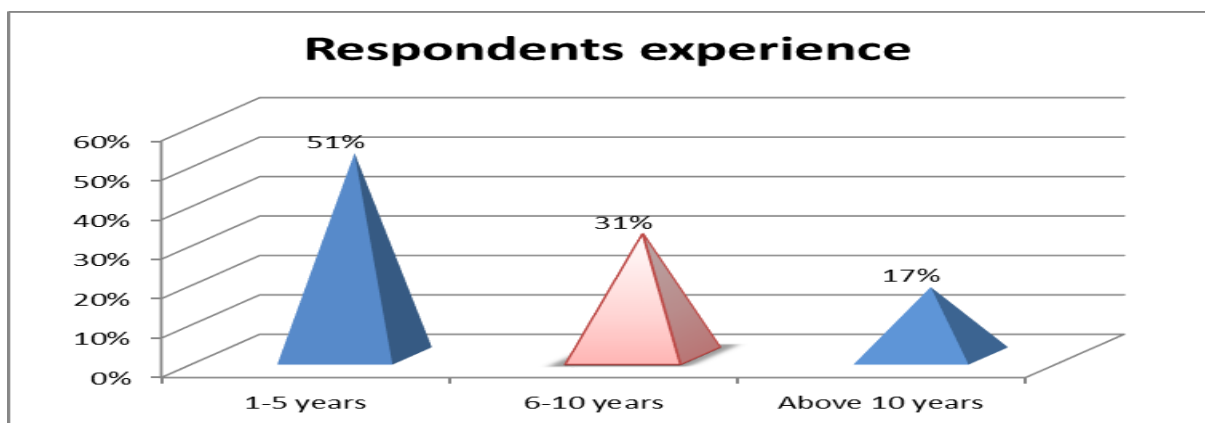


(Source: Own Source)

4.6.2.2 Respondents' Experience

Figure 4.2 reports on the experience of the respondents in their current positions. The majority of respondents, which comprised of 51 per cent + 31 per cent = 82 per cent indicated to have one to 10 years' experience. Only 17 per cent of respondents indicated to have more than 10 years' experience in their positions. These results suggest that the majority of decision-makers (51%) might not be having the sufficient experience, as it is logic for the individuals in the management positions of SME endeavours to possess enough experience to make well-grounded and informed strategic decisions (Parker & Castleman, 2009). Mabesele (2009) highlighted the risks of having the inexperienced personnel in management positions as including, but not limited to, a lack of managerial capabilities, such as identification of critical information for the decision-making, a lack of certain competencies on the part of managers and the experience of the managers as the risk of business failure is high among SMEs.

Figure: 4.2 Respondents Experience



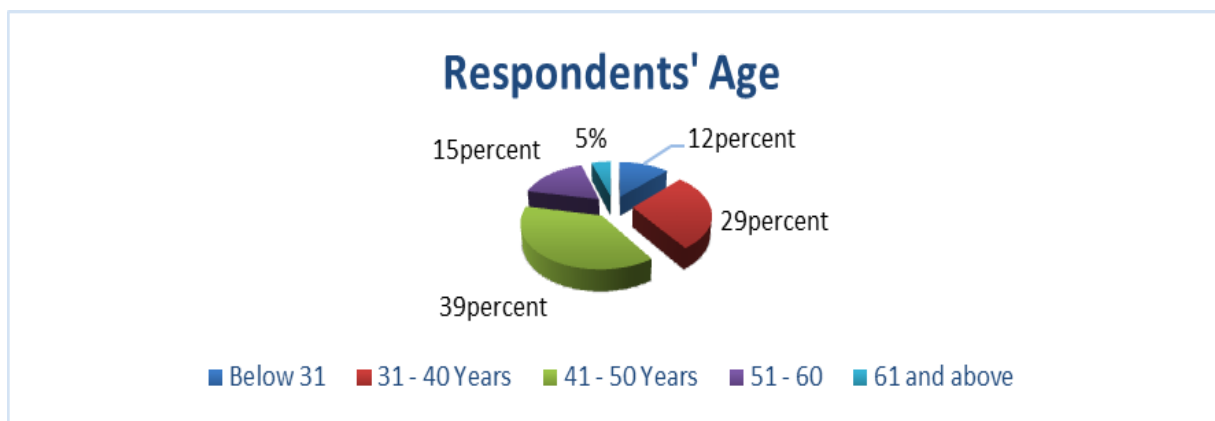
(Source: Own Source)

4.6.2.3 Respondents' Age

Figure 4.3 presents the ages of the respondents. The greater part of the respondents, 39 per cent + 12 per cent + 29 per cent = 80 per cent indicated that their ages were between 30 and 50 years. These results could justify the 82 per cent of the respondents who had minimal experience in their positions. The 15 per cent of the surveyed respondents were approaching 60 years (the official retirement age). Five per cent of the respondents was above 60 years. The mentioned five per cent of the respondents was still with companies after reaching the retirement age. The assumption is that they might be owners or shareholders since SMEs are likely to operate as family businesses. These results further reveal that most of the SME decision-makers are above 40 years.

According to the meta-analysis procedures of the study conducted by McEvoy and Cascio, (1989), there was no relationship existing in general between age and the job performance. The conclusion drawn, however, indicated consistent and modestly positive relationships that exist between very young employees, their age and their job performance. The conclusion, therefore, can be drawn that the decision-makers of the surveyed SMEs are likely to perform well in their position, despite the fact that they have limited experience.

Figure: 4.3 Respondents Age

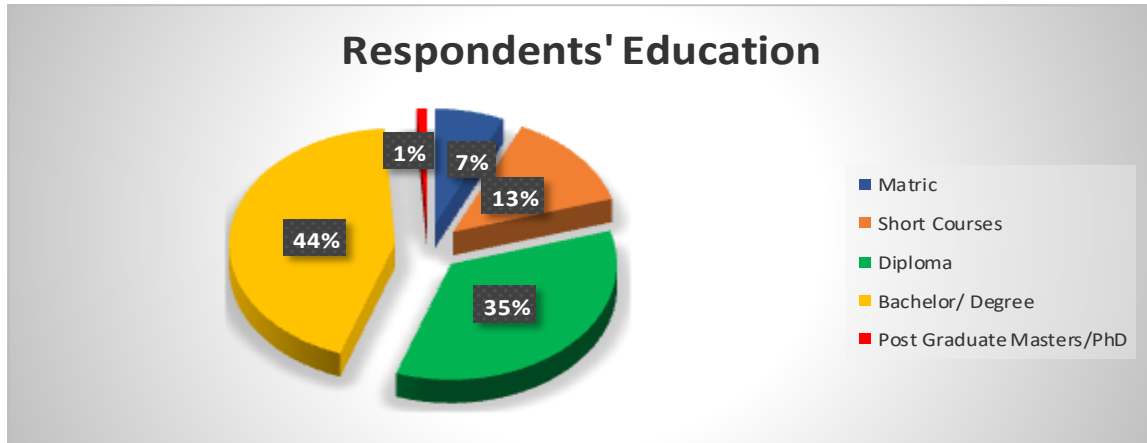


(Source: Own Source)

4.6.2.4 Respondents' Education

Pertaining to data from Figure 4.4 that address the education levels of the respondents. The data indicated more than three quarters (35 per cent + 44 per cent + One per cent = 80 per cent) of respondents had at least a tertiary qualification. The remaining 20 per cent of the respondents who were owners and managers of the surveyed SMEs were either having trade certificates or basic education (13 and seven per cent, respectively). These results were congruent to those of Fatoki and Patswawairi (2012), cited in Toli (2017), who found most SMEs decision-makers possessed post-matriculation qualifications. Education could aid the decision-makers to take well-informed decision in strategic planning.

Figure: 4.4 Respondents Education

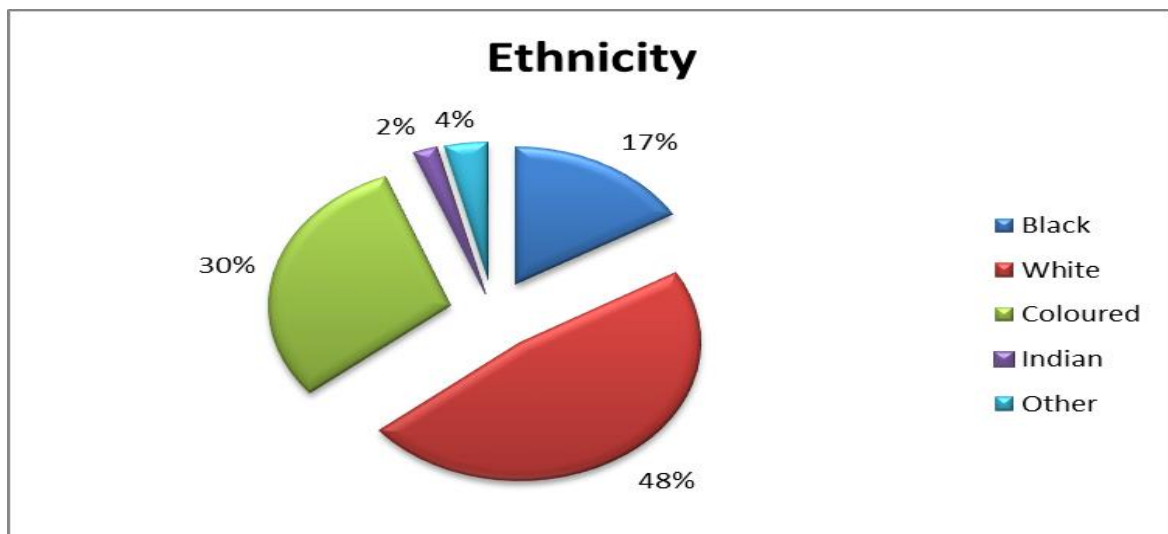


(Source: Own Source)

4.6.2.5 Respondents' Ethnicity

Figure 4.5 graphically portrays the racial profile of the respondents who participated in the study. Just fewer than five in every ten manufacturing SMEs (48 per cent) were owned or managed by Whites. Seventeen (17) per cent of the surveyed respondents were Black; 30 per cent of the respondents were coloured; two per cent represented Indians and the remaining four per cent were the respondents from other ethnic groups, other than those of Natives. These results could indicate that most manufacturing SMEs at the Cape Metropole (South Africa) are owned by Whites. It remains imperative to foster operations skills that are focussing on cultural diversity and ethnicity in the workplace, allowing for appreciation of the “other” view and the different value orientations with respect to management and relying on “afro-centric management perspectives” (Urban & Naidoo, 2012).

Figure: 4.5 Respondents Ethnicity



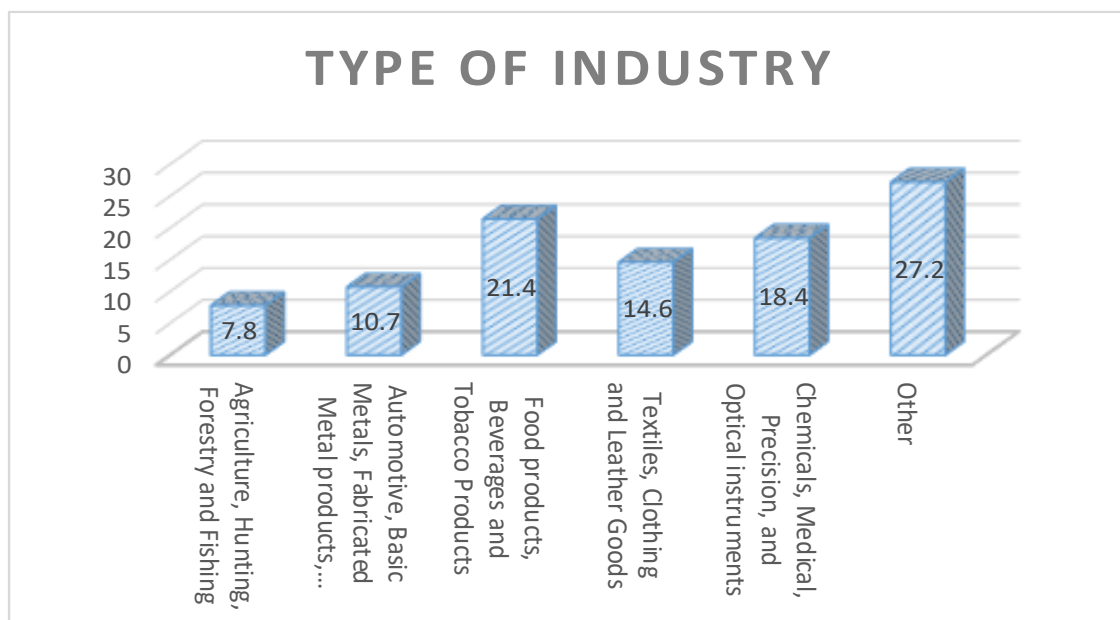
(Source: Own Source)

4.6.2.6 Industry of operation

The feedback from the surveyed respondents presented in Figure 4.6 indicates most entities investigated were formally registered manufacturing SMEs. The chart indicates that the food manufacturing companies, beverages and tobacco products manufacturing companies, and companies manufacturing products other than those mentioned in these categories were the majority (27.2 per cent + 21.4 per cent = 48.6). The least of the respondents were from SMEs manufacturing the agriculture, hunting, forestry and fishing products (7.8 per cent).

There were major factors impeding the success of SMEs, especially those operating in the manufacturing environment (Beck & Demirguc-Kunt, 2006). The government has posed a mandatory call to ensure that the manufacturing sector is well-developed and performance measurement systems are in place, as it is the major contributor to the GDP. The important value of the manufacturing SMEs was viewed by Matsoso (2014) who cited Rogerson (2004) as not to be underestimated because of their contribution to the country's economic growth. The contribution they make through job creation, employment and alleviation of poverty, and their capability to manufacture and launch new products that complement the market trends and attain the customer satisfaction level should be recognised.

Figure: 4.6 Type of Industry

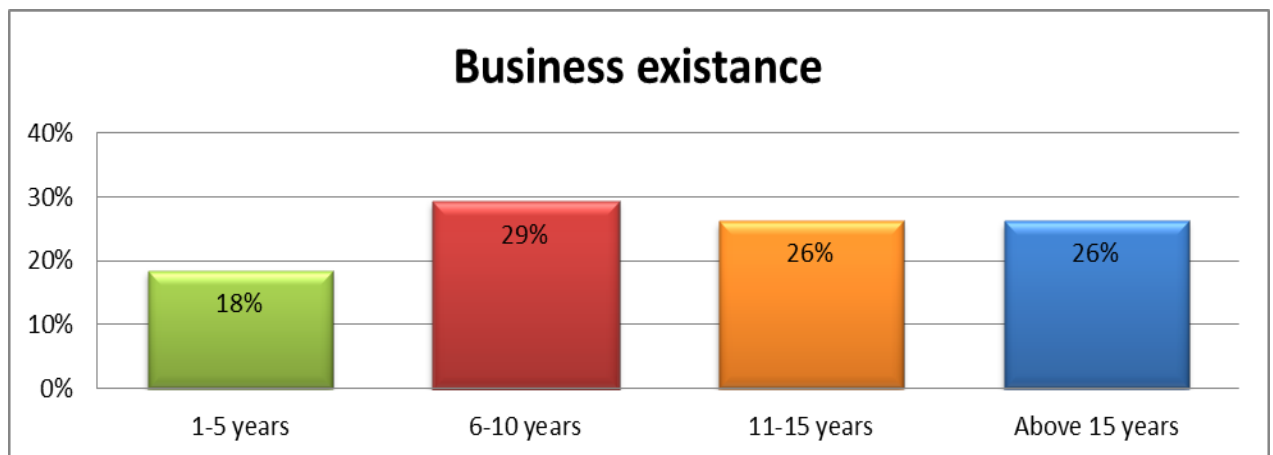


(Source: Own Source)

4.6.2.7 Longevity of Business Existence

The results pertaining to the business lifespan is shown in Figure 4.7. The 26 per cent + 26 per cent = 58 per cent of the surveyed businesses were established for over 11 years. Twenty-nine (29) per cent has been in existence for six to 10 years, while the remainder 18 per cent could be classified as emerging enterprises that were less than five years old. These results show the majority of SMEs 26 per cent + 26 per cent + 29 per cent = 82 per cent surveyed have survived more than five years and were considered eligible to give informative responses on issues pertaining their sustainability. They have passed the phase of the overall estimated lifespan of approximately 80 per cent who are noted to be hardly surviving beyond four years of existence (Ngubane et al., 2015).

Figure: 4.7 Business Existences

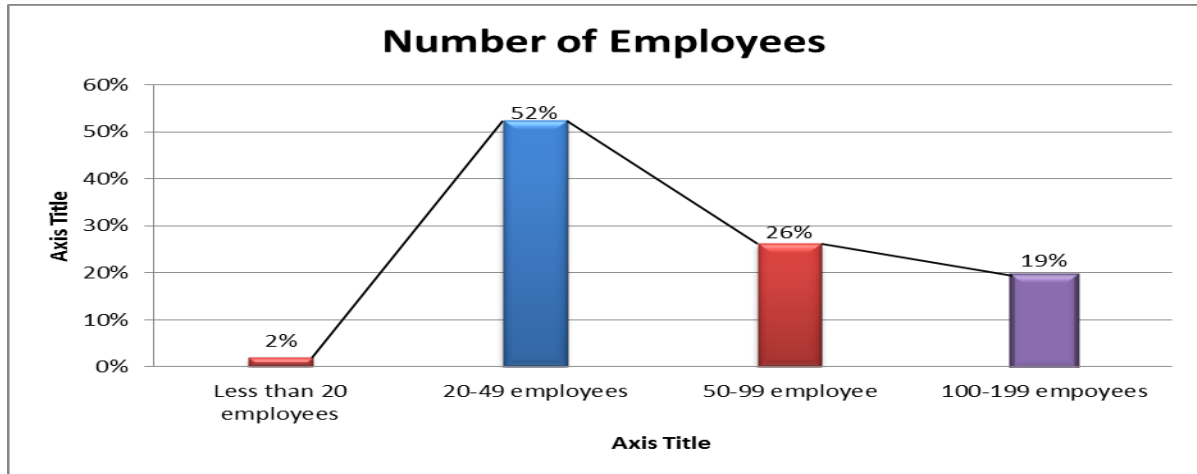


(Source: Own Source)

4.6.2.8 Number of Employees

Employment figures for this specific sample profile are represented Figure 4.8. The previous studies confirmed that the bulk employers in the South Africa's Cape Metropole are SMEs, even though they only have a capacity to employ less than 200 fulltime paid employees per business entity. A projected two per cent of the surveyed SMEs employed less than 20 employees, and a further 52 per cent has employed 20 to 49 employees. Interestingly, almost a half (26 per cent + 19 per cent = 45.6 per cent) of the participating SMEs are labouring more than 50 employees. These results are congruous with Moodley's (2002) findings that revealed the importance of SMEs. Despite their ability of recruiting fewer employees per entity, their potential capability to create jobs and dominance were outlined. These reported survey results are confirmed by the study Matsoso (2014), which made a comparison between the Gauteng SME manufacturing sector and the Western Cape manufacturing sector in South Africa. The study concluded that the Western Cape might not demonstrate the industrial dominance, but it is still counted as the third major contributor to the national output and job creation.

Figure: 4.8 Number of full time Employees



(Source: Own Source)

The above results show that the respondents who participated in the study were eligible and appropriate since they met all the criteria that describe the decision-makers of SMEs. The characteristics of the surveyed enterprises also satisfied the criterion of the manufacturing SMEs as per study requirements. In essence the attributes of these respondents, therefore, indicate that the surveyed respondents were indeed the decision-makers on behalf of the manufacturing SMEs in the Cape Metropole.

4.7 RELIABILITY ANALYSIS

Reliability in the context of measurement is defined by Peter (1979) as the degree to which measures are free from blunder as they subsequently yield the reliable outcomes. The high inter-judge reliability agreement indicates high reliability at an assumption that respondents provide information that is more accurate than random guesses. The assessment of reliability is essential in research for the researcher to decide on the solidness and the nature of the information obtained (Rust & Cooil, 1994). For this research, reliability was first assessed in the sample and discussed in the previous chapter to measure the degree of accuracy and precision. The researcher then carried out the reliability analysis at the pilot study and lastly, in the main survey.

The Cronbach alpha results of the pilot study were satisfactory. These results were satisfactory as the scores above 0.50 and 0.60 benchmark could be deemed adequate (Kerlinger & Lee, 2000). Most research considered 0.70 Cronbach Alpha as the most acceptable benchmark. According to the study by Maree (2009), composite reliability indices should exceed 0.7 satisfactory degree to depict the adequate internal consistency of the constructs. The most recent study conducted by Maduekwe (2015) concurred with the latter author that 0.70 is considered as a good estimate of internal consistency and reliability.

During the main survey, the reliability was assessed using three ways to check consistency, test re-test, internal consistency reliability and the equivalent form. The items who manifested low composite reliability were deleted and removed from the scale to improve the Cronbach Alpha factor. The items deleted from the scale were from following coded EnvDi and SocDi components. Prior to deletion the minimum alpha factor was .558 for EnvDi construct and the highest was .873 for SusMe.

Table 4.2: Reliability analysis

Factor	Cronbach alpha	Cronbach's alpha based on standardised items
EcoDi	.860	.860
EnvDi	.558	.681
SocDi	.747	.787
SusMe-EcoDi	.814	.873
SusMe-EnvDi	.853	.853
SusMe-SocDi	.809	.809
SusMe	.873	.873

(Source: Field Work)

The test re-test was performed to measure constructs the second time after the deletion and check if the Cronbach alpha would yield consistence results under similar conditions as possible to the original during the pilot stage. After the deletion Cronbach alpha results were reported as follows as presented in the last column of Table 4.2. EcoDi (.860), EnvDi (.681), SocDi (.787), SusMe-EcoDi (.873), SusMe-EnvDi (.853), SusMe-SocDi (.809) and SusMe (.873). After the deletion the lowest alpha became .681 and highest alpha remained constant .873. EnvDi, SocDi, SusMe-EcoDi factors increased in their alphas except EcoDi, SusMe-EnvDi, SusMe-SocDi and SusMe which remained constant at 0.860, 0.853, 0.809 and 0.873 respectively as represented in Table 4.2. The level of the alpha indicated CR indexes varied between .681 (which can be rounded off to 0.7) and .873 and was considered good enough and adequate to deem the data satisfactory reliable to proceed advanced analysis.

The internal reliability of each construct was then tested using Cronbach alpha based on the standardised items as indicated in the third column of Table 4.2. The higher reliability of the scale was manifested by its high level of Cronbach alpha. Table 4.2 demonstrated that the Cronbach alpha coefficients ranged from 0.681 (0.7 when rounded off) to 0.873 (0.9 when rounded off). The above Cronbach's alpha's coefficients for all constructs were either equal or above 0.7, signifying the acceptable internal consistency. The composite reliability coefficients for all constructs above 0.7, evinced a good internal consistency. The results of scale reliability tests were equivalent or greater than 0.7, indicating reasonable reliability that is in good satisfactory range (Bertea, 2010; Vela, Sparrow, Whittenberg, & Rodriguez, 2018).

The last form the study used to test the reliability was the equivalent form of reliability. The study assessed the ability of the following two equivalent forms of instruments if they could yield closely correlated results, through the composite reliability (CR) and the average variance extracted (AVE). The calculations were presented in the column of Table 4.3.

The calculations of CR and AVE are as follow:

CR: amount all factor loadings, square this totality (call this SSI); sum all inaccuracy variances of each indicator (call this SEV); comp rel. = $SSI / (SSI+SEV)$

AVE: total each squared factor loading; divide it by the number of indicators. Items with standardised loadings and error variances (the same for a single latent with four indicators):

$$CR: SSI = (0.859 + 0.881 + 0.807+0.871)^2 = 11.68$$

$$SEV = 0.367 + 0.375 + 0.457+0.351 + 0.417 = 1.97$$

$$Comp Rel = 11.68 / (11.68 + 1.97) = .856$$

$$AVE: AVE = (0.859^2 + 0.881^2 + 0.807^2+0.871^2)/4 = 0.73$$

The above results, therefore, yielded closely correlated results ranging between (0.73- 0.86) > (0.7- 0.9) same as results from internal reliability ranged between (0.68- 0.87) > (0.7- 0.9).

4.8 TESTS FOR VALIDITY

The quantitative research described validity as a measure of the preliminary concept, notion, question that explain which data must be collected and how to obtain it (Wainer & Braun, 1988). Validity is compromised only when a source of error or bias exist in how the questions are asked. The construction validity was also to establish a relationship in both theoretical and empirical work. The questionnaire was constructed from the information extracted from the literature and previous studies about the topic at hand. The construct validity was established during the piloting stage of the questionnaire to validate the measuring scales. The researcher requested four academia experts with vast experience in the questionnaire design to critically review the questionnaire. The researcher asked the academics to highlight ambiguous statements in the construction of items in the variables and raise comments were possible about the conceptual validity.

During the piloting process, academics were required to explain their understanding of each question and identify any possible weaknesses that would render the questionnaire as not being user-friendly. The researcher also used the process to test the length of time it took each of them to complete the survey. The purpose of piloting the questionnaire before the actual data collection was to ensure that all the questions asked were meant to measure

what the study intended to measure. It was also to ensure that items included were suitable and appropriate to fulfil the objectives of the study. The study conducted by Maree (2009) confirmed that the instrument is valid if it can measure what is it intending to measure. The academics experts then suggested the weaknesses that could undermine the questionnaire's external validity. Following the suggestions, the researcher amended the questionnaire accordingly to ensure the construct validity.

Validity is the magnitude to which measurement produces precise denotation or scores of the variables being investigated (Block & Block, 2005). One of the approaches used in the study to measure construct validity of the scores was discriminant validity. The discriminant validity was measured to determine the constructs that do not correlate with others. The discriminant validity of the revised scale was assessed and examined the relationship between EcoDi and EnvDi (0.367); EcoDi and SocDi (0.526); EcoDi and SusMe (0.351); EnvDi and SocDi (0.375); EnvDi and SusMe (0.417); SocDi and SusMe (0.457). The aim to establish these relationships was to assess correlations among latent constructs and they should be no more than or equal to 0.6 (Bertea, 2010). Table 4.3 demonstrated that the inter-correlation values for all paired latent variables are below or equal to 0.6, consequently, demonstrating the presence of discriminant validity. These correlation values confirming discriminant validity, as they were contained in the threshold as recommended by Bertea (2010), and Bell and Bryman (2007).

Convergent validity was assessed by comparing the results of this research with those of previous similar studies. The empirical and theory evidence was compared throughout the analysis of the findings. Conceptually contradictory measures of implicit attitudes were presumed to tap the same implicit attitude and failures to discover correlations among measures that naturally raised concerns about the validity of couched attitude measured. The researcher measured confirmatory factor analysis (CFA) to assess the accuracy of convergent validity. The four administrations of the following constructs of variables, economic dimension (EcoDI), social dimension (SocDi), environmental dimension (EnvDi) and sustainability measures (SusMe) were modelled as indicators of their respective latent constructs.

The correlations among these latent variables projected validity to test the relationship of the variables or the interdependence of the components of the TBL tool to sustainability. The correlations of variables are statistically noteworthy at less than 0.6, which signified the convergent validity. All constructs have AVE of > 0.6 , suggesting the convergent validity; at least 60 per cent of variance in all constructs is due to the underlying traits. Root squares of AVE indicators for the constructs are greater than their correlations, suggesting discriminant validity no less than 60 per cent of variance in all constructs because of the key underlying

traits. Root squares of the AVE indicators for constructs are greater than their correlations, suggesting discriminant validity.

Table: 4.3 Correlation analysis

CONSTRUCTS	MEAN	STANDARD DEVIATION					Composite Reliability
			EcoDi	EnvDi	SocDi	SusMe	
Economic Dimension- (EcoDi)	3.11	0.457	1.00	0.367	0.526	0.351	0.859
Environmental Dimension- (EnvDi)	3.32	0.417		1.00	0.375	0.417	0.881
Social Dimension- (SocDi)	3.06	0.530			1.00	0.457	0.807
Sustainability Measures- (SusMe)	3.40	0.451				1.00	0.871

(Source: Field Work)

4.9 T-TEST RESULTS

This section presents the analysis pertaining to the results obtained that address the test-significant differences to the extent to which the decision-makers of manufacturing SMEs adopted the TBL framework to measure sustainability of their enterprises. The independent T-tests was analysed to test if there are any statistically significant differences among variables, with all inferential statistics, as it assumes the dependent variable fits a normal distribution.

Table 4.4 illustrates the results of prognosis about the properties of a populace based on information gathered from a sample. In essence, Table 4.4 provides a summary of what influence decision-makers of manufacturing SMEs to use the TBL by predicting the factors that inhibit or challenge the accomplishment of the full adoption and consumption of the tool. SPSS computed the P-value (Probability value) which is the output. In an effort to draw the test-specific alpha levels also known as (significance levels), the researcher compared the P-value on the output (labelled as a Sig. value on the SPSS output) to the selected alpha level. The results were regarded as significant in cases where P-values are less than 0.05, because these values indicate a satisfactory level on a 95 per cent confidence interval ($p \leq 0.05$).

The sig-value is the probability of detecting a sample value as great as, or greater than, the value actually observed when the statistical test is performed and reflects null, the results are valid. Mabesele (2009), citing Cooper and Schindler (2001), suggested that the area that symbolises the probability of a Type-1 error that must be presumed. The sig-value is compared to the significance level (α) and on this basis the statistical indicator is either rejected or not rejected. Furthermore, independent sample test was used. Most authors refer

to statistically significant as $P < 0.05$ and statistically highly significant as $P < 0.001$ (less than one in a thousand chance of being wrong).

The results revealed the significant differences between the business' using TBL and employees' knowledge of TBL usage within their organisations (t-value = -3.564) and P-value = .001. Also, respondents seem to associate TBL with organisational success where it was stated with t-value = -3.485 and P-value = .001. The differences between the remaining variables were not significant and were discarded.

Table: 4.4: Independent T-test analysis

		Independent Samples Test						
		Levene's Test for Equality of Variances					t-test for Equality of Means	
Q1 Does your company utilise TBL?		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Q6a Difficult to quantify	Equal variances assumed	-3.564	99	.001	-.828	.232	-1.289	-.367
	Equal variances not assumed	-2.648	11.167	.022	-.828	.313	-1.515	-.141
Q6b Cost ineffectiveness of the performance measures and endure economic burden	Equal variances assumed	-1.868	99	.065	-.436	.234	-.900	.027
	Equal variances not assumed	-1.708	12.029	.113	-.436	.256	-.993	.120
Q6c Inadequacy of information about TBL	Equal variances assumed	-2.262	96	.026	-.625	.276	-1.173	-.077
	Equal variances not assumed	-1.937	11.763	.077	-.625	.323	-1.329	.079
Q6d Complexity of TBL	Equal variances assumed	-2.816	99	.006	-.642	.228	-1.095	-.190
	Equal variances not assumed	-2.459	11.798	.030	-.642	.261	-1.213	-.072
Q6e Social and Environmental measures unreliable	Equal variances assumed	-1.831	95	.070	-.364	.199	-.758	.031
	Equal variances not assumed	-1.442	11.421	.176	-.364	.252	-.916	.189
Q6f Social and Environmental measures irrelevant to our business	Equal variances assumed	-1.166	99	.246	-.324	.278	-.876	.227
	Equal variances not assumed	-.990	11.670	.342	-.324	.327	-1.040	.391
Q6g Lack of understanding and knowledge of TBL	Equal variances assumed	-2.366	99	.020	-.681	.288	-1.252	-.110
	Equal variances not assumed	-1.711	11.084	.115	-.681	.398	-1.556	.194
Q6h Cost of implementing TBL is very high	Equal variances assumed	-.261	99	.794	-.040	.155	-.347	.266
	Equal variances not assumed	-.214	11.525	.834	-.040	.188	-.453	.372
Q6i TBL does not guarantee sustainability	Equal variances assumed	-2.053	99	.043	-.228	.111	-.449	-.008
	Equal variances not assumed	-1.573	11.270	.143	-.228	.145	-.547	.090
Q6j TBL does not ascertain success	Equal variances assumed	-3.485	98	.001	-.535	.154	-.840	-.230
	Equal variances not assumed	-2.157	10.701	.055	-.535	.248	-1.083	.013
Q6k Lack of necessary skills in human resources	Equal variances assumed	.217	98	.829	.054	.249	-.441	.549
	Equal variances not assumed	.150	10.968	.883	.054	.360	-.739	.848
Q6l Lack of policies guiding business into devoting the way of doing business using TBL	Equal variances assumed	-.314	98	.754	-.094	.300	-.688	.500
	Equal variances not assumed	-.267	11.705	.794	-.094	.351	-.862	.674
Q6m Lack of management support	Equal variances assumed	-1.124	97	.264	-.273	.243	-.754	.209
	Equal variances not assumed	-1.062	12.264	.309	-.273	.257	-.831	.285
Q6n Absence of an effective process of implementing TBL measures	Equal variances assumed	-.040	97	.968	-.011	.285	-.577	.555
	Equal variances not assumed	-.044	13.530	.965	-.011	.256	-.562	.539
Q6o Conflicting results among the different sustainability measures	Equal variances assumed	.076	97	.940	.011	.150	-.286	.309
	Equal variances not assumed	.067	11.893	.948	.011	.170	-.359	.382
Q6p employee resistance	Equal variances assumed	1.384	97	.170	.295	.213	-.128	.719
	Equal variances not assumed	.919	10.867	.378	.295	.322	-.413	1.004

****.** Correlation is significant at the 0.01 level (2-tailed). The remaining variables were not statistically significant and were ignored.

The summary of the results shown from Tables 4.2 to 4.4 indicated the importance of the environmental dimension with the mean scores of 3, 32 and the standard deviation of 0.417. These indicators are impressive, since manufacturing SMEs are generally known for lacking resources, yet, sensitive to environmental issues. Most manufacturing SMEs are increasingly

adopting the environmentally friendly activities and are attempting to conserve the natural resources despite their limited resources reported in the literature.

The results also shown in the social dimension mean score of 3.06 and the standard deviation of 0.530, which are accepted averages. These results are reflecting that manufacturing SMEs are moderately considering the importance of investing in the social responsibility. The more investment in social activities could strengthen long-term sustained relationships with different stakeholders.

The economic dimension and the sustainability measure used to measure the relationships among the constructs indicated the means scores of 3.11 and 3.40, and standard deviation of 0.457 and 0.451 respectively. These results confirm the relationship in all these variables is potentially leading to future profits and sustainable viability. With all the above measures and comparisons, the credibility of results from this study can be confirmed reliable and valid.

4.10 TRIPLE BOTTOM LINE COMPONENTS AS A REPORTING TOOL

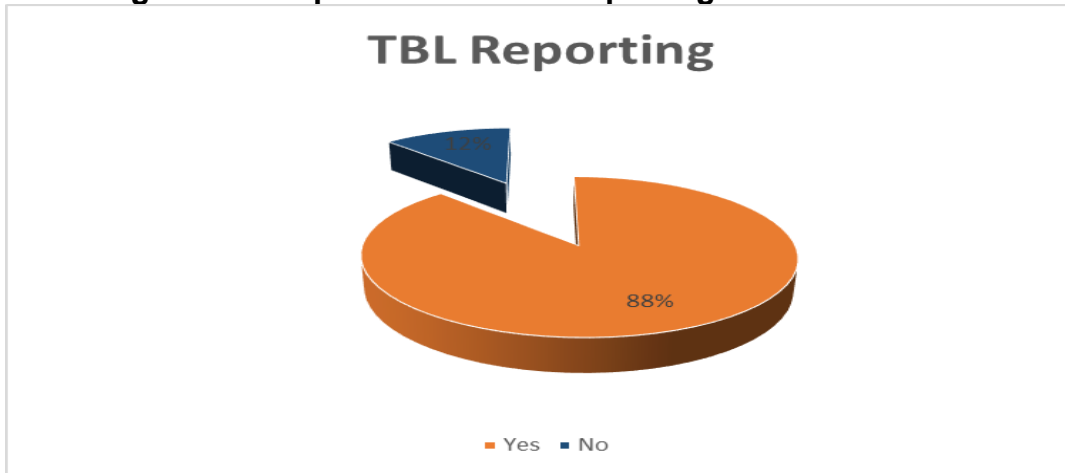
4.10.1 Utilisation of Triple Bottom Line

Triple Bottom Line Reporting (TBLR) refers to a notion of sizes designed to potentiate non-financial and the non-accounting performance of an organisation. The notion behind the TBL paradigm is that a corporation's decisive success or well-being should be valued not only by traditional financial bottom line, but also by its social/ethical and environmental performance. There were only two questions asked under this section. If SMEs were aware of the TBL approach, and if they did utilise it to report profits. These questions were posed in Section One of the questionnaire to understand if the manufacturing SMEs surveyed understood the TBL approach and incorporated other non-financial aspects in measuring their profitability. Mabesele (2009) confirmed that the "traditional" financial measures focus on the current status of profitability and do not shed light regarding future revenues. It also fails to capture the essence of the relationships that a company should grow to strengthen with important stakeholders, which are customers, employees, suppliers and communities for the future prospects and sustainability.

With the growing research and the awareness of rising social and environmental pressures that calls for the improvement and measures of the impacts, the TBL methodology and CSR agenda is increasingly becoming prominent in the SMEs sector. In total, 100 per cent of respondents surveyed in the manufacturing SMEs confirmed that their organisations were all aware of the TBL approach and reporting. Luken and Stares (2005) confirmed that SMEs of the developing and the least developed countries are keenly aware of the trends of rising social and the environmental requirements requiring improvements and the monitoring of the social and environmental performance. The TBL gained prominence because it could link

and address the social and environmental performances for the effectiveness and efficiency of the financial performance.

4.10.2 Figure: 4.9 Triple Bottom Line Reporting



Source: (Own Source)

Figure 4.9 reflected that 88 per cent of respondents consider the importance of TBL reporting in their organisations as opposed to 12 per cent. The pressures ensuing from environmental and social performances are putting SMEs under duress to seek for avenues that can aid them to conceptualise the entire process of sustainability. The TBL framework is a suitable tool that can assist SMEs in linking social and environmental concerns into the mainstream operations of the business for the profitability and sustainability of their enterprises. The manufacturing SMEs, however, are still confronted with various challenges, apart from the cliché, resource limitation, the lack of knowledge, scarce skills, and limited finances. The sustainability issue is increasingly becoming an urgent call that needs immediate attention, despite constraints and limitations. The TBL reporting can provide the sustainability lenses and guidelines for the environmental responsible operations that are effective to drive SMEs into attaining economic prosperity and social justice (Tullberg, 2012). Mabesele (2009) asserts that too much reliance on the traditional reporting can be considered ineffective and inadequate since it can only provide historic summary performance and lacks the ability to detect the problems that could be corrected. Furthermore, the author noted the weak ability of traditional reporting to include non-financial performances in reporting that are equally crucial for health, success, growth and sustainability of businesses.

4.10.3 Operational components of Triple Bottom Line

The second question of Section One in the questionnaire indicated the respondents to rate the level of importance of the operational components of the TBL, comparing the previous years, considered in drawing of the financial statements of manufacturing SMEs. The section was divided into the following three parts, namely Part A, B and C (see Appendix B).

Part A

The economic dimension refers to the financial feasibility that incorporates issues of the job and market creation, competitiveness markets, and long-term sustained profitability (Jamali, 2006). Zhu and Sarkis (2004) posited that economic performance comprises of the following components such as, profitability, revenue growth, increase in the market share, and intensification in productivity. The list of the important operational components of the financial performance to be considered in Financial Statements (FS) was indicated in Table 4.5. The respondents were required to rate the progress made in those investments over the years.

4.10.4 Table: 4.5 Measures of Economic Dimensions of Triple Bottom Line

Number	Economic Dimension	Missing Responses or unanswered questions	Percentage of the use and investment of operation components and their inclusion in Financial Statements (%)		
			Respondents (N=103)	Mean	Standard Deviation
1	Financial Capital - Sales Growth		88,4	3.41	.810
2	Financial Capital - Returns on sales		83,4	3.08	.682
3	Financial Capital - Returns on assets		84,4	3.02	.610
4	Financial Capital - Returns on equity		78,7	2.90	.569
5	Financial Capital - Products returns rates		84,5	3.21	.750
6	Financial Capital - Defects		64	2.78	.699
7	Financial Capital - Productivity		94,2	3.56	.825
8	Financial Capital - Investments or total assets	2	75,9	2.96	.706
9	Financial Capital - Marketing the Organisation		71,8	3.03	.912
10	Financial Capital - No. of New customers		90,3	3.17	.648
11	Financial Capital - Order cycle time	1	88,3	3.19	.700

Scale: 1 = Unacceptable; 5 = Exceptional (Source: Field work)

As summarised in Table 4.5, the economic dimension was measured to trail the progress, health and success of the business by rating the inclusion, investment and importance of the listed operating components of the financial performance and their consideration in the preparations SMEs' Financial Statements (FS) over the past years. Taruté and Gatautis (2014) posited that the SMEs' economic performance should be measured by its degree of productivity, effectiveness and efficiency of operations, competitiveness, profitability, growth and market value. Among the financial measures investigated, productivity (94.2 per cent), number of new customers (90.3 per cent), sales growth (88.4 per cent) were regarded primary focus by average SMEs and were considered vital to be included in the financial statements.

The literature revealed that the strong validation of the economic dimension requires businesses to measure systematic management of resources by reducing operational costs and the cost of doing business, and the attraction of new business by rigorous business integrity policies. Furthermore, increasing productivity through a motivated and dedicated workforce, offers of a corporation an opportunity to boost not only economic measures but

also the socially responsible investment indices, and attracting a new range of investors' business, as it should be rated (Jamali, 2006).

The above results stipulate that SMEs are generally performing financially strong as they considered investment in most of the operational components of financial performance. They indicated the components' importance to be included in the FS. The increasing number of customers directly affects the sales growth, which positively affects productivity and, therefore, implicates an increase in profits. These findings are congruent with those of Peel and Bridge (1998) who found profitability and sales growth as the primary focus of manufacturing SMEs.

The least rated yet important financial component was progress made on investing resources for the effective production to avoid defects. Only 64 per cent of the surveyed manufacturing SME respondents reported that there have been improvements on the progress made over the years. The defects negatively affect profitability when are not constantly monitored. The increase in defects at any stage of the production process is to be considered a loss. A reduction of defects in the production process, therefore, must be the main priority of every organisation, as their increase is costly (Kumar, Antony, Singh, Tiwari & Perry, 2006). The manufacturing SMEs' disregard of defects could render shortages in the production and that has the negative ramifications on the profitability (loss), which could lead to be a threat to sustainability.

Part B

The environmental agenda is increasingly becoming a major concern for businesses today, after the lesson that was agonisingly learnt from the earth degradation. It became a priority study of emerging generations and university graduates to be environmentally responsible if only to secure the future of the next generations by protecting and procreating resources (Elkington, 1998). The amount of transparency that was impossible to attain previously when reporting on the environmental aspect, can be measured and enabled by the environmental performance (Makrinou, Mandaraka & Assimakopoulos, 2008). Jamali (2006) emphasised the meaningfulness of studying the resource consumption implications and energy use when creating new resources because of the effects they bear on firms' ecological integrity. Table 4.6 lists some of the operational components of the environment that should be considered in the FS and suggested the respondents to rate their importance and progress made in their investments.

4.10.5 Table: 4.6: Measures of Environmental Dimension of Triple Bottom Line

Number	Environment Dimension	Missing Responses or unanswered questions	Percentage of the use and investment of operation components and their inclusion in Financial Statements (%)		
			Respondents (N=103)	Mean	Standard Deviation
1	Environmental - Water consumption	2	96,1	3.98	.721
2	Environmental - Vegetation and nature conservation such as protecting trees	7	57,3	2.83	.816
3	Environmental -Pollute environment direct (CO2)	7	68	2.96	.710
4	Environmental - Sinks absorbs waste (quantity of solid waste)	8	67,4	2.94	.769
5	Environmental - Energy consumption	2	63,2	3.98	.860
6	Environmental - Recycle waste	3	91,3	3.33	.792
7	Environmental - Emissions, effluent & waste/ total resources used industry specific factor	8	76,7	3.19	.762

Scale: 1 = Unacceptable; 5 = Exceptional; (Source: Field work)

As summarised in Table 4.6, the environmental dimension was measured to trail the progress, health and success of a business through rating the use, investment and important consideration of the listed operational components of environment when preparing the SMEs' FS over the past years. Jamali (2006) suggested the comprehensive approach that deals with the organisation's operations, products, and the facilities should include; evaluating the business' products, phases of production and services and reducing waste and emissions. Capitalising on the effectiveness and the throughput of all assets and resources, and limiting practices that might unfavourably influence delight of the planet's assets for future eras should be a priority of every organisation regardless of the size.

The high levels of industrial refuse disposal that burden the Cape Metropole industrial region has rapidly diminished the water quality and polluted landfill spaces (Friedrich & Trois, 2013; Qeke & Dubihlela, 2018). Regardless of the recent reported water crisis at Western Cape, the results from this study revealed that the manufacturing SME sector is dependent on the water consumption that was presented by the highest figure of 96.1 per cent. The City of Cape Town energy and climate change policy that implicated the "democratising of the energy sector" (Worthington, 2009), which urged the municipalities to play a major part in generating power and handling energy demand (Jaglin, 2014). A figure of 63.2 per cent of respondents indicated the consumption of energy as vital in the SMEs' FS; hence, Cape Town was reported to have achieved a less energy-intensive economy compared to other towns and municipalities in the country (Jaglin, 2014).

The overall results presenting environmental dimensions are not too convincing regarding realising the importance of considering other listed items in SMEs' FS as compared to the economic dimension. The figure of 91.3 per cent represented recycled waste indicated the manufacturing SMEs' responsibility to commit to decreasing environmental degradation up to a point when environmental calibre improves (Schaper, 2002).

The awareness at the stage of the “environmental protection awakening” is emerging in the manufacturing SME sector despite resource limitations and constraints (Kiron et al., 2015). These findings bear a degree of resemblance to those of Biondi et al. (2012) who noted the current research findings of the (ENVIS and EMAS projects) indicated that most SMEs endeavouring to assimilate environmental concerns and their improvements throughout the entire scope of business activities. Agan, Acar and Borodin (2013) suggested the need for the environmental sensitive programs should be prioritised by every manufacturing SME and be considered as strategies of actions in the company vision, mission and policy.

Part C

Corporate social responsibility emerged as a mark for a rationality of financial development in businesses that value not only those who gain but also those who can persist into future eras (Ekwueme et al., 2013). The social agenda is about showing the organisation’s progress to employees and other stakeholders, and the investments they make in local communities and practices that endorse human rights and dignity of employees (Phillips, 2006). Table 4.7 lists some operational components of social performance whom their inclusion in the FS should be considered important and suggested the respondents to rate the progress made on their investment over the years.

4.10.6 Table: 4.7: Measures of Social Components of Triple Bottom Line

Number	Social Dimension	Missing Responses or unanswered questions	Percentage of the use and investment of operation components and their inclusion in Financial Statements (%)		
			Respondents (N=103) Mean	Standard Deviation	
1	Social-Employees capabilities, training and development	2	82,6	3.13	.658
2	Social-Employees recruitment process and fair salaries (market related)	4	91,3	3.45	.674
3	Social-Customers satisfaction	1	97,1	3.72	.736
4	Social-Cooperation with local residents (eg. the number of CSR activities organised)	6	53,3	2.73	.984
5	Social-Affiliation with governmental agencies to develop your business strategies (eg. SEDDA, SEFA)	8	35,9	2.04	1.211
6	Social-Affiliation with non-governmental agencies such as Chamber of Commerce to improve business network	8	24,3	1.76	1.099
7	Social-Suppliers satisfaction	2	91,3	3.42	.765
8	Social-Suppliers long term relationship	1	91,2	3.46	.699
9	Social-Customer long term relationship	1	92,2	3.66	.751

Scale: 1=Unacceptable; 5= Exceptional; (Source: Field work)

Table 4.7 shows the summary of the progress, health and success of the business through rating the investment and important consideration of the operational components of social dimension in manufacturing SMEs’ FS over the past years. According to Moloji, Oksitucz-Munyawiri and Ndong (2014), the investment in the social dimension ultimately contributes to a business’ positive brand image. William, Werther and Chandler (2011) opined that investing in long-term projects that have a measurable impact on the community where the

company is operating, is part of wealth creation and sustainability. Qeke and Dubihlela (2018) suggested that a sound investment in the social dimension of the business has the potential for successful social programmes that benefit not only economic growth but also the development of the society where the business operates. Biondi, Iraldo, and Meredith (2012) suggested close maintained relationships with dealers, consumers, chambers of commerce, consultants, non-governmental organisations (NGOs) and trade associations, as the driving factors of social progress for SMEs to achieve innovation and sustainability.

The above results clearly state that manufacturing SMEs are indeed progressing and leaning in the right direction, indicating exceptional figures for the well-being of customers, suppliers and employees, which implicated the satisfaction (also expressed in figure) of the mentioned stakeholders. Singh et al. (2018) emphasised that community involvement is a vital boost to competitiveness with implications of improving the organisation's image. The 53.3 per cent that represented the progress in the investment in communities outline that SMEs have not yet done much to improve their relations with the communities where they operate.

Authors such as Biondi et al. (2012) suggested the significance of correspondence between SMEs and network platforms to assist by orientating markets, considering legal obligations, and attaining information about emerging technologies or technological options. The results reflect only 35.9 per cent and 24.3 per cent respectively of the respondents realised the importance of affiliation with the governmental and non-governmental agencies. SMEs are denying themselves an opportunity to engage in the platforms that could aid their growth and development and consequently market them. Those results are in line with Egbu et al. (2005) who noted the SMEs' need of networking with other organisations that could advise on how to overcome issues they might encounter. Furthermore, Biondi et al. (2012) added that those platforms have the potential of assisting SMEs to achieve a competitive advantage and improved environmental performance.

4.10.7 Integration of Triple Bottom Line Components for Profitability

The above results presented in Tables 4.5 to Table 4.7 suggest that progress has been made by most manufacturing SMEs with the integration of the three components of sustainability in reporting their profits. Too much reliance on the "traditional" financial measures, however, was seen as a possible factor that affects the integration of environmental and social concerns to the operations. This behaviour was stated to be ineffective and inadequate because of its failure to capture the essence of measuring non-financial aspects that matters most in the pursuit of sustainability.

The results indicated strong progress in the financial components and moderate progress in environmental and social aspects. The total integration, however, could be achieved when the balance is found in the financial and non-financial performance measures, as they are

equally important for the growth and sustainability of manufacturing SMEs (Mabesele, 2009). Those results bear a degree of resemblance with those of Agan et al. (2013) who noted the impact of poor investment in social and moral accountability on the environmental activities could weaken by SMEs' growth and sustainability. If SMEs could attempt to integrate their environmental activities into their business operations that initiative could achieve the part of environmental and social sustainability.

The skewed focus that is directed to economic sustainability reporting is saddling ecological sustainability reporting (Qeke & Dubihlela, 2018). The manufacturing SMEs' investment on social sustainability reporting has also shown conflicting results, which were confirmed by Willard (2012), who aptly noted the collision between local communities and manufacturing SMEs as the hindering factor of economic growth and development, which could be neutralised by the initiation of social programmes.

These results also confirmed the problem that was earlier stated in the literature, which indicated that SMEs' focus is mostly on stakeholders, which are directly contributing to profits e.g. supplier, customers and employees, since they are directly linked to profit, neglecting communities that have the potential for future relationships and whose contributions indirectly breed more potential employees and customers (Ramasobana & Fatoki, 2014). Mabesele (2009) suggested that manufacturing SMEs to regard the importance of involving other constituencies such as local communities, customers, employees and suppliers in the business' financial reporting as a potential for maximising future revenue and profits, and that could land them on the road to sustainability reporting.

4.10.8 Regression analysis

Regression analysis was done in this study to examine the relationship that exist between the variables, namely impact of sustainability measurement/activities (SusMe) on economic dimension (EcoDi), social dimension (SocDi) and the environmental dimension (EnvDi). Regression was also taken as an inferential statistic for this study. The predictor that was held constant was SusMe (independent variable), and the dependent variables that were entered into the model were the dimensions of sustainability. Table 4.12 reports the regression analysis

Table 4.8 Regression Analysis

Construct	B	Beta (β)	T	p-level
1. Dependent: EcoDi Independent variable: SusMe	0.754	0.781	23.260	0.000*
2. Dependent: SocDi Independent variable: SusMe	0.761	0.793	22.297	0.000*
3. Dependent: EnvDi Independent variable: SusMe	0.801	0.819	24.819	0.000*
<p>1. $R = 0.771, R^2 = 0.594$ $Adjusted R^2 = 0.593$ $F = 541.015 p < 0.0000$</p> <p>2. $R = 0.778, R^2 = 0.605$ $Adjusted R^2 = 0.601$ $F = 497.153 p < 0.0000$</p> <p>3. $R = 0.819, R^2 = 0.671$ $Adjusted R^2 = 0.654$ $F = 615.975 p < 0.0000$</p>				

(Source: Field Work)

On the examination of the relationship between variables, the adjusted $R^2 = 0.594$, indicating that sustainability activities explained 59% of variance on economic dimension. The beta coefficient ($\beta = 0.781$) suggests that there is a strong positive relationship between sustainability measures and economic performance in manufacturing SMEs. The rating (the adjusted R^2) of the relationship between sustainability measures (initiatives) and social dimension (social activities) was $R^2 = 0.604$, indicating that the measures explained 60.4 % of variance on organisational social sensitivity. The beta coefficient ($\beta = 0.793$) suggests that there is a strong positive relationship between independent and dependent variable. Thus, sustainability measures are clearly a precursor influencing sensitivity of the manufacturing SMEs to social and societal matters. The third scenario has SusMe as a predictor with EnvDi as the dependent variable. On the examination of the relationship between these two constructs, the score (adjusted) was $R^2 = 0.671$. The beta coefficient ($\beta = 0.819$), suggesting that there is a strong positive relationship between sustainability measures (initiatives) and environmental dimension. Therefore, the results indicate that SMEs that value sustainability are more likely to be ecologically sensitive in their operations.

4.11 STRATEGIES FOR MAXIMISING PROFITS AND MEASURING SUSTAINABILITY

Many strategies can be used for adopting the TBL tool to maximise profits and further measure the organisational sustainability to ascertain the organisations' success. These organisations could also potentially maximise profits in the long-term. Respondents were asked in Section Two of the questionnaire to indicate and specify how often their businesses had used the following strategies for the purpose of measuring listed dimensions.

The researcher is endeavouring to unpack the influence of the environmental and social programmes (non-financial measures) on triple dimensionality of sustainability. The strategic planning lead to decision-making of integrating three prongs to ensure maximum sustainable profits. The study conducted by Sezen and Çankaya (2013) confirmed the need of including

non-financial performance measures in the decision-making process and strategic planning, as the economic performance alone can no longer guarantee companies' long-term survival.

Table: 4.9 Triple Bottom Line strategies employed

Number	use of triple-bottom line' strategies to measure organisational sustainability	Percentage of respondents that adopted strategy for the purpose of measuring listed dimensions		
		often %	Respondents (N=103)	Standard Deviation
			Mean	
Social Dimension				
1	Community Charity	13,7	2.72	.813
2	Community safety and security awareness programmes	6,9	1.90	.954
3	Purchase from local suppliers and use of local raw material	31,4	3.31	.820
4	Employment of local residents	44,1	3.51	.817
Environmental Dimension				
5	Water conservation strategies	76,5	4.03	.789
6	Energy saving strategies	84,2	4.26	.744
7	Follow material practises (eg.) environmentally friendly products	21,4	3.14	.658
12	Recycle waste	53,5	3.64	.692
9	Manage waste (waste reduction)	39,2	3.36	.766
10	Comply with environmentally friendly policies and governance?	28,9	3.16	.773
Economic Dimension				
11	Connection with customers?	70	3.87	.734
13	Re-use waste	43,3	3.37	.833
14	Measure customer satisfaction	52	3.60	.729
15	Benchmark performance against that of competitors	38,1	3.31	.727
16	Training and Development of employees	47,6	3.50	.642

Scale: 1 = never; 5 = very frequently (Source: Field work)

The percentages of the surveyed owners/managers who specified that their businesses adopted and used particular strategies for measuring particular dimensions, either frequently or very frequently, were summed up, and reported as percentages in the third column of Table 4.9 for the sake of clarity and succinctness. Those who reflected the adoption and use particular strategies by their businesses for measuring certain dimensions sometimes or rarely, therefore, were quintessentially and conservatively reported as never has used those strategies, as the phrases sometimes and rarely evince infrequent to practically non-usage. This tactic is acceptable because it ensures that only those respondents whose enterprises frequently adopted and used particular strategies for the purpose of measuring particular dimensions are reported, and this method has also been used in prior studies (Ahmad, 2014; Maduekwe, 2015).

As summarised in Table 4.9, the results are indicating that the most adopted strategy was an energy-efficiency strategy (84.2 per cent). Energy efficiency in the workplace cuts costs, improves competitiveness and helps safeguard profits and employment. Apart from cutting costs and retaining maximised profits, this could have been influences from the City of Cape Town, as the first African city that initiated the energy and the climate change strategy (Jaglin, 2014). The strategies held stakeholders responsible to conform and partake in drafting policies that guided Cape Town to have less energy-intensive economy than the most South African cities (CoCT, 2012).

The Cape Town water crisis in South Africa was a period of the severe water shortage in the Western Cape region, most notably affecting the City of Cape Town (CoCT). Cape Town's water-crisis report indicated controversial results in correspondence of the rapidly cumulative water demand coupled with scarce-supply options, substandard water quality and inefficient utilisation of existing infrastructures and resources. Water-saving strategies was adopted by 76.5 per cent. This confirms influence of CoCT through awareness and water restrictions.

The above results bear a degree of resemblance with those of Biondi et al. (2012) who confirmed economic benefits attained by European SMEs from optimising resources (cutting cost of raw materials, conserving energy, water conservation, or by recycling waste). Lastly, the study conducted by Makrinou, Mandaraka and Assimakopoulos (2008) projected probable economic benefits from resource conservation and cost savings should the SMEs implement management strategy which integrates energy and water.

The consumers' connection strategy followed with 70 per cent, as confirmed by Abimbola and Vallaster (2007) who demonstrated the importance of connecting SMEs and their customers for a greater chance of success. Customers are regarded as priority stakeholders (Biondi et al., 2012). SMEs have no choice but to adopt strategies for significant economic benefits.

Other strategies show controversial results, more specifically, from the social aspect. Most scholars, however, suggested that CSR are a beneficial tool in strategic management to expand corporation's bottom line (Kotler & Lee, 2005; Lantos, 2001; Porter & Kramer, 2002; 2006). The poor results were shown by community safety and awareness programmes and was followed by the community charity strategy at 6.9 per cent and 13.7 per cent respectively. These results are congruent with those of the study by Coppa and Sriramesh (2013) who found that SMEs least adopt and regard charitable contributions as important.

Lastly, the results reflected 28.9 per cent and 21.4 per cent respectively, comply with environmentally friendly policies and governance and follow a safety material strategy (e.g. using and producing environmentally friendly products). These strategies can benefit the

company in adopting green processes for benefits that can enhance a company's image and produce products that are safe for their intended consumption. Musa and Chinniah (2016) mentioned the nature and characteristics of SMEs in general accompanied by their scarce resources (time, human resource and finances), and the management of personal interests and the lack of knowledge in environmental management as factors that hinder the complete adoption of the afore-mentioned strategies.

Strategies used for integrating Triple Bottom Line in manufacturing Small Medium Enterprises

From results, it was discovered that the listed strategies adopted by the manufacturing SMEs mostly, are the responses to the call posed by ecological pressures not voluntary initiatives. In other words, these manufacturing SMEs are under duress that they have to conform, otherwise there is no other way. Despite the fact that those strategies have the potential to reward manufacturing SMEs to achieve their long-term goal of profit maximisation through the economic benefits and cost savings. The manufacturing SMEs are still reluctant to adopt the holistic TBL sustainability approach because they are unaware of the benefits as they are not sure of "what is in it for them". The manufacturing SMEs are unaware that investing in communities through donations can have tax relief benefits, they are unaware that if it is via bursary it could be a labour retention benefit. The manufacturing SMEs' excuses of reluctance to adopt all these strategies is their forever-standing hindrances including the lack of resources, lack of knowledge and the nature of their characteristics. The SMEs' short-term focus in the decision-making is affecting their sustainability. Their drive for profitability at an expense of ecology and society is the compromise for sustainability.

For these strategies to retain positive results they must be holistically integrated for a healthy balance of triple dimensionality. Regardless of the view that handling the trade-offs of the three prongs of TBL sustainability is a mission, almost described impossible. Manufacturing SMEs must holistically adopt those strategies to enhance the entire process of sustainability (Jamali, 2006). Although this finding is a significant one, it appears that there is little consensus to support in the relevant available literature. This state of affairs could possibly attribute to the fact that literature decries the TBL sustainability tool for not providing the accurate exact ways to measure sustainability. The same literature, however, has highlighted the SMEs' failures, underscored the ecological and social pressures, and commended TBL tool for successfully sustaining different sector within their specific context.

4.12 PERCEPTIONS OF DECISION-MAKERS ON TRIPLE BOTTOM LINE ADOPTION

Section three of the questionnaire comprised of question 4. The respondents were required to express their views and perceptions on different sustainability measures, as they influence

the decision-making process and affect how the business operates. The way companies of today strive for sustainable development to facilitate long-term growth, and enhance their prospects require them to change their mind-sets and align them to the sustainable business development goal. The goals revolve around increasing employment and simultaneously protecting the environment (Makrinou et al., 2008).

This question seeks to understand how the business understands, values and benchmarks the sustainability measures by identifying factors enhancing or hindering decision-makers to holistically adopt the TBL framework as a tool to measure sustainability. A five-point Likert scale was utilised with weightings of one for very ineffective, two for ineffective, three for neutral, four for effective and five for very effective. The nearer the mean was closer to five, the more effective the factor was valued and perceived to be.

For the sake of lucidity and succinctness, the percentages of the respondents who appraised sustainability measures to be either effective or very effective were summed up together and recorded as a percentage of respondents who perceived the sustainability used to be effective in the third column of Table 4.10. Those who reported to be neutral regarding their perceived effectiveness of sustainability measure, therefore, were conventionally reported as having professed the measure to be ineffective. The word “neutral” indicate a lack of confidence regarding the effectiveness of what is measured. This method is reasonable and acceptable as it confirms that only those perceived sustainability measures to be effective were described as such, and the similar tactic has been used in prior studies (Ahmad, 2012; Maduekwe, 2015).

Table: 4.10 Small Medium Enterprises' decision to adopt Triple Bottom Line

Factors perceived to enhance or hinder the decision to adopt TBL	Percentage that managers perceived the factors for decision making (%)	Respondents (N=103)	Standard Deviation	Mean	
Economic Dimension					
1 Business success and growth	86.4	4.11	.640		
2 Business marketing strategies	48.0	3.58	.750		
3 Customer satisfaction and long-term relationship with the clientele	80.6	4.08	.682		
4 Response to customer and employee survey	38.3	3.30	.781		
5 Gaining suppliers trust, fair trading, long term relationship, supplier reliability	49.5	3.64	.721		
6 Offer quality products that are safe and fit for their intended use	65.6	3.80	.758		
7 Avoid false and misleading advertisement and sales promotions that use deception and manipulation	51.	3.62	.736		
8 Disclosing all substantial risks associated with the product usage and avoid manipulating of the availability of the product for purpose of exploitation	33.0	3.38	.763		
9 Strive for competitive return on investment	51.	3.68	.750		
Social Dimension					
10 Using employee fair recruitment processes, training, equipping and constantly developing staff	49.5	3.61	.721		
11 Creating an family- friendly working environment to ensure employee satisfaction and diversity	60.4	3.64	.687		
12 Ensuring the safety and the wellbeing of your employee	73.3	3.85	.606		
13 Ensuring that the employees participate in social project	40.4	3.15	1.004		
14 Foster a reciprocal relationship between the corporation and community	31.0	3.04	.887		
15 Invest in the community in which the corporation operate	34.4	3.15	.833		
16 Launch community development activities and encourages employees to partake	24.2	2.84	.923		
17 Respect customers and their rights and provide them with truthful, honest and useful information all the time	68.7	3.84	.700		
18 Avoiding price fixing and engage in a fair and honest business practices in the relationship with the stake holders	52.0	3.64	.798		
Environmental Dimension					
19 Demonstrate a commitment to sustainable development	40.8	3.40	.796		
20 Demonstrate commitment to the environment	30.6	3.15	.829		
21 Promote green building and infrastructure	34.7	3.13	.820		
22 Commit to environmental education (e.g. environmental awareness weeks, environmental seminars etc.)	22.4	3.01	.843		
23 Ensuring compliance with environmental quality standards ISO 14001 certificate	22.7	2.76	.998		
24 Cooperation with non-governmental environment organisations	24.0	2.74	.987		
25 Recycle and re-use of resources	43.5	3.42	.752		
26 Energy conservation	65.4	3.72	.709		
27 Greening the manufacturing process encourages the identification of new and better methods of production	44.9	3.34	.861		

Scale: 1 = very ineffective; 5 = very effective (Source: Field work)

As illustrated in Table 4.10, business success and growth that represented (considering social and environmental effects on business operations to ensure the business growth and success) was perceived to be the most effective drive for manufacturing SMEs to adopt TBL tool (86.4 per cent). The drive for customer priority and long-term relationships with clientele followed (80.6 per cent). Then the drive to offer to produce quality products that are safe for intended use (65.6 per cent). These results were justified by those of the study by Mark-Herbert and Von Schantz (2007) who found TBL/CSR actions result in a key element for creating a strong brand and 79 per cent of consumers would switch to a brand associated with a good cause. These results are congruent to those of Öztürk and Özçelik (2014) who stated that the customers hold high regard for investing in the environmentally friendly and safe products. These customers do not only show their conscious towards their impact in personal environmental space but also pledge contribution and support to part of sustainable business enterprise: which attempts to discover harmony between planets, profit and people (Masurel, 2007).

The drive for competitive return on investment and, as well as avoiding false and misleading advertisement and sales promotions that use deception and manipulation were both at 51 per cent. The drive to gain suppliers' trust and engage in fair-trading transactions to create long term relationships with suppliers and suppliers' reliability was at 49.5 per cent. These results were influenced by pressures from SMEs' counterparts operating in the developed countries and their adaption was for the sake of competitive advantage (Moore & Manring, 2009).

Under the social dimension construct, 73.3 per cent of the respondents' perceived safety and wellbeing of employees as important, followed by 68.7 per cent of respondents who valued respect for the consumer rights. Pertaining to creating family-friendly working environments, ensuring diversity and employee satisfaction, a stable 60.4 per cent was reported. The above factors are regarded to be the most valuable and effective factors to measure and indicate sustainability (Slabá, 2016). The above results also indicate that direct stakeholders, which are the customers, employees and suppliers, are regarded the pivotal stakeholders and are prioritised within manufacturing SMEs. These results also confirm what Slabá (2016) also asserted that sustainable companies must exhibit mutual efforts among stakeholder-based employer-employee relationships. Research provides that in dynamic and rapidly changing environments, the maintenance of long-term mutual relationships with stakeholders is pivotal. Furthermore, Slabá (2016) posited that prioritising the direct influential stakeholder groups, such as customers, employees and suppliers is imperative for sustainability.

The environmental dimension tabled outrageous results. The results perceived the energy conservation (65.4 per cent) as the most effective. The manufacturing sector being one of industry sectors that is directly affected by high energy consumption. Manufacturers have no

choice but to implement cost-reduction strategies (Lau, Cheng, Lee & Ho, 2008). These results are similar to those of Von Ketelhodt and Wöcke, (2008) whose research was also conducted in Cape Town. Their results indicated only 60 per cent of SMEs respondents who have provided inducements or otherwise actively embolden employees to conserve energy by, for example, switching off lights or air conditioners. Furthermore, Von Ketelhodt and Wöcke (2008) posited that the CoCT is in electricity crisis and that is not distinctive with other countries who have dealt with concerns of their crises primarily by changing the consumers' behaviour to manage demands. The decision-makers of the manufacturing SMEs, therefore, moderately perceived and valued this factor to contribute to measuring sustainability.

Due to the inflating pressure that expands the significance of environmental concerns and environmental consciousness, the adoption of green manufacturing by companies became a mandatory process and practice. The green manufacturing was executed through three main strategies: green energy, green products, and green processes in the industry's operations (Govindan, Diabat, & Shankar, 2015). The contribution to the product differentiation has the potential to enhance organisational image to stakeholders and customers (both current and potential), the green practices can improve company's profitability (Buttler, Henderson & Raiborn, 2011).

Generally, strategies of green manufacturing are represented by three Rs (remanufacture, reduce, and the reuse/recycle) (Govindan et al., 2015). The greening manufacturing was perceived by 44.9 per cent of the respondents as important, as it could better the process of manufacturing and lesson pollution. The recycling and the re-use of resources was perceived by 43.5 per cent of respondents as the important benchmark and valuable indicator of sustainability measures. These results indicate that manufacturing SMEs do not consider the importance of the ISO 14001 standard that guide the green manufacturing as a driver. The adoption is showing substandard results of 22.7 per cent, lessening the chances of achieving green manufacturing to reduce the impact of operations which degrade the environment. These results are common in developing countries, as highlighted in studies conducted in countries such as India, who lack support from their government and have limited resources. The implementation of the green manufacturing to primarily satisfy governmental regulations often fails since they manage their means and lack support. All SMEs, therefore, end up not having green practices (Govermdan et al., 2015).

Factors affecting the decision-making process

The developing awareness of embracing environmental and social sensitive programmes is increasingly becoming the driver of sustainability. The holistic process of integrating the environmental and social programmes in the operational activities of manufacturing SMEs, however, is a luxury that is hard to be attained by the most decision-makers. The results

indicate that manufacturing SMEs prioritise their operations through these processes, primary stakeholders that are directly and currently involved in the generation of profits, and less prioritising the secondary stakeholders who are also vital for the future and sustainability of any business. The latter is due to the SMEs skewed focus on the profit, and this statement was supported by Coppa and Sriramesh (2013) who stated that customers and employees are most important, without them there is no business. This is followed by supplier stakeholders who are perceived important by most SME decision-makers. Their perception of generating profit, therefore, is based on a short-term vision and does not guarantee competitiveness and sustainability.

This is confirmed by their failure to integrate community stakeholders in the primary list and the sub-standard deviation shown among the SMEs encouraging the employees to part-take in social projects. The community as the stakeholders in the primary list would boost loyalty of the community in the business, which would mean a competitive advantage because of the protection and marketing indirectly. The community often speak highly of businesses that give back and in return, they often show loyal support. In essence, the SMEs' failure to include essential factors (ecologic and social concerns) in their business' alignments (operations) would slight their ability to integrating the dimensions at the broader wide scope and fully capture sustainability.

4.13 FACTORS INHIBITING ADOPTION OF TRIPLE BOTTOM LINE FOR SMALL MEDIUM ENTERPRISES'

Section four of the questionnaire comprised of only two questions, namely question five and six. In question five, respondents were asked to indicate with a Yes or No to the question asked to find whether there were factors hindering the success of the employment of TBL by manufacturing SMEs. Question six posed a question for respondents to indicate the degree to which they agreed with the sixteen statements about factors inhibiting their businesses from utilising the TBL tool to its full potential. The preparation of the latter statements was used as a proxy for the challenges encountered when using the TBL tool.

A five-point Likert scale was used with the following values/codes: one for strongly disagree, two for disagree, three for neither agree nor disagree, four for agree and five for strongly agree. For the sake of intelligibility and brevity, the percentages were added for those respondents who either concurred or strongly affirm the level of accord to certain statement. They were then published as the percentage that agreed with the statement in the third column of Table 4.11. The researcher, therefore, conservatively reported the statements of those respondents who neither agreed nor disagreed as disagreeing with statement. The locution "neither agree nor disagree" submit a reservation to reach the agreement with the statement. This approach is reasonable because it guarantees only those who admitted to a

particular statement on the factors that inhibit the holistic usage of the TBL by manufacturing SMEs.

All the representatives of the manufacturing SMEs divulged that there are hiccups presented in using the TBL to its full potential in its efforts to attain sustainability. Table 4.11 is a summary of factors stated that might be the root causes of struggling.

Table: 4.11 Usage Pattern of Triple Bottom Line

Number	statements of factors hinder the use of TBL	Percentage of the factors		
		inhibiting the use of TBL by manufacturing SME%	Respondents (N=103) Mean	Standard Deviation
1	Difficult to quantify	85,2	4.47	.769
2	Cost ineffectiveness of the performance measures and endure economic burden	71,3	3.75	.740
3	Inadequacy of information about triple bottom line in the entity	73,4	3.92	.881
4	Complexity of the triple bottom line	60,4	3.66	.739
5	Social and Environmental measures are unreliable	84,5	3.96	.628
6	Social and Environmental measures are irrelevant to our business	6,9	2.20	.872
7	A lack of understanding and knowledge of triple bottom line	76,2	3.97	.921
8	Cost of implementing the triple bottom line is very high	22,8	3.22	.482
9	Triple bottom line does not guarantee sustainability	2	2.93	.354
10	Triple bottom line does not ascertain success	1	2.84	.507
11	A lack of the necessary skills and human resources	12	2.77	.777
12	A lack of policies guiding us into devoting our way of doing business and using triple bottom line framework	53	3.72	.933
13	A lack of management support	17,1	2.88	.760
14	Absence of an effective process of implementing triple bottom line measures	50,5	3.74	.887
15	Conflicting results among the different sustainability measures	11,1	3.08	.467
16	employee resistance	13,1	2.83	.671

Scale: 1 = strongly disagree; 5 = strongly agree (source: Field Work)

The vision of sustainability is to provide a coherent and a recognisable bigger picture that reveals a secured future and organisational roadmaps to guide the future development that is realistic enough to generate commitment to performance (Jamali, 2006). The results in Table 4.11 suggested a number of factors that hinder the use/adoption of the TBL framework by manufacturing SMEs to their full potential.

Even though the less significant percentages of One per cent and Two per cent, respectively, attribute it to the fact that the respondents indicated that TBL does not ascertain success nor

does it guarantee sustainability. Fifty-three (53) per cent believes that the lack of policies to guide companies to devote their ways of operating as guided by TBL sustainability. Followed by 50.5 per cent that indicated absence of effective processes to follow in the implementation of the TBL tool make it difficult for them to achieve the results they were hoping for when they used the tool. Only 6.9 per cent of respondents believed that social and environmental measures are not relevant in their enterprises. These results were confirmed by Jamali (2006) who noted the absence of a single blueprint to be used as a policy guiding the implementation of this complex and multi-faceted TBL tool to approach sustainability since organisations are at different stages of maturity and learning.

The common barriers that burden SMEs, such as the reluctance to plan, lack of capital and shortage of the general resources, lack of access to appropriate information, insufficient experience and lack of technical expertise, lack of skills and scarcity of attention in research and development were noted by Perez-Sanchez, Barton and Bower (2003). Those outcomes were not all supported by the results of this study. Only 13.1 per cent of the respondents who confirmed the employees' resistance to use of the TBL tool, followed by 17.1 per cent noted the lack of management support. Twelve (12) per cent followed and suggested a lack of necessary skills and human resource that could aid and advise companies in the monitoring process as a hindrance of attaining the results they were hoping for. However, 76.2 per cent strongly affirmed the lack of knowledge and understanding of the TBL tool as the most critical factor. Perrini (2006) opined that the solid body of evidence can be a key contribution to enhance the TBL tool among SMEs, and knowledge gap between business scenarios and complication drivers of TBL calls for researchers to improve it by linking theory and practice.

Butler et al. (2011) opined that the reason for sustainability measures to bear the conflicting results is attributed to their quantitative nature of the two dimensions (social and ecological). The fact that they cannot be measured in terms of monetary value makes the process of integrating non-financial measures into the corporate operations complex. The assessments to provide a meaningful and the comprehensive understanding is a struggle. The latter was then confirmed by 11.1 per cent of manufacturing SME respondents. Though 22.8 per cent of respondents believed that the cost of implementing TBL tool is expensive, 71.8 per cent pointed at the cost of maintaining TBL as enduring an economic burden. The inadequacy of the TBL in the entity was then confirmed by the 73.4 per cent of respondents, who believed and critiqued the TBL tool as not serving purpose. Lastly, 85.2 per cent top it up to agree that this TBL tool is difficult quantify. These results were confirmed from the by Slapper and Hall (2011) who believes that the TBL tool is still understood at a surface level and the tool has not yet gained the prominence to be understandable and, therefore, it must be given a chance and then, with time, the results will be seen and the measures will be developed.

The results were further supported by the study conducted by Zachrisson and Shahir (2016), revealing SMEs' increasing interest of adopting and implementing CSR/TBL. Furthermore, noted the hiccups that still hinder the full adoption, such as limited resources. Unlike large companies, SMEs have no methodology to guide the process, demonstrate the application of all the steps of integration, and form the implementation and monitoring of the sustainability theories. Companies must discover their own solutions, and not borrow them. It, therefore, was discovered to be difficult and complex for SMEs to quantify benefits and opportunities of engaging and the adoption of TBL. Sridhar and Jones (2013) further blames the social and environmental performances (non-financial measure) that differ from each enterprise or at least industry, and which is also difficult to quantify.

The latter information prompted Condon (2002) to suggest that the formula of TBL and other sustainability measures be presented in an easily understandable and engaging way to its target audience. Stakeholders and organisations need to be presented with comprehensive unambiguous measures that eventually yield fathom findings to solve complex issues and calculations. The results revealed that 60.4 per cent of respondents still believe that TBL is a complex tool to manage. Jamali (2006) noted that managing the trade-off in three prongs of sustainability is doable. For non-financial performances SMEs could use intangible assets to measure. The loyalty or reputation for measuring social outcomes of sustainability. Of the respondents, 84.5 per cent believes that the intangible assets could be hazy to measure at times since environmental and social dimensions are unreliable.

Despite the factors hindering manufacturing SMEs from adopting the full version of TBL sustainability, it is also on a voluntary basis and terms. The coastal municipal areas suffer from the high levels of industrial refuse disposal, diminishing water quality, polluted landfill space, environmental contamination, and social concerns. Dubihlela and Ngxukumashe (2016) posited the emergent concern of the environmental awakening stages where the environmental issues and the subsequent health problems cannot be ignored anymore. With that being said, these environmental issues being the root causes of social issues and concerns. SMEs in the Cape Metropole are slowly addressing the awakened apprehension of unsustainable enterprises and addressing social and environmental concerns, but their attempts are not enough with absence of policies and laws guiding their endeavours and practices.

The new generation of SMEs is even more sensitive to community problems and has a more modern vision of business, where environmental sustainability, concern for employees and wealth redistribution provide both for ethical and economic returns. The biggest concern and obstruction in their holdbacks might be lack of knowledge, economic reasons or fear that regulations, might not be as involved as it would be expected. The study conducted by Vives (2006) suggested that it should be natural for these SMEs to be concerned with community

development, the local environmental and social issues. SMEs, therefore, need the support and understanding. The TBL is not necessarily or only “greenwash” but there is a need to engage business critically towards the more sincere versions of TBL (Hamann & Kapelus 2004).

4.14 SUMMARY OF THE RESULTS OF THE STUDY

The results of this study confirm the skewed focus on more economic sustainability in an expanse of ecological and social sustainability as the hindrance that often saddled and burdened most manufacturing SMEs to attain total encapsulation of sustainability aspects. The manufacturing SMEs in the Cape Metropole see the need of integrating their social and environmental programmes in their operational activities and are aware of their sparse investment in those programmes, so the implementation of those strategies will still be in vain as there is still a lack of an entrenched culture of sustainable reporting and accounting. The other challenge burdening most SMEs is the absence of frameworks, processes and policies that guide them to devote their ways of running their businesses to future-maintained sustainability and short-term profitability.

CHAPTER FIVE DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The penultimate chapter focused on the postulated testing and discussion of results for this study. The principal aim of Chapter Five is five-fold, in that it seeks to present conclusions for the last four chapters that collectively make up this thesis. Second, it endeavours to dispense with the implications of the findings contained in this study. The third objective of this chapter is to provide the contribution that these findings and the conclusions of this thesis bring to academicians, policymakers, body of knowledge and the researched enterprise, the SME sector. The fourth and essential aim of this chapter is to provide directions for future studies in lieu of the limitations as stated in the pioneering chapters, i.e. Chapter One and Chapter Three. The last but equally imperative aim of this chapter is to provide the overall conclusion of this entire thesis. This chapter, therefore, in an exceptional way, becomes the culmination acme of the entire study.

5.2 STUDY INFERENCES

The principal objective of this study was to determine the extent to which the TBL framework was employed by manufacturing SMEs with the aim of addressing their sustainability issues. The reference of the modern contribution to this topic developed when both academic and managerial literature began to assign social duties to companies. The secondary intention of this research was to aid the manufacturing SMEs to integrate the components of the TBL framework to report their maximised future profits and benchmark their sustainability; this becomes the tributary objective. This study concluded that the effectual embracement of ecological and socially sensitive programmes emerged as climacteric drivers of sustainability in the gradually expanding manufacturing sector, particularly since this research relates to manufacturing SMEs.

Although, researchers such as Dholakia and Kshetri (2004), Herath and Mahmood, (2013), Marom and Lussier, (2018), and Singh, Garg, and Deshmukh, (2009) suggested what was proven a cliché, vindicate the resource constraints as the factor hindering the sustainability of SMEs. The findings of this study noted the essentially profit-driven attitude adopted by most manufacturing SMEs as a demeanour that greatly influences underinvestment decisions on social and ecological aspects. The implications of this attitude weaken the application and full adoption of the TBL tool, which threatens not only future profitability but also sustainability. These findings bear a similar degree of resemblance with those of Parker et al. (2009) who noted the SMEs' drive for economic viability results in a struggle to incorporate social and ecological aspects into single measure as business performance commitment. Furthermore,

SMEs' focus is mostly on turnover and profits. This confirmation divulged the skewed focus on economic sustainability as the weakness that saddles the enhancement of the total integration of the environmental and social programmes in their main operational activities.

The latter catastrophe does not only burden the sustainability of SMEs but also, it potentially induces occasions that endanger and threaten the health and safety of communities situated around these SMEs and subsequently contribute in the environmental damage. Ayuso and Navarrete-Báez (2018) supported adoption, activeness and voluntary contribution of business to economic, social, and environmental development as tactics and activities that meet both companies' current necessities and future societal prospects. The study concluded that manufacturing SMEs are *au courant*, but still they sparsely invest in ecological and social programmes due to the lack of an ingrained culture of aligning the sustainability reporting with large companies and their cliché excuse of the resource limitations. The findings also uncovered that the meagre investment on social and ecological programmes does not only dent their positive reputation of commitment to protection of the ecological environment, but it also could impair leverages of overall competitiveness that could be benefited on the basis of differentiation.

5.3 MANAGERIAL IMPLICATIONS

5.3.1 Managerial and pragmatic implications

First, this study's contribution demonstrated alignment with the global strategic imperative that indicated the importance of constantly monitoring the external environmental changes by businesses (Zou & Tamer Cavusgil, 1996). The study supported environmental sustainability and climate change through protecting the ecological aspect of the TBL dimensionality. The environmental protection-awakening stage was manifested by the most of SMEs, particularly those situated in the industrial parks of Cape Metropole area. The coastal municipal areas negatively endured the pollution which affected them with high levels of manufacturing refuse disposal, weakening water standard and polluted landfill spaces (Dubihlela & Ngukumashe, 2016). Subsequently, manufacturing SMEs responded to the call of environmental and social sensitivity to minimise the gravity of environmental pollution (Han, Matthew, & Cao, 2016).

Second, the study's impact to promote sustainable economic and social development as part of the African Union's objectives was achieved by aiding the sustainability of the SME sector. The focus was on the manufacturing sector, which is globally significant for its enormous contribution to GDP growth, import and exports contributions and the creation of employment opportunities (Agwu & Emeti, 2014). Principally, the manufacturing sector is considered an essential segment with a massive impact on stimulating the industrialisation for industrial growth and socio-development through research and development. The sector's contribution

to personal economic science and by driving the global trade with intentions to diminish unemployment, eradicate poverty and diminish extreme hunger was highlighted. The overall contribution of the sector was generating productivity for satisfying the needs of the people through producing and promoting good services (Williamson et al., 2006).

Third, the contribution of the study in the sustainable business context of South Africa. The study highlighted the importance of integrating environmental and social programmes in the mainstream business operations to achieve sustainable business outcomes. This was to procure a complement in developing potential, which induce positive business outcomes that leverage in the future. In essence, the study highlighted that the SMEs who consider the integration of environmental and social performances in operations for sustainability could be better in performance than those who are still traditional-reporting driven.

The findings of this study indicated the incapacitated integration of environmental and social aspects as due to profit-driven focus. Singh et al. (2009) blamed weak management skills of SME managers, which are a deterrent to reflect strategically on current business operations. Manufacturing SMEs and mainly in the South African context, are increasingly noticing the need to embrace environmental and the socially sensitive programs, despite the resources constraints, which are still the slacking slope that hinder the improvement. Environmental improvement act as a driver for the continual improvement of business and manufacturing processes is a critical solution that ensures the long-term sustainability (Parker et al., 2009).

Lastly, the study contributed in the mainstream of sustainability and efficiency of SMEs in the Western Cape. The aim to increase ecological sustainability in SMEs of the Cape metropole with lesser emphasis on mere profitability makes perfect sense. According to Singh et al. (2009), the SMEs' frequent orientation towards aiding local niches or developing relatively narrow specialisations decisions has underscored the value of SMEs' responsibility to the planet, and the need for give-and-take instead of just taking the resources of the earth.

The fact that most SMEs are sadly lacking in their efforts to respect ecological sustainability is worrisome and shows the urgent need to educate business owners and potential business entrepreneurs towards the necessity to work in harmony with nature. The environmental sustainability could protect existing resources and regenerate more resources out of existing to aid manufacturing SMEs for future generations. The first step of the journey to the road to achieve sustainability is to consider the planet and automatically other lenses (economic and social) are captured. The sustainability of SMEs ensues the potential to provide opportunities eradicate poverty in a more sustainable manner and create more active environmental and social programmes (Ayuso & Navarrete & Báez, 2018; Klewitz & Hansen, 2014).

The following Table 5.1 is a diagrammatic attempt to illustrate the influences of the social and environmental programmes in the dimensionality of the TBL tool. Furthermore, it confirms the contributions and benefits stated above.

Table: 5.1 Sustainability Report

Variance Effect	Path			Sequel	Result
Economic Dimension (EcoDi) positively contribute on effectiveness of Sustainability measures - (SusMe)	SusMe	<--	EcoDi	0.046***	Accepted
The Environmental Dimension (EnvDi) positively contribute on effectiveness of Sustainability measures - (SusMe)	SusMe	<--	EnvDi	0.042***	Accepted
Social Dimension (SocDi) positively influence the effectiveness of Sustainability measures - (SusMe)	SusMe	<--	SocDi	0.053**	Accepted

(Source: Own Construction)

5.3.2 Traditional Reporting versus Triple Bottom Line Reporting approach

The study indicated SMEs' awareness of environmental and social programmes with their sparse investment being the struggle that burdens and fails the balance of the TBL tool. The improvement needed should be made on the slight investment in environmental sensitive programmes and their moderate regard for the prominence of social responsibility to balance the three pillars. The sustainability prongs must be at the balance level for the achievement of the integration to be attained.

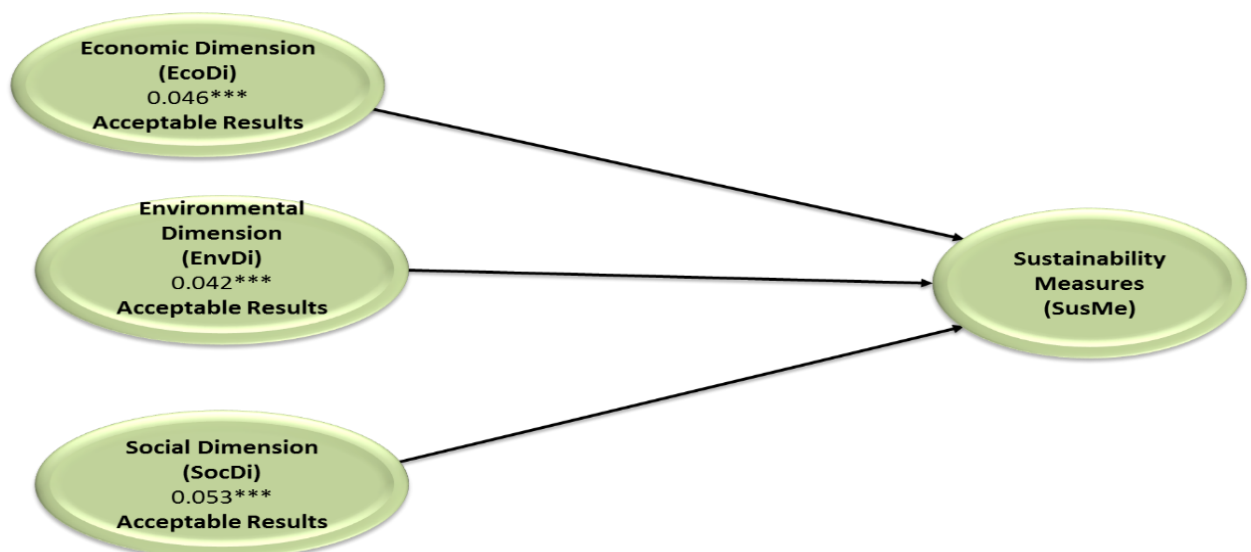
The pressures and demands for measurements gave rise to a social and ethical auditing, accounting and reporting that pressured the effective management seeking for avenues and methods to improve the business performances and improve ethical behaviour (EP Minerals, 2015). SMEs should be made aware that the enhanced traditionally reported profits can be attained and maintained through the investment in the TBL prongs. The study identified the need for integration of other non-financial measures (social and environmental) to rescue SMEs from living from hand to mouth with uncertainties of the business in future. This study seeks to advise that effectiveness of integrating the environmental and social programmes in operational activities for profit reporting can benefit the SMEs through means of maximised future profits and sustainability as there are financial benefits and tax reliefs.

The integration of these performances means to account for and take the responsibility of corporate social responsibility and extend further than the statutory obligation to conform to legislation and improve the quality of the environment in all aspects of their operations. This integration can be further accounted for in the reporting of accounting profits. SMEs' excuse of resource constraints can make it sound expensive and impossible, but it can be achieved by integrated reporting which is suitable to reflect their operations. SMEs do not need to benchmark their initiatives against of the large companies through comparisons as the TBL tool can specifically cater for their needs and be adjusted particularly for their context.

The latter can be achieved through interventions of SEDA and the Chamber of Commerce and provide compulsory workshops, training and courses for educating SMEs about the sustainability reporting that speak to their operations', suitable for their sizes, as an aid to the sector for its significant contribution to the economy, e.g. informative courses on Corporate Social Investments (CSI) can inform about the benefits and importance of investing in the social aspect, where SMEs could learn how donations and social investments bear tax relief benefits. Environmental Affairs can educate SMEs about importance of protecting the planet for future generations' resources from the same planet, and they would never have known such until there are compulsory training courses that will be informative.

Furthermore, owners, SMEs and managers alike could also attend sustainability conferences where academics and practitioners bring ideas from the practical and theoretical sides, DTI and the Ministry of Small Business Development can subsidise conferences and workshops. This could be the golden opportunity for SMEs to network, attract media and be currently informed about what is happening in the environment and how that might affect the business, and that awareness could be a vehicle for profitability and sustainability.

Figure 5.1 Benefits of TBL reporting



(Source: Own construction)

The above diagram illustrates the possible benefits of integrating social and environmental programmes in the business operations for the purpose of reporting profits and sustaining enterprises. The diagram indicated positive and acceptable results that highlight and indicate the positive effect and the capability of all the three dimensions in enhancing sustainability. This diagram confirms the statistical tests that were indicated in earlier sections in chapter 1. The TBL framework has the potential to enhance sustainability and ameliorate the image of businesses. Subsequently, TBL is shown to improve competitive advantage, enhance profits and guarantee future competitiveness of manufacturing SMEs.

5.3.3 Policy implications

Over the years the highest number of failures of SMEs was blamed on special prominence given to lack of access to knowledge and the resource constraints (Ngubane et al., 2015). The mentioned factors have been regarded as a principal reason for SMEs high failure rate, especially in South Africa. This study emerged to substantiate that a lack resources might have a bearing on sustainability of enterprises. It, however, is not the only and main reason. Despite the limitations that were discoursed through this study, this study serves as a lesson to address the policymakers that the crux of the matter is not only the matter of SMEs' needs but rather the matter of integrating sustainability components into business operations and reporting what should be addressed and monitored.

This study described the challenges of the SMEs environment and provided the avenues that could take SMEs out of the survival issues. The study also served a lesson to policymaker to address those problems when strategizing with regards to the SMEs. The pressures from the social and environmental aspects require the researched enterprises to change their way of doing business. The lack of policies and frameworks devoted to guide the SMEs out of their peril, however, contribute to derailed progress of attaining sustainability. It, therefore, could be strategic for policymakers, especially the DTI officials and the Ministry of Small Business Development in South Africa to join forces with organisations to spread the TBL idea at an entry level, by means of numerous initiatives, formal definitions and benchmarks indicators. The emphasise put on sustainability training for SMEs could entrench the TBL reporting culture to nascent entrepreneurs and to those existing before making possible interventions with unsustainable enterprises. The TBL tool was proven to be the existing tool that is one size fits all, that could overcome the SMEs sustainability issues. The policymakers could strategically include related constructs such as the internal marketing, networking and innovation, and environmental awareness as part of sustainability training programmes and that could cause SMEs to have satisfied stakeholders and eventually make these enterprises more sustainable.

5.3.4 Implications to academic world

The academic contributions progressed from an early indefinite awareness of relationship between companies and social-environmental contexts into an explicit identification of rules of conduct and the management of the TBL tool. The contribution made by this study, therefore, aims to alert the academicians within developing economies about the feasibility of the TBL tool in the context of SMEs. The study explained that SMEs can test the tool's ability by integrating the environmental and social programmes in the business operations. The purpose is to assist manufacturing SMEs to achieve maximised profitability and benchmark their sustainability at the same time. The TBL tool was proven to be a prudent decision to cater for that purpose and is deemed most suitable. Furthermore, the tested TBL framework within the manufacturing SMEs could generally assist decision-makers of the SMEs from all sectors with the meaningful way of running their enterprises.

Using the TBL tool was meant to mitigate or manage the high failure rate of South African SMEs, more especially in the gradually developing manufacturing sector. Such an endeavour at the Cape Metropole has not yet been done so far, at least to the best knowledge of the researcher and, therefore, it could be the first of its kind. The TBL reporting framework has been explained from the beginning of this chapter. The development highlighted in this thesis can possibly be utilised by other future researchers to investigate the relationship between business' day-to-day operations, ecological and social programmes inter alia.

Research is flooded with business-performance topics that promote and advocate for the TBL tool. Rarely, has the TBL tool been investigated in the context of the SME and mostly focusing on manufacturing sector. Much research has been saturated with other sectors and big companies, mostly in the already developed countries. Furthermore, the TBL profitability-sustainability framework explained in this research can be used by other researchers in the business and other fields for future studies. The contribution made by these analysis can be considered, to a large extent, as a supplement to the current academic knowledge and the existing body of literature on SMEs where there seems to be a research gap.

5.4 SUGGESTIONS FOR FURTHER STUDIES

The limitations of this study presented the possibility of opportunities for further research which are summarised below as well as the recommendations offered.

First, the assumption of this study that the decision-makers of SMEs are only owners, managers and supervisors/directors, it, in reality this can hardly be the case. Future research could involve other stakeholders as well as those who occupy decision-making positions in the SMEs apart from those mentioned above. Besides, the study was interrogating and

investigating issues that concerns the stakeholders; therefore, their input might be valuable as well, and their perspective might improve how SMEs are operating.

Second, this study outlined mostly a skewed focus of SMEs on the economic dimensions as what is perceived to be the barrier of the total integration of other components of TBL. The suggestion to further research should be conducted on how SMEs could shift their focus and how could they possibly integrate social and environmental activities to their operations, in other ways provide the detailed guidelines to integrate social and environmental activities in operations. Resources are vital as much for the success and sustainability of manufacturing SMEs and the provision of education and training about the TBL tool and its benefits so that they pinpoint their focus to the right direction.

Third, due to budget constraints, this study focused only on SMEs in the manufacturing sector in the Cape Metropole. Other sectors and places were never touched. Future research could focus on other sectors, other locations and could even include micro-enterprises excluded in this study. They need sustainability measures and advises on balancing and maintaining as much that can also aid with their success.

Fourth, the future research should use a bigger sample size to have more generalizable results, or alternatively conduct a thorough case study to fully understand the TBL adoption framework for reporting, investments in the TBL components, and then monitor the progress of the SMEs. This could add value and give more realistic and reliable results.

Fifth, a comparative study could be conducted to compare the usage of the TBL framework by South African SMEs and the usage of the TBL by SMEs in other countries, even from already developed markets. This could finally lead to a mixed methodology approach being adopted by further studies, particularly regarding factors that inhibit SMEs from using TBL. Such an approach would use open-ended questions to probe respondents to obtain a deeper insight than was possible in the current study, which employed closed-ended questionnaires.

Lastly, the study adopted non-probability selective samples. Future research, therefore, can select a sample comprising more small enterprises than medium enterprises, an aspect that might have skewed its findings.

5.5 CONCLUSION

This chapter proffered five concluding sections of this thesis. Precisely, the first section reflected the denouement of all the chapters for the study, which became the crest of the entire thesis. The second section discussed the managerial implications of the findings. This was trailed by a third section whose paramount aim was to present the implications of the study to policymakers. Perfecting the implications of the study was the fourth section that envisioned implications of the study to academicians. The fifth and ultimate section of the study was the delineations and limitations of the study where future research was directed.

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APPENDICES

Appendix A: COVERING LETTER TO QUESTIONNAIRE	149
Appendix B: QUESTIONNAIRE	150



Cape Peninsula University of Technology
Faculty of Business and Management Sciences

Consent to partake in an academic study

Research conducted by:
Siphesande Rodaiber Qeke

Student number: 211280844

Dear Sir/Madam,

Invitation to participate in an academic research study

You are kindly invited to participate in a research study titled “Triple Bottom Line Framework as a tool for Measuring the Sustainability of Manufacturing Small and Medium Enterprises (SMEs) in the Cape Metropole”. This study is being conducted by Ms Siphesande Rodaiber Qeke, a Master student at the Cape Peninsula University of Technology (CPUT) under the supervision of Professor J. Dubihlela. The purpose of this study is to determine the extent to which the manufacturing SMEs are utilising the Triple bottom line reporting framework as a tool for ensuring sustainability in the Cape Metropole.

By virtue of you being decision maker of a South African SME in the manufacturing sector, your contribution is of the tremendous value for this study. Your participation in this study is voluntary and you are free to withdraw from it at any time without an obligation. There are no risks associated with participating in this study. The study will not collect any information that can identify you as respondents, and the researcher is definite to assure you that you will be recorded anonymously, and the company will be protected. Even though you will not be compensated for participating, the information collected in this study will positively contribute to a better understanding of how sustainability of the SMEs in South Africa can be achieved.

Your consent to participate in this study will be highly appreciated.

For further inquiries, you may contact me on this email srqeke@gmail.com

If you consent to participate in this study, please sign this form to indicate that:

- You have read and understood the information provided above;
- You hereby consent to participate in this study voluntarily.

Name of the Enterprise: _____

Respondent's signature: _____ Date: _____

Appendix B: Questionnaire

Section One – Components of Triple Bottom Line that can measure the sustainability (Please mark with “X” in the appropriate box)

1. The idea behind the Triple Bottom Line/ CSR approach is that the corporation's ultimate success and health should not only be measured by its traditional bottom line but also by its social/ethical and environmental performances.

- Is your organisation aware of Triple Bottom Line Approach?

a. Yes						1
b. No						2
<ul style="list-style-type: none"> If yes, would you consider your company as one who uses Triple Bottom Line to report their profits? 						
a. Yes						1
b. No						2
<p>2. The following items given will be reported in the financial statements as part of operational components of your organisation in your view how you would rate their overall progress comparing the past years to measure and weigh the TBL that enhance the sustainability of your organisation? Rate the listed items from 1 – 5, where 1 is unacceptable and 5 is exceptional.</p>						
A. Items related to the economic dimension of financial reports	Rating 1 Unacceptable	Rating 2 improvement needed	Rating 3 meets expectations	Rating 4 Exceeds Expectations	Rating 5 Exceptional	
Financial Capital						
a. Sales Growth	1	2	3	4	5	
b. Returns on sales	1	2	3	4	5	
c. Returns on assets	1	2	3	4	5	
d. Returns on equity	1	2	3	4	5	
e. Products returns rates	1	2	3	4	5	
f. Defects	1	2	3	4	5	
g. Productivity	1	2	3	4	5	
h. Investments or total assets	1	2	3	4	5	
i. Marketing the Organisation	1	2	3	4	5	
j. No. of New customers	1	2	3	4	5	
k. Order cycle time	1	2	3	4	5	
B. Items related to the environmental dimension of financial reports						
a. Water consumption	1	2	3	4	5	
b. Vegetation and nature conservation such as protecting trees, grass etc.	1	2	3	4	5	
c. Pollute environment (direct CO2)	1	2	3	4	5	
d. Sinks absorbs waste (quantity of solid waste)	1	2	3	4	5	
e. Energy consumption	1	2	3	4	5	
f. Recycling waste	1	2	3	4	5	
g. Emissions, effluent & waste/ or unit as a% of total resources used Industry specific factor (e.g. GHG emissions)	1	2	3	4	5	
C. Items related to the social dimension of financial reports						

a. Employees capabilities and training and development	1	2	3	4	5
b. Employees recruitment process and fair salaries (market related)	1	2	3	4	5
c. Customers satisfaction	1	2	3	4	5
d. Cooperation with local residents (e.g. the number of CSR activities organised)	1	2	3	4	5
e. Affiliation with governmental agencies to develop your business strategies (e.g. SEDA, SEFA etc.)	1	2	3	4	5
f. Affiliation to non- governmental organisations and agencies such as Chamber of Commerce to improve your business network	1	2	3	4	5
g. Suppliers satisfaction	1	2	3	4	5
h. Supplier long term relationship	1	2	3	4	5
i. Customer long term relationship	1	2	3	4	5

Section Two –The following list of questions would require you to indicate the frequency of the company do these activities of triple-bottom line as strategies to ensure maximised profits and measure organisational sustainability (Please mark with “X” in the appropriate box)

3. Use the following scales to answer below listed questions that seek to understand how frequent these activities of TBL take place to ensure the continuity of your organisation 1=Never, 2=Rarely, 3=Sometimes, 4=Frequently, 5=Very Frequently	Never	Rarely	Sometimes	Frequently	very frequently
a. How often does your organisation do Community Charity	1	2	3	4	5
b. How often Is your business involved in Community safety and security awareness programme	1	2	3	4	5
c. How frequently does your business purchase from local suppliers and using local raw material	1	2	3	4	5
d. How often does your business employ local residents	1	2	3	4	5
e. How often do they consume water	1	2	3	4	5
f. How frequently do your business utilise energy	1	2	3	4	5
g. How often your organisation follows material practices (e.g. use and produce environmentally friendly products)	1	2	3	4	5
h. How often your business ensures energy conservation	1	2	3	4	5
i. How frequently does your business comply environmentally friendly policies and governance	1	2	3	4	5
j. How often your business keep touch with	1	2	3	4	5

your customers					
k. How often do your business manage waste (waste reduction)	1	2	3	4	5
l. How often does your business recycle	1	2	3	4	5
m. How frequently does your business re-use waste	1	2	3	4	5
n. How frequently does your Increase customer satisfaction	1	2	3	4	5
o. How often does your organisation benchmark performance against that of competitors	1	2	3	4	5
p. How frequently does your company train, promote, equip, develop and motivating employees	1	2	3	4	5

Section Three- Your perceptions of the effectiveness of sustainability measures used in your business

Use the following scales to answer Question 4,
1=Very Ineffective, 2=Ineffective, 3 =Neutral, 4=Somewhat Effective, 5=Very Effective

4. What are your perceptions regarding the effectiveness of the following sustainability measures?

The way the organisation perceive things can influence the way they run business, please rate your perception on the effectiveness the below measures' contribution to the success, growth and the sustainability of the business.	Very Ineffective	Ineffective	Neutral	Somewhat Effective	Very Effective
a. Considering the social and environmental effects on business operations to ensure the business growth and success	1	2	3	4	5
b. Sustainable business marketing	1	2	3	4	5
c. Customer satisfaction and the long-term relationship with the clientele	1	2	3	4	5
d. Responding to customers' and the employees' surveys	1	2	3	4	5
e. Gaining suppliers' trust by engaging in fair-trading transactions and creating long term sustained relationship with suppliers and gaining supplier reliability	1	2	3	4	5
f. Offer quality products that are safe and fit for their intended use	1	2	3	4	5
g. Avoiding the false and misleading advertisement and sales promotions that use deception and manipulation	1	2	3	4	5
h. Disclosing all substantial risks associated with the product usage and avoid manipulating of the availability of the product for purpose of exploitation	1	2	3	4	5
i. Strive for the competitive return on investment is important	1	2	3	4	5

j. Using employee fair recruitment processes, training, equipping and constantly developing staff.	1	2	3	4	5
k. Creating the family- friendly working environment to ensure employee satisfaction and diversity	1	2	3	4	5
l. Ensuring the safety and the wellbeing of your employee	1	2	3	4	5
m. Ensuring that the employees participate in social project	1	2	3	4	5
n. Foster a reciprocal relationship between the corporation and community	1	2	3	4	5
o. Invest in the community in which the corporation operate	1	2	3	4	5
p. Launch community development activities and encourages employees to partake	1	2	3	4	5
q. Respect customers and their rights and provide them with truthful, honest and useful information all the time	1	2	3	4	5
r. Avoiding price fixing and engage in a fair and honest business practices in the relationship with the stake holders	1	2	3	4	5
s. Demonstrating a commitment to sustainable development	1	2	3	4	5
t. Demonstrating commitment to the environmental programmes	1	2	3	4	5
u. Promoting green building and infrastructure	1	2	3	4	5
v. Commitment to the environmental education (e.g. environmental awareness weeks, environmental seminars etc.)	1	2	3	4	5
w. Ensuring compliance with environmental quality standards ISO 14001 certificate	1	2	3	4	5
x. Cooperation with non-governmental environment organisations	1	2	3	4	5
y. Recycling and re-using the resources	1	2	3	4	5
z. Energy conservation	1	2	3	4	5

Section Four - Factors inhibiting or challenging Manufacturing SMEs from fully adopting triple bottom line framework to commit to focus on social and environmental concerns (Please mark with "X" in the appropriate box)

5. Are there any factors that inhibit or challenging your business from fully adopting triple bottom line?

(a) Yes

1

(b) No						2
If yes provide them in a line below, if No, proceed to question 6.						
Use the following information scale to answer question 6, 1= Strongly disagree, 2= Disagree, 3= Neither agree or disagree, 4= Agree, 5= Strongly agree						
6. To what extent do you agree with the following statements about factors that inhibit or challenging your business from fully adopting triple bottom line?						
	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	
a. Difficult to quantify	1	2	3	4	5	
b. Cost ineffectiveness of the performance measures and endure economic burden	1	2	3	4	5	
c. Inadequacy of information about triple bottom line in the entity	1	2	3	4	5	
d. Complexity of the triple bottom line	1	2	3	4	5	
e. Social and Environmental measures are unreliable	1	2	3	4	5	
f. Social and Environmental measures are irrelevant to our business	1	2	3	4	5	
g. A lack of understanding and knowledge of triple bottom line	1	2	3	4	5	
h. Cost of implementing the triple bottom line is very high	1	2	3	4	5	
i. Triple bottom line does not guarantee sustainability	1	2	3	4	5	
j. Triple bottom line does not ascertain success	1	2	3	4	5	
k. A lack of the necessary skills and human resources	1	2	3	4	5	
l. A lack of policies guiding us into devoting our way of doing business and using triple bottom line framework	1	2	3	4	5	
m. A lack of management support	1	2	3	4	5	
n. Absence of an effective process of implementing triple bottom line measures	1	2	3	4	5	
o. Conflicting results among the different sustainability measures	1	2	3	4	5	
p. employee resistance	1	2	3	4	5	
Section Five – Demographic information and business profile (Please mark with “X” in the appropriate box)						
7. What is your position in your business?						
a. Owner						1
b. Manager						2
c. Owner and Manager						3

d. Supervisor	4
8. Choose your Age from the below scales	
Under 31 Years	1
31- 40 Years	2
41-50 Years	3
51-60 Years	4
Over 60 Years	5
9. How long have you been in the above position?	
a. Less than 1 year	1
b. 1-5 years	2
c. 6-10 years	3
d. Above 10 years	4
10. How long has your business been in existence?	
a. Less than 1 year	1
b. 1-5 years	2
c. 6-10 years	3
d. 11-15 years	4
e. Above 15 years	5
11. What is your highest level of education?	
a. Matric	1
b. Short course	2
c. Diploma	3
d. Bachelor/Degree	4
e. Masters	5
f. Doctorate	6
g. Other	7
12. What is the number of employees in the business?	
a. Less than 20	1
b. 20-49	2
c. 50-99	3
d. 100-199	4
e. 200 and above	5
13. What type of industry are you operating under?	
a. Agriculture, Hunting, Forestry and Fishing	1
b. Automotive, Basic Metals, Fabricated Metal Products, Machinery & Equipment	2
c. Food Products, Beverages and Tobacco Products	3

d. Textiles, Clothing and Leather Goods	4
e. Chemicals, Medical, Precision and Optical Instruments	5
f. Refined Petroleum, Coke and Nuclear Fuel	6
g. Other	7
14. Please select your ethnicity	
a. Black	1
b. White	2
c. Coloured	3
d. Indian	4
e. Other	5
Thank you for your participation. If you would like feedback on the findings of this study, please E-mail Siphesande using the following E-mail address: srgeke@gmail.com	