



Cape Peninsula
University of Technology

**ENTREPRENEURIAL RISK MANAGEMENT CHALLENGES OF SELECTED SMALL AND
MEDIUM ENTERPRISES IN THE MARITIME INDUSTRY IN CAPE TOWN**

by

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Signature

Date

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ABSTRACT

Entrepreneurs are very important to the South African economy. Entrepreneurs use opportunities to establish new ventures, introducing new business ideas as well as establishing Small and Medium Enterprises (SMEs) in all industries. SMEs have emerged as an important tool to solve the triple bottom challenges, namely: poverty, unemployment and inequality. The purpose of this study was to examine eco-entrepreneurial risk management for SMEs within the maritime industry in Cape Town and the impact on business performance with specific focus on risk management, eco-friendliness and the main challenges faced by SMEs. A survey was conducted to gather data from selected SMEs in the maritime industry in Cape Town (N=60). Data was collected from sixty companies inclusive of high ranking officials, owners and managers. This was done due to the sensitivity and depth of information required as per the survey. Quantitative, qualitative and secondary data methods were employed in the data collection. Respondents for this study were selected through the use of convenience sampling. Quantitative data was analysed through SPSS V25.0 to generate descriptive and statistical results. Most of the SMEs in the maritime industry had an understanding of risks and their impact on the business well-being. The greatest challenge encountered, however, was on how to minimize the risks (risk management challenges). This was due to financial crises, lack of knowledge and expertise on the part of the owner managers regarding the issue of risk management. Some respondents found the question irrelevant as they lacked a proper understanding of eco-entrepreneurial risk management. They therefore regarded the survey as irrelevant to their businesses. The study has implications for entrepreneurs and managers. The lack of a risk management framework may result in reduced profitability and cost overruns. A standardised risk management structure could result in identification and mitigation of diverse risk factors.

Keywords:

Small and Medium enterprises, Eco-entrepreneurship, Risk management, Business performance, Eco-friendliness

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CHAPTER 1

BACKGROUND AND RATIONALE OF THE STUDY

1.1 INTRODUCTION

The maritime industry is one of the most promising and well-known industries in South Africa. The industry encapsulates business activities along the coastline stretching more than 2,500 kilometres from the desert border with Namibia on the Atlantic Ocean (western), across the tip of Africa and to the border with Mozambique on the Indian Ocean. The reputation of this industry is highly recognized through trade activities, business operations and economic contribution to country's socio-economic development. Key activities, natural resources, energy, trade, science and leisure activities are the foundation of the marine industry's value chain.

The marine-based ocean economy is of critical importance to the South African economy. It serves as a cornerstone of international trade as it interlinks the country with other continents through interregional and international trading partnerships. It has proven to be one of the greatest revenue generators (Kildow & McIlgorm, 2010). It incorporates different lines of business such as fishing, shipping, transportation, import and export, with fishing being the most dominant (Onwuegbuchunam & Akujuobi, 2013). Different lines of business have great potential for economic development, reduction of unemployment and poverty alleviation. Merk (2013), noted that economic development attributed to this industry is due to the port efficiency, shipping services and technological advancement of the country.

Undertakings in the marine related industries are expanding, bringing benefits to people across the world. The tremendous growth and socio-economic development seen by these industries is due to the massive amount of Small and Medium Enterprises (SMEs) that play a significant role in the industry. SMEs are mainly in the fast foods, restaurants, repairs and maintenances, servicing large entities and ensuring the ecological friendliness of the marine environment. Most of the SMEs are developed by an entrepreneurial driven mind-set. Some examples of SMEs in

the maritime sector include fishing, boat repairs and maintenance, waste management, oil and gas services, as well as construction services, to mention but a few.

Entrepreneurship is a process that involves the discovery of new opportunities and the exploitation thereof, taking into account the risk and rewards in the exploitation of available resources (Olusegun, 2012). Their experiences in the socio-economic environment drive many to start-up small enterprises in order to enhance social and economic change as well as being an instrument for achieving economic goals. The concepts and terms Small and Medium Enterprise were derived from the words Small, Micro and Medium Enterprises (SMMEs). The definition of what constitutes SMEs is of some concern in the literature. SMMEs is defined in the National Business Act of 1996, subsequently amended in the National small Business act of 2003 and 2004, as a separate and distinct entity that includes non-governmental enterprise and co-operatives managed by one or more owners. The term SMMEs incorporates all small businesses such as Survivalist or Subsistence, Micro, Small and Medium business enterprises (Smit & Watkins, 2012). Various authors have differed on the definition of SMEs. Abor and Quartey (2010) have asserted that the definition of SMEs is based on size, capital assets owned, labour skills, legal status and method of production while Berisha and Shiroka Pula (2015) concluded that the SMEs definition is far from being agreed upon. The Bureau for Economic Research (2016) and DTI (2008) defined a SME as any small enterprise including both registered as well as unregistered and non-VAT registered business entities. Moreover, this includes survivalist street trading, backyard manufacturing and services, and occasional home-based evening jobs. Berry *et al.* (2002) further added that the term SME was derived from "... survivalist self-employed from the poorest population (informal micro-enterprises) to traditional family businesses employing above hundred employees (medium)". The term was then further developed by comparing the upper and lower ends to eliminate the micro.

Survivalist business ventures have low potential growth and are less likely to hire employees. To clarify the definition Abor and Quartey (2010) further noted that, in order for a business to be recognised as an SME the following criteria have to be met:

- The firm should have a relatively small share of market place;
- The firm should be managed by owners or part owners and not through a medium formalised structure; and
- The firm should be independent and not form part of large entities or franchises.

The survivalist category includes businesses such as hawkers, vendors and subsistence farmers, normally generating income levels below ‘the poverty datum line’. Micro enterprises generally lack registration formalities while small enterprises are those formally registered businesses that are well-established, employing up to 50 people, grossing turnovers of between R2 million and R25 million. Medium enterprise employment levels range between 100 to 200 employees, exhibiting evolving decentralisation of power and recognisable management perspectives (Smit & Watkins, 2012). Table 1.1 below summarises the categories of SMMEs in line with the statute.

Table 1.1: Categorisation of SMEs by size

| Size or class of enterprise | Number of employees | Annual turnover South African Rand | Gross Assets, excluding fixed property |
|-----------------------------|---------------------|------------------------------------|--|
| Medium | Between 100 & 200 | Less than R10m to R50m | Less than R2m to R8m |
| Small | Less than 50 | Less than R2m to R25m | Less than R2m to R4.5m |
| Very small | Between 10 & 20 | Less than R200 000 to R500 000, | Less than R150 000 to R500 000, |
| Micro | Less than 5 | Less than R150 000 | Less than R100 000 |

Source: Falkena *et al.* (2001)

As illustrated in table 1.1 above, SMEs were defined in terms of formalised small businesses that are registered, thus bringing systematic development of the informal to formal trade. SMEs are essential in industrial development and in various business sectors as they contribute to employment, poverty alleviation and economic growth through the contribution to Gross

Domestic Product (Prinsloo *et al.*, 2015). The South African government values the existence and importance of SMES as a means to stimulate economic development and the creation of jobs. The South African government goes an extra mile in supporting the SMEs with ideas, financial support, advice, and market access to mention but few (Simpson & Docherty, 2004). Mahembe (2011) noted that the SMEs are supported through the use of the following organisations developed to help only SMEs in various aspects, for example Khula enterprise LTD, The National Youth Development Agency (NYDA) and other government owned institutions such as Small enterprise Development Agency (SEDA). The aforementioned organisation was instituted to equip the SMEs with ideas to raise funds or loans, market access, training and mentoring, knowledge as well as providing the necessary skills that a business needs to survive.

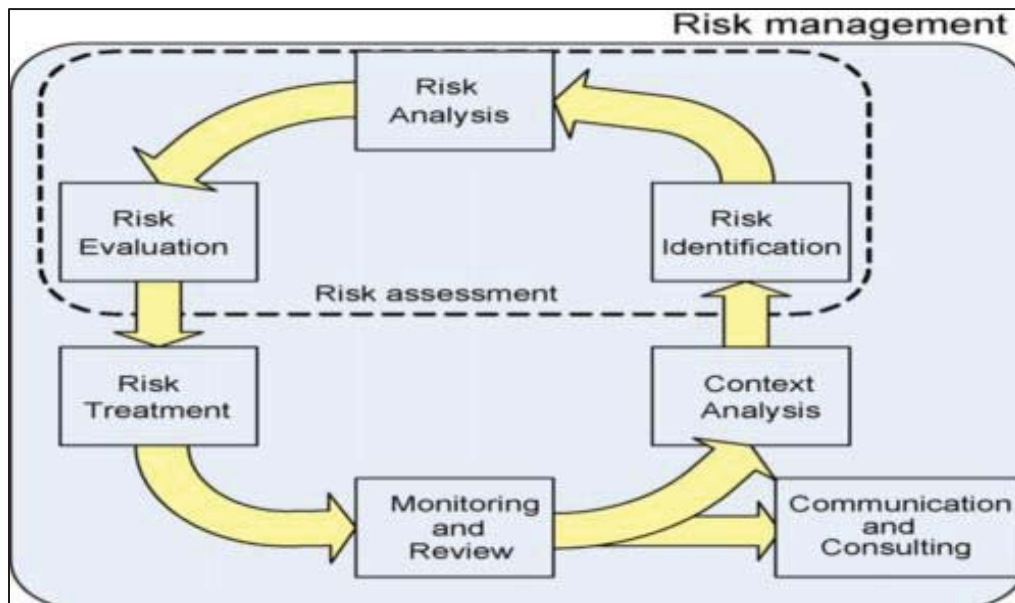
Apart from all the support, the SMEs are failing at the start-up phase due to risks that are not properly managed. A proper risk management technique is still a challenge within the SMEs environment irrespective of the industry they operate in. This is due to a lack of risk management knowledge and risk management skills by management in capitalising available funds for the well-being of the business. Ekwere (2016) found that despite government reinforcements through ensuring financial access for SMEs, no attention has been focused on risk management knowledge and application within SMEs.

It is not mandatory for SMEs to implement structured risk management in their ventures but it is of utmost importance to have one in place in order to survive. Proper risk management techniques assist in risk identification, mitigation and control. Sarbutts (2007) finds that inadequate risk management practices are the main challenge faced by many SMEs. Poor managerial skills on the part of owners and managers is the main cause of poor risk management strategies in SMEs and thus have a negative impact on SMEs growth and performance. Duong (2009) classifies SMEs as risky business since most SMEs have a weak capital background that gives rise to poor operational activities, financial loss and insolvency, leading to poor performance that leads to high failure rates. The failure rates of SMEs are attributed to internal

and external drivers, such as poor managerial skills, limited access to funds, and most importantly, a poor risk assessment background of the owner managers (Mahembe 2011).

Risk definition varies by area of focus and purpose. Šotić and Rajić (2015) defined risk as the probability, encumbrance of unwanted circumstances as well as expected damages. It is a combination of likelihood, significance, causal scenario and affected population. Sadgrove (2016) identified the main three common types of risk that affects most businesses. These include financial risks, business risk and compliance risk. Successful businesses always have controls in places to mitigate, eliminate and prevent risks depending on the type of risks that are associated with the business, namely inherent, control and detective risks. Stoneburner *et al.* (2004) noted that, the best remedy for business risks is an effective risk management plan. The ability to implement effective risk management plan awareness and knowing the greatest challenge affecting the business is very crucial. Risk management is regarded as a process of risk assessment, risk mitigation, and evaluation and assessment (Chavez & Boyce, 2003). Figure 1.1 below shows how risk could be managed in an organization:

Figure 1.1: The Process of Risk Management

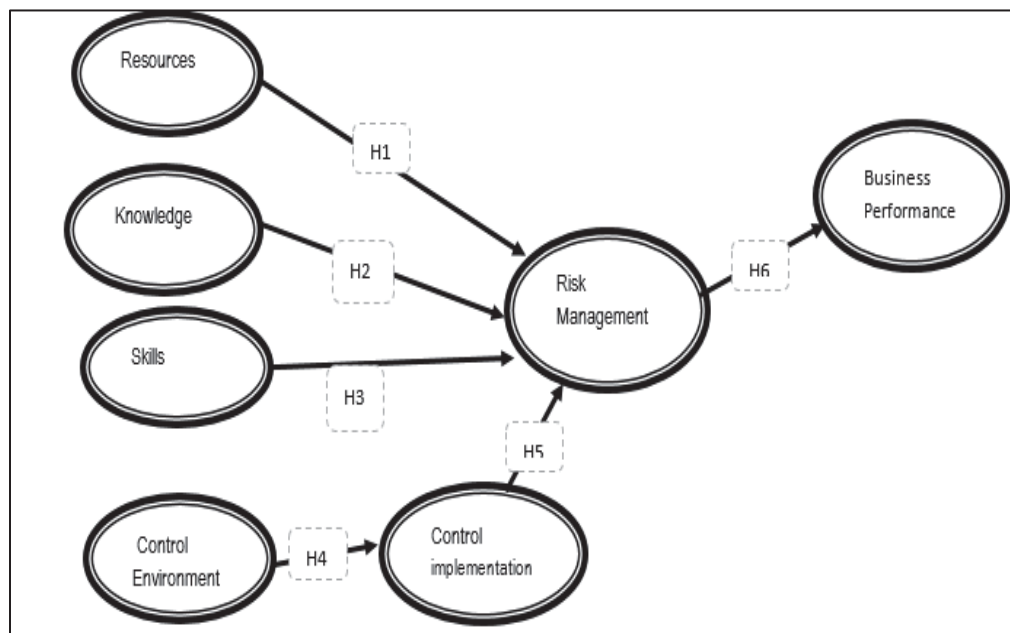


Source: Aloini, Dulmin and Mininno (2007)

Risk management is regarded as a great challenge in the SME sector. Compared to large enterprises, SMEs do not have sufficient resources; they also lack knowledge on how to implement structured risk management (Jayathilake, 2012). The latter can be attributed to insufficient support services and relative costliness of resources (Abor & Quartey, 2010). It can be concluded that SMEs are failing due to ineffective risk management in place since most of the business owners have an entrepreneurial passion for starting their own business and overlooking risk management issues at all organisational levels.

The entrepreneurial risk challenges are of the greatest concern in SMEs. The word entrepreneurial risk is a combination of risk and entrepreneurs. Entrepreneurs have been linked to the idea of risks. Scholars have observed risks as fundamental to entrepreneurial function and entrepreneurs' ability to tolerate risks as central to the development of new ventures. SMEs face great challenges such as unpredictability in sources of income, lack of resources, market accessibility and competition. This research attempts to oversee the level of risk management in place to curb the entrepreneurial risk challenges faced by SMEs. Figure 1.2 below illustrates risk variables and their impact on business performance as explained by the conceptual framework.

Figure 1.2: Illustration of Conceptual Framework (Researcher's formulation)



Source: *Researcher's formulation*

1.1.1 Lack of Resources

Resources are available in limited capacities in the country as a whole. Resources include natural resources such as land as well as labour in terms of skills and capital shortages. These resources are available in a minimum capacity. Most SMEs do not have the capacity to employ sufficient labour due to a lack of funds. Apart from that, they mainly can afford cheap unskilled labour, which has a negative influence on risk management implementation. A short supply of resources that does not match the output demand is undesirable for a business.

Big companies have strong financial backgrounds that enable them to easily access the limited available resources as small entities cannot afford them. The four major resources that every business needs are financial, managerial, physical and technological as determined by Das & Teng (1998). These resources are available in limited supply and it is a great challenge for SMEs to acquire them. This results in poor risk management implemented in SMEs. Consequently, the following hypothesis was drawn:

H₁: *Lack of resources has a negative impact on risk management implementation.*

1.1.2 Lack of Knowledge

Knowledge is essential and has a strong impact on business decision making regarding risk management (Wallquist *et al.*, 2010). Knowledgeable personnel especially in risk identification, prioritizing on risks as they arise, and putting in place proper controls leads to effective risk management techniques implementation. SMEs' owner managers do not necessarily possess the expertise to manage risk due to lack of knowledge (Smit & Watkins, 2012). The following hypothesis was therefore drawn:

H₂: *Lack of awareness and knowledge will lead to poor risk management skills.*

1.1.3 Lack of Skills

Skills are an essential aspect in risk management implementation in any operating environment. Lack of adequate skills leads to poor risk management. The owner managers should invest more in human capital to enhance managerial skills as this yields positive results in an organization. The following hypothesis was drawn:

H₃: *Lack of risk management skills results in poor risk identification (financial risks and business risks) leading to a negative impact on risk management.*

1.1.4 Poor Control environment and Poor Controls

A strong control environment leads to a healthy successful business (Siwangaza & Dubihlela, 2016). Previous researchers such as Siwangaza, Smit, Bruwer & Ukpere (2014) found that the SMEs control environment is managed very poorly, due to lack of resources in the form of funding, incompetent personnel (lack of skills) as well as poor managerial skills thus giving rise to poor performances. This gave rise to the next hypothesis:

H₄: *Poor control environment leads to poor risk controls measures*

H₅: *Poor controls have a positive correlation with poor risk management*

1.1.5 Poor Risk Management

Rasmussen (1997) considers risk management as a control technique that serves as the cornerstone to oversee and reduce the effects of risk in an organization. Poor risk management has the ability to severely and negatively impact on business success. Poor risk management has therefore to be avoided at all costs. When inefficiencies are identified, root cause analysis can be performed, and corrective or preventative measures may be included in the risk management of SMEs.

H₆: *Poor implementation of risk management techniques will result in poor performance*

From the above illustrations and explanations the following hypotheses were derived:

Research Hypotheses

H₁: Lack of resources within SMEs will lead to poor implementation of risk management techniques.

H₂: Lack of awareness and knowledge will lead to poor risk management skills.

H₃: Lack of risk management skills will result in poor risk identification (Financial risks and Business Risks) that lead to a negative impact on risk management.

H₄: Poor control environment will lead to poor risk controls.

H₅: Poor controls have a positive correlation with poor risk management.

H₆: Poor implementation of risk management techniques will result in poor performance.

This study seeks to identify the entrepreneurial risks challenges faced by SMEs as well as their impact on business performances versus risk mitigation measures. With risk management in place, this study further seeks to provide a better understanding of whether risk management is sufficient to ensure high SMEs performance. Any risk taken by SMEs owner and managers should be after careful consideration of risk probability, impact and return. This can be contrasted with risks that are taken unknowingly or without much of an evaluation based on optimism or a lack of due diligence.

1.2 PROBLEM STATEMENT

Despite the contributions made by various scholars on risk management in the literature, it appears that most SMES in South Africa do not implement good risk management techniques. The SMEs do not seem to effectively manage enterprise risks due to lack of knowledge, lack of awareness and the value they place on risk identification and the control environment (Smit & Watkins, 2012). This often gives rise to risks which have a greater probability of realisation, ultimately adversely influencing the performance of SME operations. Research on risk management has mainly been concentrated in developed markets and with prominence on large corporates, focusing mainly on operational risk matters and not the risk control environment. No identifiable research has tackled the issue of risk management within the maritime industry sector, yet it is one sector that is exposed to environmental, operational and related risks. Research on risk management within the maritime industry is therefore necessary, particularly in

South Africa's coastal city of Cape Town. It can therefore be concluded that SMEs performance in the maritime industry is perceived to be exposed to poor controls and poor risk management as SMEs lack adequate and effective risk management techniques. This study seeks to determine the entrepreneurial risk mitigation strategies for the SMEs operating within the maritime industry sector in Cape Town. This study also sought to determine ways to implement entrepreneurial risk management with the aim of improving maritime SMEs performance within this vital industrial sector of the South African economy, commonly known as the oceans economy.

1.3 RESEARCH QUESTIONS AND OBJECTIVES

The purpose of this study is to empirically examine entrepreneurial risk management for SMEs within the maritime industry in Cape Town, and the impact thereof, on business performance. To achieve this goal the research question was formulated namely how is risk management implemented amongst SMEs operating in the maritime industry?

The following subsequent objectives were also formulated:

- To identify if risks are successfully managed in a small businesses operating in a maritime industry;
- To determine whether there are control systems in place to detect risks for SMEs operating in the ocean economy;
- To determine whether the risks realised are properly managed within the maritime SMEs sector;
- To determine how well developed the risk management systems of a maritime SMEs are;
- To determine what type of risks maritime SMEs normally encounter; and
- To determine what measures the maritime SMEs could take in mitigating risk exposures.

To ensure that the above objectives were achieved, the following sub-questions were formulated:

- How are risks managed in small businesses operating in a maritime industry?
- How effective are the current internal controls to prevent, detect and correct risks for SMEs within the ocean economy?

- How do SME leaders in the maritime sector manage risks that they identify?
- What are the characteristics of well-developed risk management systems and how well developed are the risk management systems of SMEs in the maritime industry?
- What types of risks are associated with SMEs operating within the maritime industry sector?
- What measures do marine SMEs have in place for risk mitigation?

1.4. RESEARCH METHODOLOGY

The detailed methodologies are discussed in chapter three of this research. In this chapter an overview of research methodology is highlighted. Brief discussions of the methodologies used in this study are given in the section under the following headings: Research approach, Research design and strategy.

1.4.1 Research Philosophy

Research philosophy can be viewed as ontology or epistemology and each view point influences the way scholars think about the research method. (Saunders, Lewis and Thornhill, 2008). Saunders, Lewis and Thornhill (2008) propose four management research philosophies; (1) positivism, (2) realism, (3) interpretivism and (4) pragmatism are four main research philosophies in management research as shown in table 1.1 below

Realism is a philosophical position that link with scientific examination. This subdivision of epistemology is analogous to positivism as it adopts a scientific incline towards knowledge development where there is a reality relatively mind independent therefore the opposite of idealism. Two types of realism have been proposed, (1) direct realism which declares that what is experienced through human senses depicts the world precisely, (2) critical realists draw attention to the deception of senses (Saunders, Lewis & Thornhill, 2008).

Table 1.2: Management research philosophies

| | Positivism | Realism | Interpretivism | Pragmatism |
|--|--|---|---|---|
| <i>Ontology: the researcher's view of the nature of reality or being</i> | External, objective and independent of social actors | Is objective. Exists independently of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realist) | Socially constructed, subjective, may change, multiple | External, multiple, view chosen to best enable answering of research question |
| <i>Epistemology: the researcher's view regarding what constitutes acceptable knowledge</i> | Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations, reducing phenomena to simplest elements | Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively, phenomena create sensations which are open to misinterpretation (critical realism). Focus on explaining within a context or contexts | Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions | Either or both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interpret the data |
| <i>Axiology: the researcher's view of the role of values in research</i> | Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance | Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research | Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective | Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view |
| Data collection techniques most often used | Highly structured, large samples, measurement, quantitative, but can use qualitative | Methods chosen must fit the subject matter, quantitative or qualitative | Small samples, in-depth investigations, qualitative | Mixed or multiple method designs, quantitative and qualitative |

Source: *Saunders, Lewis and Thornhill (2008)*

According to Saunders, Lewis and Thornhill, (2008) critical realist's proposition is that there is constant change in the social world. This position is consistent with the research's purpose which attempts to comprehend the reason for a phenomenon (performance as a consequence of the alignment of the supply chain, competitive and information systems strategy) which is a predecessor for recommending change. Therefore, this research will be based on critical realism where the importance of a multi-level study would be acknowledged and each level (individual,

the group and the organisation) could transform the researcher's understanding of the studied phenomena (Saunders, Lewis and Thornhill, 2008).

1.4.2 Research Approach

According to Creswell (2017) Research Approach is a way of thinking about conducting research. Research Approach gives a description of the research purpose, role of researchers, stage of research and methods used to analyse data. This study follows a mixed method approach. A mixed approach includes qualitative and quantitative methodologies. The mixed method approach allows the researcher to explore the research phenomenon under study using a variety of data sources. The data collection instruments were designed to get a better understanding of risk management practices that are being used by SMEs in the area of study. This study is focussed on the maritime industry, Cape Town, South Africa.

1.4.3 Research Design

Research design is defined as strategies in research that give specific direction for research procedure (Creswell, 2014). While this study was originally set on a quantitative research paradigm, the additional qualitative procedures were used to gather data so as to respect participants' preferences. Some participants preferred to be interviewed rather than participating in a survey. The researcher therefore decided to use mixed method approach. The maritime industry was selected for this study due to the fact that previous researchers have not covered this industry in SMEs, necessitating a need for research in this area.

1.4.3.1 Quantitative Research

Stokes (2011) defines quantitative research as a study paradigm that emphasizes quantification in collection, analysis of data and establishing the relationship between theory and research as deductive. Quantitative research involves data quantities providing a linkage between attributes (Bowling, 2014). In this study, structured questionnaires were used to collect data from 51 respondents (supports quantity). Quantitative methods are crucial in data analysis. Quantitative analysis is suitable for testing hypothesis, measuring social reality and quantifying opinion. By using a quantitative technique, the researcher's aim is to establish the link among the variables

stated in the research questions, objectives and hypothesis. Full details of the quantitative procedures are provided under chapter of this write-up.

1.4.3.2 Qualitative Research

Qualitative analysis is defined by Marczyk *et al.* (2010) as research techniques that involves interview questions and observation techniques. Furthermore, qualitative results are not quantified through statistical analysis. Mixed methods include qualitative and quantitative techniques. In this study both structured, open-ended questionnaires and interview questions were used to gather sufficient data. The research instruments were used to collect data from SMEs in the maritime industry in Cape Town. Full descriptions of procedures are explained under chapter 3.

1.5 TARGET POPULATION

Quinlan *et al.* (2011) defines the target population “... as all individuals, items or units relevant to the study; it comprises individuals, groups, organisations, documents and campaigns”. In this study, the target population comprises of owners, managers, and employees at the managerial level of SMEs in the maritime industry in Cape Town. The term SMEs refers to any small businesses that operate in this industry and meet the requirements of an SME definition as stated by the Small Business Act of 1996, amended in 2004. The list of all SMEs is available in business directory. According to SEDA (2016) there are 2 251 821 SMEs in South Africa as a whole, but does not indicate the number of SMEs in Cape Town. The population of this study included both female and male staff members of SMEs within the maritime sector in Cape Town.

1.6 SAMPLING FRAME AND TECHNIQUE

Malhotra (2010) describes a sample frame as a representation of the elements of the target population. Coldwell and Herbst (2004) define it as a list that consists of the directions of identifying the target population. The main difference between sample and population is that population refers to the entire group whereas sample refers to the members where data was collected (Coldwell & Herbst, 2004). The main reasons for using a sample instead of population are time constraints, financial constraints and accessibility of the sample.

The sampling frame for this study was a list of SMEs list which was obtained from the maritime listed companies (Sadid Directory). For this study, purposive convenience sampling was used. Watkins (2008) showed that purposive sampling is used for a particular purpose, for example choosing people who are typical to a group, or those who represent diverse perspectives on a particular issue.

Purposive convenience sampling was used in this research since the research focused on a small sample of maritime industry SMEs inclusive of the owners, managers and employees involved at the managerial level, with the main focus being to obtain 'rich data' (Welman et al., 2007).

1.7 SAMPLE SIZE

A sample of 60 respondents was drawn from 59 conveniently selected SMEs in the maritime industry, Cape Town. The distribution of the collected data was as follows: 9 interviews from 9 different companies and 51 completed questionnaires from 50 different companies. Two questionnaires were collected from one company, comprising of the line manager and chief executive officer of the company. The study participants comprised owners and managers including line managers. The reason for using top officials was that they are primarily responsible for risk management and they understand the importance of the risk management processes meaning that valid data was obtained. They were, therefore, able to provide valuable insight and input to be used and analysed as part of the study.

The 59 SMEs under study were directly visited by the researcher. Where necessary, prior arrangements were made to determine a convenient time with management for the administering of questionnaires and conducting of interviews with the respective respondents. Some respondents, however, preferred that the researcher leave the questionnaires with them and thereafter to return them via electronic means at an agreed date. This gave the respondents enough time for proper completion of the questionnaires without disrupting their duties at work.

1.8 DATA COLLECTION INSTRUMENT

Mixed methods were employed in conducting the research. The research included structured questionnaires and interview questions for data collection. The reason for using mixed methods was to obtain the necessary data to complete the research.

The questionnaires were used to collect quantified data while interviews were used as a quality data instrument. The benefits of using questionnaires are as follows:-

- Participants can complete the questions at their own convenience.
- Questionnaires are more objective as their responses are gathered in a standardized way, they do not give room for irrelevant explanations; and
- It is not time consuming, it is relatively quick to collect data using questionnaires.

Apart from the above mentioned advantages of questionnaires, interview questions also have certain advantages. They allow respondents to express themselves, providing a reasonable judgment and they provide additional results that cannot be obtained through the use of questionnaires.

The questionnaire was self-administered to gather relevant data from the respondents. The questionnaire was divided into four sections. Section A covered questions regarding SMEs biographical information. Section B embraced questions on the eco-friendliness of the businesses. Section C covered questions on business performance. Section D comprised questions on risks and control measures and Section E entailed ecological sensitivity and environmental issues.

1.9 DELINEATION OF THE STUDY

To ensure validity of the responses from the respondents, data collection instruments were administered to owner, managers or permanently employed personnel in the top position of SMEs. The SMEs had to operate in the maritime industry in Cape Town region. In addition, respondents were personnel actively involved in SMEs business processes. The SMEs were not

to form part of a franchise. Most importantly, SMEs were to adhere to the definition of SME as per the National Small Business Act, No. 102 of 2004 (South Africa, 2004).

1.10 DATA ANALYSIS

Data analysis involves both quantitative and qualitative techniques. The data collected from the questionnaires were analysed using Statistical Package for Social Sciences (SPSS) version 25.0 Windows was used to analyse collected data. Graphs were manually derived from SPSS results to ensure clear presentations.

Incomplete questions were represented by a null value. Some participants were not comfortable answering questions related to their financials as they considered the information to be too sensitive and confidential. In addition, regression analysis including Analysis of variance (ANOVA) was used to examine differences and relationships among the variables used in the study (Cooper & Emory, 1995).

Apart from data collected through surveys and interview questions, secondary data was also used. Secondary data was used to support theoretical background and arguments. Secondary data was collected from accredited journals, books, reports and it is presented in chapter two of this thesis.

1.11 ETHICAL CONSIDERATIONS

Ethical issues are principles and guidelines that clarify the conditions under which a study is conducted (Oates, Kwiatkowski & Coulthard, 2010). Creswell (2002) regards ethics as a fundamental part of research. It forms the base of the planning phase of research. Babbie (2010) indicated that ethical consideration highlights a common agreement of the procedures that are appropriate in a research journey. Moreover, ethical considerations were used as a base to establish trust between participants and the researcher (Mamabolo, 2009). The participants were assured that information obtained would only be used for academic purposes.

Marczyk *et al.* (2010) reduced the ethical considerations into three main points: informed consent, respect to privacy, voluntary and information to be used strictly for academic purposes.

In addition to those mentioned by Mareczyk *et al.* (2010) confidentiality and anonymity are some of the ethical considerations. The aforementioned points were elaborated as follows:

Informed consent: The participant had to provide verbal or written consent to participate in this research.

Voluntary: Participation in this research was voluntary; in the sense that they are free to withdraw at any time.

Respect to privacy: Personal information obtained from the research was not be ascribed to any individuals.

Confidentiality: Participants were assured that all information collected would not be shared with anyone who is not directly involved in this study. The respondents were assured that the information would not be used as a benchmark or as referral when contacting other participants. To maintain confidentiality, the researcher agreed to share the research output with the respondents to make sure that there is no impairment of confidentiality.

Anonymity: The questionnaires did not contain names of respondents. To ensure a stronger guarantee to privacy, participants were informed that they would remain anonymous throughout the research.

In further support of all the ethical consideration mentioned above, professional competence in the data collection analysis was maintained.

1.12 RESEARCH CONTRIBUTION

Once the research is completed, a report will be produced. The report will contribute the following to the research community:

- Add value to the existing board of knowledge in the risk management area.
- Provide a better understanding of risk management techniques and the benefits of having structured risk management within SMEs.
- Emphasise the effectiveness of risk management practices in SMEs performance; and
- Help the new and existing entrepreneurs to appreciate the importance of risk management and its effects on achieving short and long term business objectives.

1.13 CHAPTER SUMMARY

This study comprises five chapters described as follows:

Chapter 1- Introduction and problem orientation: this chapter provides an overview; introduction to the study and formulation of research problem. The latter will be followed by research questions, objectives and their subcomponents. The design of the research will be briefly discussed. Lastly, research contribution is discussed in this chapter.

Chapter 2- Literature Review: this chapter provides a discussion on Small and Medium Enterprises, Risk management overviews within the SMEs as well as the relationship between risk management and the business performance within SMEs environment. This chapter provides a theoretical background to the research.

Chapter 3- Research methodology: the design and method of research utilized in the study will be discussed. Sampling techniques, methods of data collection and analysis will also be further discussed.

Chapter 4- Analysis and interpretation of the research findings: the results obtained will be evaluated against findings from previous studies.

Chapter 5- Conclusions and recommendations of the study: Recommendations emanating from the study will be provided. Conclusions will be made based on the findings discussed in the previous chapter. Limitations and implications for further research will be highlighted in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The preceding chapter provided the background to the study, the proposed research model, highlighting the problem statement, the research objectives and research methodology that were employed in the study. This chapter provides detailed discussions of the key variables noted in the conceptual framework. It also provides a review of previous studies in order to develop meaningful insights into the current study. The theoretical discussion in this chapter includes entrepreneurial risk management, business performances, an overview of SMEs and the maritime industry in South Africa.

The primary objective of this study as stated in chapter one is to empirically examine risk management and its impact on business performance for SMEs operating in the maritime industry and as such it is imperative to examine how owners or managers react to realised risks. Despite the significance of such insight, little or no study has been conducted in this direction. Earlier researchers' main focus was on the existence of internal controls, control environment and their effects on business sustainability (Jiang & Li, 2010; Bruwer, 2010; Siwangaza, 2013). The literature review in this study lays the foundation of the study and has enabled the researcher to formulate and propose a valid argument, thus providing evidence of prior research in the field.

2.2 IMPORTANCE OF RISK MANAGEMENT

To reduce the impact on entrepreneurial risks in business, a strong risk management process is the best option for a business entity. Every organization should consider implementing proper risk management techniques at an early stage. It is not compulsory for an entity to have one, however proper risk management is critical for any business' well-being. Risk management is a business process that involves risk identification, monitoring and the managing of unforeseen events that have an effect on an entity achieving its objectives (Chavez & Boyce, 2003). It is further stated that if a risk management plan is not correctly implemented, this has a negative impact on business performance. Ekwere (2016) also defined risk management as a process of

identifying, measuring probability, possible effect, treating risks, eliminating, monitoring and reducing the effects of risks by using minimum resources. It entails the use of an entity's resources such as labour, financial and physical resources to alleviate losses for the purpose of achieving business objectives.

Risk management was derived from the word management as a profession, where managers imply top responsibility of protecting and safe-guarding the company's assets by implementing necessary measures (Prinsloo et al., 2015). Ching and Colombo (2014) noted that most business entities are forced to adopt a structured risk management due to external forces. The external forces comprise pressure from the market as well as regulations.

Risk management is used as a protective measure that assists a business in averting any losses. These losses are classified as financial, legal, employee safety and or natural disasters such as floods and fire. All these are risks that companies need to be aware of irrespective of size. Large businesses have risk management teams in place to assess their exposure to risks, while SMEs do not do so due to financial difficulties. To SMEs, financial hardships are the owner or manager's responsibility for the risk management function (Franck, 2008). Most of the owner managers do not possess skills and expert to perform the task.

Businesses encounter different types of risk depending on the nature and the types of services ventured into. Irrespective of the nature of business all businesses are prone to risks. Jalal-Karim (2013) noted that the country's economy also contributes to the types of risks businesses encounter, especially the financial risks. It depends on how wealthy or poor the country is, determining as it does accessibility and limitation of credit facilities. If the country's economy is stable and the market rate is appealing, financial institutions shall willingly provide funds to the requesters as it will be a better investment.

Risk management requires expertise and skills since it takes a knowledgeable person to be able to identify and mitigate the risks involved. The latter was reinforced by Smit and Watkins (2012) who indicated that where SME owners/ managers do not have expert risk management

techniques, they characterise them as being “ignorant” as they are not aware of risks that businesses might encounter; also having risk management techniques deployed incorrectly due to lack of knowledge pose a threat to the business. Ridha and Alnaji (2013) also showed that SMEs failure rate are mainly impacted on by poor risk management.

It is further stated that poor risk management is attributed by lack of expertise in risk management, scarcity in monitoring and control structures, unpredicted failures in communication structures, failure by employees to recognize the importance of risk management, overlooking the historical advancement or risk management, and excessive optimism. In addition, the failure rate is also caused by lack of awareness, poor communication and control structures (Banks & Dunn, 2003). It is of utmost important for small entrepreneurs to consider and implement the enterprise risk management (ERM) techniques.

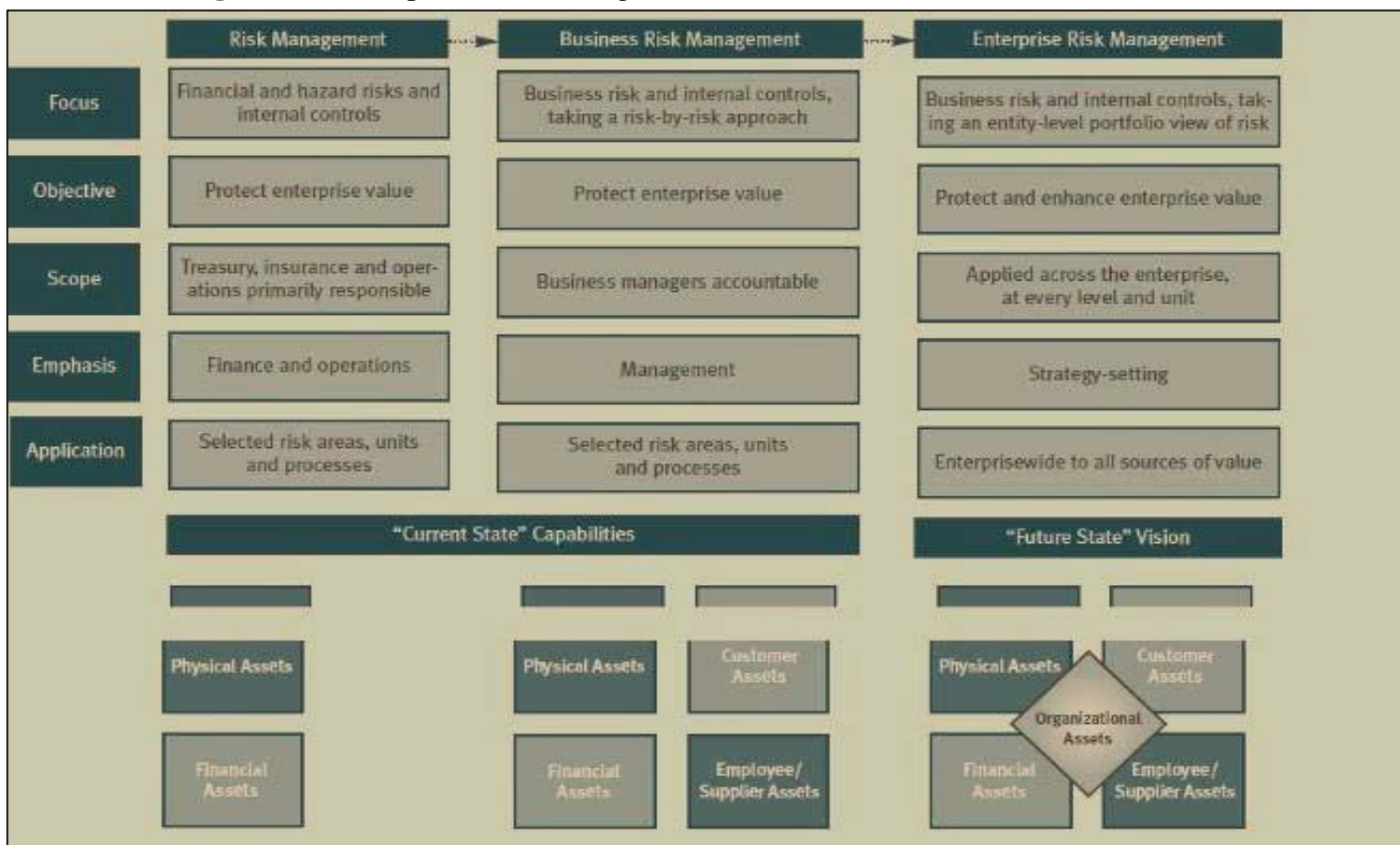
2.3 ENTERPRISE RISK MANAGEMENT

ERM is defined as a process, implemented by management and employees in an entity, to identify potential events that may affect an entity, and to manage these risks within its risk appetite, and to provide reasonable assurance regarding the achievement of an entity’s objectives and performance (Committee of Sponsoring Organization, 2017). Ching and Colombo (2014) define ERM as a process imposed by a board of directors, management and personnel, applied in strategy setting and across the enterprise to detect potential events that may affect the entity and manage risk to be within its risk appetite as well as to provide reasonable assurance regarding the achievement of entity objectives. The main agenda of ERM in a business operation is to maintain business operations at optimum levels at the set objectives.

Protiviti (2006) noted that the businesses that implement ERM are an assurance of business objectives fulfilment. Apart from the objectives being achieved, it also enhances the reduction of unacceptable performance variables, aligning and integration of different views of risk management, that is to establish the link between risk management and to more well-organized capital allocation and risk transfer decision, provide assurances to potential investors and stakeholders and enhances good corporate governance. It is further advocated by Protiviti (2006)

that ERM is the best technique to manage and control the risks, however not all companies have knowledge to implement enterprise risk management. They tend to place reliance on traditional risk management that makes ERM their imminent goal. Figure 2.1 below illustrates the movement from the traditional risk management model to an enterprise risk management model.

Figure 2.1: Enterprise Risk Management Model



Source: *Protiviti (2006)*

Figure 2.1 indicates the structure and layout of the traditional risk management model. Traditional risk management mainly focuses on managing risks affecting physical and financial assets while ERM focuses on entire assets including intangible assets, customers, employees and supplier's assets. This also brings about the major difference between the two models.

Financial challenges are not the only problems faced by SMEs owners/ managers. Owners/ managers need to acquire knowledge to be able to run their businesses and require expertise in all areas since the entity tends to be too small and hence managed by that one individual. Having a business insured is another protective measure, but one has to know what the business needs to be insured against. Knowledge and expertise are of greatest concern. Apart from a strong risk management team an Enterprise Risk Management System is an essential tool in running a business since it gives the assurance that all risk areas are covered since it involves the identification, assessment and controlling of potential risks (Chavez & Boyce, 2003).

Jayathilake (2012) noted that risk management is a challenging factor in SMEs as compared to large enterprises. SMEs lack necessary resources with regards to available labour and specific knowledge to put in place a standardised and structured risk management plan. The latter can be attributed to insufficient support services and relative costliness of resources (Abor & Quartey, 2010), leading to poor business performance. Most SMEs may not perceive this so long as they operate above their break-even point. There is thus a possibility of not operating to full capacity.

Risk Management is essential for small enterprises, as risk management plays an important role in the success and performance of business entities. The implementation of risk management strategies and methodology is crucial in SMEs since small enterprises are vulnerable to external and internal threats. The adoption of risk management assists in protecting innovations that contribute to competitive advantage and reduce business failure rates. Apart from that, risk management strategy is fundamental as SMEs do not have enough resources to respond quickly to those threats (Ekwere, 2016). The identification and management of risks (reasonable risk mitigation) at an early stage is important as it is regarded as the best control measure that enhances the great output in business performance. Businesses operating in the marine industry are exposed to very high risk factors. Bhattacharya, (2009) has pointed to the fact that the marine industry is affected by poor occupational health and safety measures. This will affect the employees and business operation at large. Most of the employees are getting injured and even losing their lives on duty. This is a serious consequence as it also it increases the business expenditure since the business has to compensate affected individuals. In the maritime industry it

is not only the businesses that are at risk. Noise pollution also has a negative effect on human health, oil pollution in coastal areas and most importantly, some companies are dealing with life threatening materials. A good health and safety strategy needs to be considered by each and every company to enhance their performance and profitability.

It is of utmost important for a business operating in the maritime industry to consider risk assessment and disaster management before starting an organisation as the environment is considered a high risk one. It is always evident that high risks in business lead to high returns (Horne & Wachowicz, 2008). Manaf and Anwar (2017) defined risk assessment as a structured process that identifies hazards and ensures that all risks that affect business operations are reduced.

It is further noted that business owners have to list all risks that their businesses might be exposed to, for example health and safety and environmental issues as they are regarded as the root of major problems that have a negative impact on business performance and existence. The risk assessment also addresses, at an early business stage, the risks, the importance, occurrence, environmental impact and the appropriate measures to mitigate or eliminate all identified risks through the risk assessment system. The risk assessment structure also sets the procedures that need to be taken in case of emergencies to avoid high risks of accidents to improve workers and business safety measures.

However, it is still a challenge since most SME owners are ignorant of the implementation of a proper risk management function due to lack of knowledge Thus, poor risk management leads to poor business performance. The employment and acceptance of generation Y in the small ventures can also help to assist in solving the challenges that are faced by small business enterprises in the South African economy.

2.4 THE CONCEPT OF ENTREPRENEURIAL RISK

The implementation of good entrepreneurial risk management is based on a better understanding of what risk is. Understanding risk types and effects in the business organization is crucial. Risk

is a very important factor in the business realm. It is a challenge that every business venture has to encounter. Risk is mostly recognized as an action that leads to undesirable outcomes and impairment of business objectives. Risks have monetary and operational impact on business (Vonortas & Kim, 2015). In business practices, engaging in the business activities indicate the courage and that the business owners have what it takes to carry risk as a business factor. The nature of entrepreneurial businesses makes them vulnerable to risk factors, considering their formation and development.

Bearing in mind that entrepreneurial businesses are formed as a result of new discoveries, innovation and opportunities, businesses that are formed through these means, occasionally face greater risk challenges. O'Brien, Folta and Johnson (2003) noted that entrepreneurs have long been linked to the risk concept. Risk can therefore be viewed as a fundamental of entrepreneurial function that requires attention. The lack of proper risk management has a negative impact on business operation leading to a high failure rate and poor performances. Busenitz (1999) estimated a failure rate of about 50 to 80% within the first five years of operation. A high failure rate is attributed to a high risk level which is not properly managed. While the high risk opportunities are perceived as the source of greater rewards in the business territory, much needs to be done in order to reduce the negative impacts of risks to ensure success in business entities, thus ensuring a great entrepreneurial risk management foundation.

Kaplan and Mikes (2012) identified market risk, recruiting risks, technological risks and financial risk as the major risks that businesses encounter with financial risk as the most dominant or root cause of other risks. The financial risk is recognized as a major component as denoted by figure 2.2 below.

Figure 2.2: Categories of financial risk



Source: Woods and Dowd (2008)

Bearing in mind figure 2.2 above, it can be concluded that financial risk is the most dominant type of risk faced by businesses.

Financial risk involves the failure to anticipate and manage fluctuations, an obstacle to company growth as a result of funding difficulties. According to Woods and Dowd (2008) financial risks arise as a result of factors that are financial in nature. These factors create the possibility of losses as a result of financial failure. In most businesses factors include high interest rates, rejection of credit allowances from financial institution, uncertainties of return, access to finance, liquidity and exchange rates (Lumpkin & Dess, 1996). Financial risk is the major problem in business operations. Most business accomplishments revolve around the availability of funds. Financial challenges in business leads to other challenges in business such as the recruitment of lesser or unskilled personnel (Vonortas & Kim, 2015). Unskilled labour gives rise to lack of technological know-how, thus giving rise to technological risks.

Market risk refers to market challenges faced by entities due to market changes, interest rates, inaccessibility of markets for products and inflations (Alexander, 2009). Considering the owner's

knowledge of business risks, entrepreneurs attempt to minimize risks in business activities. Busenitz (1999) views entrepreneurs as risk averse as they tend to associate the business situation with the rewards rather than compared to the risk that the business faces. Apart from the risk component other favourable attributes considered by entrepreneurs are strengths versus weaknesses, opportunities versus threats and potential for future developments versus deterioration (Busenitz, 1999).

Previous researchers such as Ben-Ari and Vonortas (2007) as well as Rigby and Ramlogan (2013) have pointed out that by investing in newly emerged ventures, there is less risk compared to establishing a new business. Many SMEs therefore face limited access in terms of funding to pursue certain business goals. SMEs rely on capital contribution much of which is not sufficient to realize their business needs. Due to the difficulties surrounding financial access from financial institutions, the new venture relies on informal forms of funding which include funds from family or friends or business angels or bank loans or government schemes (Bessant &Tidd, 2007). Informal funding is costly due to high interest rates charged and they are very limited and they then take chances.

All the aforementioned risks have negative impacts on business performance that could lead to economic losses that lead to business failures. The best way to minimize the negative impact is to have strong risk management techniques in business. Most entrepreneurs have diverse ways of dealing with risks. Entrepreneurs tend to accept the excessive amount of risk in their ventures by using bias and experience in decision making. Buisenitz (1999) found that they end up failing due to unacknowledged risks related to their business at full capacity. Apart from the entrepreneurial risks, the concept of eco-entrepreneurial risk is a major concern in this study. Eco-entrepreneurship is a crucial drive in the maritime industry.

2.5 ECO-ENTREPRENEURIAL RISKS

The issue of eco-friendliness is the main agenda item in the maritime sector. The government is working hard to ensure that the concept of the green economy is adhered to. This is evident by the introduction of Operation Phakisa. Pearce *at.al.* (2013) defined a green economy as one that

aims to reduce environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. The latter is considered to have the greatest impact on the maritime economy (Lai *et.al*, 2011).

Chemicals, land changes and other entrepreneurial activities in business, at times leads to environmental changes. There is concern around the eco-friendliness of businesses operating in the maritime industry. Eco-entrepreneurship is defined as the environmentally friendly way of doing business (Kainrath, 2009), a way of doing business without causing any harm or changes to the environment and surroundings such as plants, animals and water. Eco-entrepreneurship is regarded as an enterprise that supports the green economy. Chygryn (2017) further held that eco-entrepreneurship's main agenda is to solve environmental challenges and ecological scarcities in ensuring that natural resources are utilised effectively and efficiently. The maritime industry is vulnerable to environmental challenges to a greater extent, even though other factors such as social and economic factor have an impact on business, as shown by Walker (2017).

Global warming, acid rain, reduction of natural resources, waste management, green consumerism air pollution, water pollution as well as noise are the main environmental challenges that are faced in today's economy (Gupta, 1995). To curb the above mentioned environmental challenges businesses should consider following designated policies and procedures in either production or strategic operations as a whole. Gladwin and Nordstrom (1992) noted that it is management's first priority to identify and assess environmental effects for business operation and ensuring that business operations do not have negative influence on the business environment.

SMEs experience pronounced challenges in pursuing environmentally friendly business. These challenges include limited financial access, lack of business skills and unpleasant business environment (Bymolt et al., 2015). In the maritime industry, due to the nature of business it is hard for entrepreneurs to be purely environmental friendly as indicated by Schaper (2002) who noted that the maritime industry is associated with waste, noise pollution and the use of dirty resources. It may be disputed that these problems can be minimized or closely monitored.

Bymolt et al. (2015) expounded on the fact that due to SMEs high risk profiles they have a great burden in securing funds from financial institutions; the funds are given to the large entities with proven track records.

Entrepreneurial risk and eco-friendliness leaves a lot to be desired in the maritime industry due to attributed high levels of uncertainties and risk challenges. The entrepreneurial risk management is of crucial importance in the newly emerged ventures and small enterprises in all industries. Woods and Dowd (2008) stressed the point that, the best way to deal with entrepreneurial risk is to implement a strong risk management strategy at an early stage of the business.

2.6 GENERATIONAL CATEGORIES OF ENTREPRENEURS

The high rate of ignorance of SMEs, with regards to formal or even informal risk management techniques have caused the researcher to introduce the benefits of generational concepts in this research. Generations consist of individuals in different age groups with different knowledge and expectations in business operations.

The world is made up of different generations. These generations have different perceptions, perspectives, histories and lifestyles that influence the way of business intervention. Each generation has its own unique characteristics. Generations therefore do not all fall under the same category. Williams and Page (2011) defined a generation as a group of individuals who were born and lived within the same time period ranges. People to be placed under one generation should fall under certain age ranges. There are six generation groups in the whole world. Researchers like Iorgulescu (2016), Bolser and Gosciej (2015) and Williams and Page (2011) identified these generation groups as follows: pre-depression generation (born and lived before 1930), Depression generation (born and lived during 1930-1945), Baby Boomers (Born and lived during 1946-1964), Generation X (born during 1965-1977), Generation Y (1977-1994) and Generation Z (born after 1994) that marked the focus area of this study. The argument is mainly based on the motivation that Generation Y incorporates more active and aggressive entrepreneurs.

The pre-depression generation witnessed highly traumatic events even though they were still young during the time of depression. The pre-depression generation perceived a lot of changes including technological changes, a time of miracle medicine and the development of rockets. Depression phase people, have high value on “rationing, saving, morals and ethics”. Apart from that, the pre-depression generation also rely on approved ways of doing things; ways that are tried tested and true (Williams & Page, 2011). Since there is therefore less independence in this group, entrepreneurial visions are very poor. Chaney, Touzani and Ben Slimane (2017) identified the Baby Boomers generation as the largest generation comprising hardworking people that are goal oriented. Baby boomers were all active in the use of television for information purposes and weren't exposed to internet access. Reisenwitz and Iyer (2009) have also pointed to the fact that generation X consist of highly educated individuals as compared to the previous generations. In this generation people always try by all means to put a balance on socialising and work. They do not believe in sacrificing time and energy for the sake of improvements.

The latest generation of young and energetic individual that are capable of innovation, entrepreneurship and bringing capital changes is Generation Z (Tweens). Brodeur, Huléni, and Plourde (n.d) have mentioned that many changes were brought during this phase, including working towards a green economy and engaging in environmental friendly businesses activities. Tweens managed to solve a lot of challenges. These include “economic uncertainties, and the loan crisis in 2008”. During year 2008, many entrepreneurs suffered great losses due to inflation and most entrepreneurs closed down. The entrepreneurs who managed to adjust to those difficulties are only those with strong backgrounds and a strong entrepreneurial mind-set. They managed to come in with new business ideas and strategies to resolve all the problems that were not addressed by the previous generations.

Bolser and Gosciej (2015) noted that this generation created a conducive working environment, through technological advancement. Technological advancement marks the basis of an opportunity for high research and innovation. Research and innovation is very important in the business realm as people will gain knowledge and get a better understanding of how to run a successful business.

2.7 GENERATION Y

Generation Y also known as Millennials, is the second youngest generation. Bolser and Gosciej (2015) identified Millennials as the group that is more comfortable in their world comprising corporate scandals and they do not place more intentions on the environment that they are operating in but rather in creating wealth and better standards. Rothman (2014) emphasizes that this generation has passion and is eager to strive for success. It does not believe in failure and does not give up in achieving targeted goals. Most survival SMEs were established and operated during these generations. They believed in thorough research and clearing all obstacles before engaging in a venture (Faour & Heinze, 2013). They do not engage in the less rewarding industry and they do not have enough knowledge and skills. The latter was supported by Rothman (2016) when he stated that "... if at first you do not succeed you shouldn't be there". This means that for every venture started by individuals of this generation, there is a possibility of success.

Generation Y individuals were raised during the time where technology, electronics and wireless system were invented. Faour and Heinze (2013) noted that due to the technological environment, the business ventures operated are strong and have high success rates. Apart from that, the level of thinking of this generation is considered much better compared to the generation that went before (Williams & Page, 2011). It is further stated that the people who lived during Generation Y have a high sense of independence, sovereignty, open mindedness, are goal oriented and have high potential for success. This was as a result of technological exposure and internet. This generation makes work easier, increases efficiency and reduces the high risk of cost through the use of technology. Hoole and Bonnema (2015) also added that technological advancement has been used as the stepping stone for success, through the accessibility of the challenges that were faced by previous generations on social media this generation managed to adapt for the better.

The technological advancement is the great benefit in business management as this can lead to cost reduction in the sense of human capital. Apart from that, there is a reduction of error as compared to the manual recording of information, thus presenting lower risk. The high accessibility of the internet can easily help the entrepreneurs to network as well as introducing more ventures because they can easily see which industry has too many gaps. The

entrepreneurial mind-set gives a high potential of establishment of SMEs. These businesses require less capital, infrastructure and minimum requirements.

2.8 OVERVIEW OF SMEs IN SOUTH AFRICA

South Africa is not the only country that recognises the importance of SMEs. Although the definitions of SMEs differ, their importance is globally acknowledged. In other countries they are recognised as Micro, Small and Medium Enterprises (MSMEs) while in South Africa they are determined as SMMEs. This does not change the importance or benefits to the world's economy. Previous researchers, such as Kushnir *et al.* (2010), provide an overview of new data on MSME. The study, based on 132 economies, shows that globally there are 125 million registered formal MSMEs (SMEs as per the South African concept), including 89 million in emerging markets. Formal SMEs employs more than one third of the total population. This implies that the employment rate within this sector is moderate.

The SMEs dominate almost half of the labour force in the private sector across the globe. They also account for 99% of private enterprises in the European countries and not only that, but a huge contribution has also been noted in the Sub Saharan economies (Makina *et al.*, 2015). SMEs are regarded as the cornerstone in the reduction of unemployment and poverty worldwide (Nkwinka & Munzhedzi, 2016). Donga *et al.* (2016) supported this by stating that SMEs are perceived as the keystone in the South Africa context with the potential to reduce unemployment, asset creation, skills development and attraction of investors.

Attention was given to small business ventures by the South African government in 1996 with the setting of three core objectives that entities should strive to achieve, namely reducing poverty, job creation and adding to the prosperity of the economy (De Jongh *et al.*, 2012). In more recent times, SMEs are reported to be achieving these objectives to a certain extent. Fatoki and Garwe (2010) elaborated that SMEs contribute 56% of employment in the private sector and 36% to national Gross Domestic Product (GDP). Apart from that, SMEs comprises over 60% of the South African economy, through job creation opportunities, poverty alleviation and adding value to the increase of Gross Domestic Product (GDP) (Young, Schaffers & Bruwer, 2012).

Although SMEs have limited achievement in their objectives set by the South African government, there is still a concern on their existence. Allah, August, Bhaza, Chigovanyika, Dyan, Muteweze, Ngcoza, Tshiwula, Qambela, Vooi and Bruwer (2013) mentioned that, the survival period of SMEs ranges between 3 to 5 years. The survival rate of business is fairly low in South Africa with less than 50% of businesses surviving beyond 5 years. The aforementioned statement is also supported by Rwigema and Venter (2004) who estimated that 80% of these entities fail within the first 5 years. Makina, *et al.* (2015) claims that SMEs' growth is not attained, as most of them are operating at break-even point while some are at the lowest level of operation. It has been discovered that SMEs' contribution to employment is very weak due to growth deficiencies and a high failure rate. Considering the above, it can be concluded that most SMEs close down at an early stage. Unfortunately, the level of support to SMEs in South Africa remains fragmented and challenging.

Moreover, Smit and Watkins (2011) postulate that on average most SMEs experience difficulties in becoming going concern entities, which implies that the existence of SMEs in South Africa hangs in the air without balance as evidenced by the facts addressed above. Increasing attention is needed to revive SME success. Owners, managers and the government need to work more coherently in order to raise the level of business sustainability. They have to put their heads together to close all the gaps that hinder small business prosperity such as financial, policy, marketing, absence of proper business plans, environmental challenges but to mention few.

2.9. SOCIO-ECONOMIC IMPORTANCE OF SMES

The unemployment rate in South Africa is progressively increasing, and regarded as very high, with great attention paid to SMEs as part of the solution, with a need for investment for economic revival (Rajaram & Neill, 2009). Lekhanya (2010) further argued that the high unemployment rate is due to the high failure rate of emerging entrepreneurs. Meyer and Landsberg (2015) have indicated that the unemployment rate in South Africa is unacceptably high. This is due to an uneven income distribution in the economy, population growth rate and low productivity. Small and Medium enterprises are regarded as a great life saver in the reduction of the unemployment rate. Makina *et al.* (2015) pointed to the fact that SMEs' primary

objective is the high contribution to economic growth through job creation to the unskilled and semi-skilled individuals that would otherwise remain unemployed. Apart from economic growth, SMEs are regarded as the key drivers of employment and innovation.

SMEs are of great importance in South Africa as they are key role players in poverty alleviation through job creation, and adding to economic prosperity by increasing the Gross Domestic Product (Berry *et al.*, 2002). The latter has also been acknowledged by De Jongh *et al.* (2012). The proof of job creation was evident by an increase in Gross Domestic Product. The Bureau for Economic Research (2016) noted the prominence of small enterprises by recognising them as the key drivers of economic growth and job creation. SMEs, especially those operating in the informal sector helps to provide a living to a great number of people. The importance of SMEs has also been noted by Abor and Quartey (2010). It is evident that SMEs provide benefits as they are regarded as the corner stone by policy makers to speed up economic growth in developing countries. The high failure rate leaves much to be desired. High failure rate can be mitigated by government intervention through financial support, skills development and any other form of aid that could assist SMEs.

Mahembe (2011) added that SMEs are recognised as key drivers through which the growth of a developing country can be achieved. The growth is recognised by creating more employment opportunities, increase in production, increasing exports and introducing innovation and entrepreneurship skills.

SMEs are beneficial to the economy compared to large scale enterprises because of their flexibility. They easily adapt to diverse market conditions and are able to withstand different economic conditions (Kayanula & Quartey, 2000). The SMEs in the Maritime industry in South Africa play an important role in economic development as do any all small businesses in other industries. Their main aims are poverty alleviation, reducing unemployment and inequality. The ocean economy programme framework will help the nation at large to address unemployment, poverty and inequalities in the South African economy (Khanyile, 2016).

In 2014, the South African government acknowledged the importance of Small enterprises. This was evident by the development of a new Ministry of Small Business Development (Bureau for Economic Research, 2016). The ministry was developed to impose policies, strategies and programmes to create an enabling environment for small enterprises. This was also supported by Lekhanya (2010) who stated that the South African government had introduced two major strategies to advance its economic aims and objectives, and the promotion of SMEs in the Reconstruction and Development Programme (RDP).

2.10 GOVERNMENT INTERVENTIONS IN SMES DEVELOPMENT

The South African government values the existence of SMEs in the economy. Whether formal or informal, their existence is of utmost importance. The existence of something can only be realised when there is a change in certain situation, such as poverty alleviation, reduction of unemployment rate and high economic growth. The South African government's greatest challenge was to alleviate high unemployment rates, poverty and to grow the economy of the country. In this regard the government relies extensively on SMEs and entrepreneurs to bring about needed transformation in South Africa. Rajaram and Neill (2009) elaborated that the South African government recognise SMEs as the main driver in relieving the ever growing unemployment rate. This is a great relief to the economy. The Bureau for Economic Research, (2016) and the DTI, (2008) noted that in 1995 the South African government had developed and documented the SME policies in the white paper. The developed policy focuses on the following strategies: increased support (financially and non-financial), creating demand for products and services rendered by SMEs, and reducing regulatory constraints.

Simpson and Docherty (2004) noted that the South African government goes an extra mile in supporting entrepreneurs with financial support, advice, and market access to mention but a few measures. It is a great challenge for government to convince reluctant SME owner and managers to persuade them to take external advice (Hankison *et al.*, 1997). Solomon (2004) pointed to the fact that the former government recognized small business entities as a main source of job creation opportunity and equity generation in South African society. Mahembe (2011) noted that the entrepreneurs are supported through the use of the following organisations developed only to

help SMEs in various aspects: Khula Enterprise LTD, the National Youth Development Agency (NYDA) and other government owned institutions such as the Small Enterprise Development Agency (SEDA). The aforementioned organisation was instituted to equip the SMEs with advice to get funds or loans, market access, training and mentoring, producing knowledge as well as providing the necessary skills that a business needs to survive.

Furthermore, according to the DTI (2008) the government established a number of institutions in order to support the existence of SMEs. These institutions will help small enterprises with skills development, financial support and access to the markets. These include SEDA, Khula Enterprise Finance for small and medium enterprise finance and, a new South African Microfinance Apex Fund (SAMAF) on the finance side.

In support of the above Fury (2010) also noted that in support of small enterprises the South African government has developed government initiatives to provide support such as easy access to finance through macro-loans. This is provided by use of development agencies such as SEDA, COMSEC (Community Self-Employment Centre), and the NYDA. Non-profit organisations such as Shanduka Black Umbrellas that provide a good working environment, support services and enterprise development to the emerging black owned enterprises are also being used to provide support to SME's. Fury (2010) further stated that SMEs' success is not hindered by lack of finance; however, the filling of gaps in providing non-financial services such as education and technical assistance to the entrepreneurs is of utmost importance.

October (2015) and Khanyile (2016) noted that in July 2014 an organization called Operation Phakisa was implemented by the Presidency, through the use of National Development South Africa. This organization was introduced execute a user friendly system that would help in the achievement of development goals and project management in the marine industry. With the main aim of economic enhancement, job creation, reduction of inequality, poverty alleviation and enhancement of future economic development. Operation Phakisa focuses on four key areas: (i) Oil and gas exploration, (ii) marine transport and manufacturing, (iii) Aquaculture; and (iv) Maritime protection and governance.

The Programme was introduced to unlock growth and delivery in the oceans (Blue economy). The Indian Ocean Rim Association (2016) noted that the Blue Ocean economy improves environmental sustainability and encourages innovations. The Blue Ocean Economy was introduced to enhance coastal and national economies; generating new employment skills; encouraging entrepreneurial activities across the globe; utilising the vast, untapped potential of the Indian Ocean and contributing to sustainable development and climate change mitigation. Through satisfying all SME needs, success, sustainability and performance of these entrepreneurial activities will be achieved.

2.11 THE MARITIME INDUSTRY SECTOR

The maritime industry in South Africa comprises what is commonly known as the oceans economy, also more commonly referred to as Operation Phakisa. It incorporates all forms of different business activities both large and small enterprises, in operation along the coastline of South Africa. The oceans economy is regarded as one of the most important segments of the economy of the country going into the future, particularly because of its contribution to socio-economic growth, development and to the overall GDP. Onwuegbuchunam and Akujuobi (2013) noted that maritime business activities include ship operation, ship building, ship financing, protection and indemnity, seafarer and port operation. These business will also require services from small business enterprises. In addition, Coller, Maasdorp and Mavundla (2007) recognise the maritime industry as the sector that includes all port activities, shipping, boating, cargo profiles, cargo movements, storage, transport, bunkering, communication support, pilotage, customs clearing, inspection services, marine insurance and logistics.

Khanyile (2016) noted that the maritime industry involves boat-building, oil and gas, ship building and ship repairs. All these are sources of economic development. The maritime industry has shown huge growth over the past decades, as they contribute over 80% of global trade in the country's economy (Khanyile, 2016). The increase in growth shows that the industry is environmentally friendly and makes it attractive to the businesses that operate in this sector. The main aim of The Department of Environmental Affairs (2013) is to maintain wealthy and equal living standards that suit the natural resources. To support the strategy the following goals were

implemented: (i) Environmental assets conservation, valuation, sustainability and continual enhancement (ii) Improvement of socio-economic beneficiation and creation of employment for the future and present generation and (iii) departmental capability to deliver the services efficiently and effectively. Khanyile (2016) also noted that the maritime industry is in good shape and in existence because of the contribution of activities such as offshore oil and gas exploration, aquaculture, marine protection services and ocean governance.

The maritime industry is made up of a combination of large and small industries. This study seeks to determine the entrepreneurial risk mitigation strategies for the SMEs operating within the maritime industry sector in Cape Town. This study will also assess the Eco-friendliness of SMEs in the maritime industry. SMEs are essential in industrial development and in various business sectors as they contribute to employment, poverty alleviation and economic growth through the contribution to Gross Domestic Product (Prinsloo *et al.*, 2015). The South African government values the existence and importance of SMEs as a means to stimulate economic development and the creation of jobs. In relation to the maritime industry, the South African government introduced operation Phakisa (October, 2015).

Van Wyk (2015) pointed to the fact that, Operation Phakisa is the main driver of the Blue Economy in the maritime industry. The Blue Economy is regarded as the cornerstone of “social inclusion, environmental sustainability, strengthening of maritime ecosystems, transparent governance as well as economic growth and development” (Spamer, 2015). The operation was implemented by the South African government to ensure the clean, safe and environmentally friendly operation in the marine economy (October, 2015). The operation covers all the business industries in the marine industry, including oil and gas exploration, marine transport and manufacturing, aquaculture and maritime protection and governance (Spamer, 2015). The latter shows that all business areas are covered and to enforce environmental friendliness in the marine economy.

Environmental matters are a major concern in the development and performance of many business ventures. Szerszynski, Lash and Wynne (1998) emphasise that the lack of knowledge of

nature has a great impact on ecological matters in the business arena. Sink (2016) added that businesses operating in the Blue Economy experience challenges such as climate change, ocean acidification, plastic pollution and noise pollution. The implementation of the Phakisa Marine Protection Areas Network was also not good enough as they do not completely solve the challenges that affect business operations.

2.12 MARITIME SMES' RISK EXPOSURES

SMEs in general face great challenges in their day to day operations. It is hard for ventures to adjust in a competitive environment full of large business entities that offer the best services. Most SMEs experience challenges such as competition, lack of resources, lack of financial support, insufficient research and development, tedious labour laws, unskilled workers, poor infrastructure, technological challenges as well as environmental and economic changes. These changes affect most business operations within the maritime industry (Bureau for Economic Research, 2016).

SMEs do not fulfil their rationale for existence if they fail at their start-up phase. The challenges faced by maritime SMEs are similar to those faced by all sector SMES. Gordon *et al.* (2014) estimated that 75% of SMEs fail within their first 3 years of existence, while Bruwer (2010) estimated a failure rate of between 70% and 80%. Fatoki and Odeyemi (2010) estimated that 75% of SMEs fail at the start-up phase due to a lack of financial access. Most of their loan applications are rejected and they end up relying on internally generated funds that are insufficient to sustain their business needs. The failure rates of SMEs are attributed to internal and external drivers such as poor managerial skills, limited access to funds, and the lack of a risk assessment background of owner/ managers. Abor and Quartey (2010) concur with the latter when stating that in spite of their potential role of accelerating growth and the creation of jobs in developing countries, many obstacles hinder the realisation of SMEs' full potential. These obstacles are identified as lack of finance, poor managerial skills, lack of equipment, poor technology, lack of support services and a relatively higher unit cost that can hamper SMEs' efforts to improve their management.

SMEs owner/ managers are frequently unable to identify all the factors impacting their enterprise activities (Smit & Watkins, 2012). SMEs' failure rate is caused by risks that are not properly managed. Lack of knowledge and awareness is the root of poor identification and detection of risk at an early stage. This will have a poor impact on SMEs' performance and well-being. Baleseng (2015) stated that SMEs performance are negatively affected due to the lack of information and financial support.

Young, Schaffers and Bruwer (2012) have indicated that these reasons relate to factors which can be divided into two categories, namely that of internal factors (factors which can be controlled to a large extent and which occurs within the business) and external factors (factors which can only be managed to some extent; taking place outside the business). These internal and external factors cause damage to SMEs. According to Mudzviti and Mawanza (2011), because of these internal and external factors, some SMEs are forced to change their area of operation. Gordon *et al.* (2014) added that internal and external factors influence the demand for goods and services and hinder the growth of new SMEs.

2.12.1 Internal factors influencing risk exposures of maritime SMEs

Bloch and Bhattacharya (2016) identify internal factors as anything that influences management decision making towards solving issues and growth. Lekhanya (2010) noted that most SMEs are affected by factors such as limited access to appropriate technologies, access to better business management, poor development skills of employees and a lack of awareness of resource availabilities. Kinyua (2014) identified management competency, poor financial background, poor business training management and lack of technological skills as the factors that affect SMEs at large. Managerial skills are essential in all business ventures. SMEs are vulnerable to risk challenges, therefore strong management skills are essential in identifying these challenges at an early stage.

Many SMEs are failing due to insufficient start-up funds. This was supported by the Bureau for Economic Research (2016) which stated that small business performance is poor due to limited financial access, credit limitations, poor infrastructure, poor research and development,

inexperienced personnel and limited access to markets. The DTI (2008) had already said that due to a lack of funds, most entrepreneurial businesses employ unskilled labour. Skills shortages and insufficient entrepreneurship capacity are major impediments to employment growth.

The Bureau for Economic Research (2016) acknowledged the lack of skills in SMEs, further noting that skills shortages are mainly in the accounting and sales departments. It can be concluded that a skills shortage among employees, as well as risks that are not properly managed, play an important role in poor business performance. This is what leads to the high failure rate. The lack of skills is a challenge that affects all participants in the entrepreneurial sector, from the upper to the lower management in SMEs. The lack of knowledge and skills of owner/ managers contribute to the high failure rate in the small business sector.

According to Trandafilovic and Cvetkovic (2014) a lack of capital, experience in running the business and lack of market access are the greatest challenges affecting entrepreneurs at the start-up phase. Good accounting in terms of financial reporting is crucial as accounting information is important for decision making purposes. Good ideas and plans on its own could not build a business; financial resources are also needed. Furthermore, according to Makina *et al.* (2015), the lack of financial access has great impact on business growth and prosperity. It has been evident that SMEs have a limited ability to access finance from the formal credit market and they are therefore forced to relying on informal finance that is insufficient for their continued survival and existence in a competitive environment.

Compared to large enterprises that have access to formal financing, SMEs are failing to grow due to their reliance on informal finance. According to Makina *et al.* (2015) the main cause for the growth deficit is the informal financing that charges high interest rates that drains all hard earned profits and also the insufficiency of financing to fund both operational activities and growth enhancement. Small business, however, is left with no choice but to invest all funding in operational activities. There is a positive correlation between formal access and business growth and performances.

According to Trandafilovic and Cvetkovic (2014) technological advancement, too, can assist in business performance and accuracy. In the current era most business activities are influenced by information and technology; furthermore, technological advancement reduces time spent on decision making process. Similarly, it impacts on the changing nature and need of human capital through stressing new skills and knowledge necessary to perform tasks. For example, traditional accounting was done manually and many errors were made. The businesses should also try to make use of computerized software such as pastel, and/ or integrator to increase efficiency.

In general, SMEs are affected by employing unskilled labour that is insufficiently competent of producing efficient results. Besides that, an unskilled labour force is technologically disadvantaged and unable to keep and process financial reports. Apart from the good policies and procedures in building a healthy organization, every business should employ capable and efficient staff to manage the day to day operational activity.

2.12.2. External Factors Influencing Business Performance

Morrison and Teixeira (2004) identify external factors as the factors that management does not have control over. These include political, social, economic, technological, regulatory, competition and market segmentation factors.

According to Allah *et al.* (2013) the failure rate of SMEs is attributable to social factors (crime, infrastructure) economic factors (policies, procedures, inflation rates, interest rates) and managerial factors (planning, organising, leading, controlling). Furthermore, according to Grundling and Kaseke (2010), the well-being of SMEs is adversely affected by poor management skills, lack of business skills, access to markets, production capacity, lack of risk management and rules and regulations. From the above it can be concluded that South African SMEs performance and sustainability are negatively affected due to the realisation of risks that is not well managed. SMEs suffer due to challenges in their immediate environment. They do not follow formal and rigid strategic planning in running their business. This is due to the lack of resources. Challenges also include time constraints and no access to competitive strategies for either market access or in securing financing (Thompson, Bounds & Goldman, 2012). Resources

are available in a limited supply and SMEs are trying their best to meet their short term goals with limited resources available.

The gender, age, educational background and ethnic group are all attributes that contribute to small business performance and existence. Makina *et al.* (2015) found that small enterprises owned by young entrepreneurs show a high growth rate and performance. Younger entrepreneurs are eager to learn and advance to new business experiences compared to older business owners. Also, younger entrepreneurs are more motivated as they want to test their abilities to their full potential. Gender also has an impact on performance as the female owned enterprises experienced low and inferior growth compared to the male owned businesses. The female owned businesses undermine themselves as they concentrate on low return activities and exhibit low growth rates.

Educational background has also been found to play an important role in business performance as it is evident that most enterprises owned by educated people are the ones that survive in the market. Education enhances the owner/ managers efforts to do thorough research in the area in which they want to establish their business. This always been done to strengthen the base of the business and to assure success. Thompson, Bounds and Goldman (2012) agree that the educational background of the owner/ managers of SMEs play an important role in the enterprises' performance and existence. It is further noted that small businesses depend on the skills of their founder most of whom do not possess adequate skills and knowledge to run and manage business efficiently and effectively.

Government intervention, notwithstanding, SME performance is not satisfactory. Most SMEs are failing at an early stage. Most of the ventures don't last long in the market as they are failing within the first five year of existence. The failure rate ranges from 50% to 80% (Busenitz, 1999). Emerged entrepreneurial ventures suffer a high failure rate at the start-up stage. The failure rate is attributed to statistical and psychological factors (Artinger & Powell, 2016). Artinger and Powel (2016) further showed that there is a high failure rate of small enterprises within the first 5

years of existence. The high failure rate is attributed by market risk, lack of capital, inexperienced management who engaged in risky behaviour.

The challenges faced by SMEs can also be denoted by risks. Risks can be noted as the likelihood of financial and economic losses or gains due to unforeseen events during the business operation. Risk is something that can be predictable using past business experience (Ekwere, 2016). Ching and Colombo (2014) recognized risks as the opportunity basis for value establishment and no matter how hard businesses may try, it is not possible to escape the challenges completely. Risk definition varies on the area of focus as well as purpose. Šotić and Rajić (2015) defined risk as the probability and encumbrance of unwanted circumstances as well as expected damages. It is a combination of likelihood, significance, scenario causality and affected population.

There are three types of risks: financial, business and compliance risk. Successful businesses always have controls in places to mitigate, eliminate, and prevent risks depending on the type of risks associated with the business namely inherent, control and detective risks. Risk can only be minimized, assessed and not avoided. Due to the nature, high volume and avoidance of risk, most companies demonstrate the necessity of structured risk management due to financial scandals and misplacements (Ching & Colombo, 2014).

SMEs are easily affected by external challenges because they do not have sufficient resources to put in place proactive measures (Banham, 2010). He further stated that, SMEs face limited resources, finances and employees. They therefore focus these resources on achieving short term goals. The external factors will be dealt with as and when it arises. It is crucial for the business to focus on building a strong base as it will lead to high rewards. The awareness and knowledge of what the business is facing, will help management to implement an effective risk management strategy.

2.13 BUSINESS PERFORMANCE OF SMALL AND MEDIUM MARITIME ENTERPRISES

In both developed and developing countries, the SME sector is believed to be a driving force for economic growth and as a way of easing high unemployment rate. Researchers have identified technological challenges, lack of structure, operational size and management skills as having an impact on business performance (Dubihlela & Omoruyi, 2014). Furthermore, Dubihlela and Rundora (2014) also noted that a lack of knowledge, a lack of finance and the existence of tight laws and regulation plays an important role in business performance.

Venkatraman and Ramanujam (1996) have argued that determinacy of performance measures varies within the organisation's main goals and objectives, strategy, levels and the operating systems. Furthermore, according to Dubihlela (2013), market orientation strategies have a great impact on business performances. Performance is defined by Salaheldin (2008) as the degree to which an operation achieves the main objectives in order to fulfil the purpose of existence. It is further stated that performance measurement is regarded as a serious tool that is used by management to determine areas that need improvements in the business environment. Good management skills will also help entrepreneurs to boost finances through investments and attaining entrepreneurial skills can help them to exploit new business opportunities. Eckerson (2010) defined business performance as one that focuses on executing business strategies by making use of plans, budgets and reports to measure and monitor progress towards achieving business objectives at all levels. The business performance revolves around four main dimensions. Venkatraman and Ramanujam (1996) identify the four main dimensions of business performance: business strategy, financial performance, operational performance and marketing.

The four dimension works hand in hand in achieving business success. The business strategy serves as the heart of competitive advantage. It is the foundation of business decision making, a starting point in every successful business (Morgan & Strong, 2003). The operation is considered as a realm of execution, where the business strategies are put into action to obtain the final product. The product is then marketed in order to get customers who are willing and able to buy

in order to generate profits (financial performance) for the business (Vernkatraman & Ramanujam, 1996).

The success or failure of any business depends largely on reliable assessments of business performance. Rauch *et al.* (2009) noted that assessments of business performance serves as a guideline to mainly entrepreneurial ventures as this can identify the need for improvements and resources to be committed as well as to create a competitive advantage and to maintain the firm's vision. This researcher argues that the business performance strategy is crucial in the marine industry as they would enable the achievement of goals as well as profitability maintenance. Furthermore, business performance is a tool that can be used to evaluate individual employees and determine incentive pay-outs (performance management) (Eckerson, 2010).

Business performance is very important in every organization, since business performance is the bottom line of the business. Business performance measures the result of any activity in an organization; it can help the owner/ managers to determine the success or failure of their business (Manoledakis, 2013). According to Neely (1995) performance measures can be recognized by the business efficiency and effectiveness. In the maritime industry, it can relate to the efficiency and effectiveness of the resource employed as well as meeting the customers' needs and satisfactions. Satisfying customers' needs can increase the business's competitive advantage and profitability.

Banham (2010) noted that an SME's performance is affected by the internal factors, external factors and environmental changes at large. These factors need to be closely monitored in order to enhance business performance. Much attention, in addition to the development of models on the business environment, has been focused on large entities. Less attention, therefore, has been focussed on SMEs (Banham, 2010). This gives rise to high environmental risks facing maritime SMEs, hence the poor performance.

Measurement of business performance is, therefore, of utmost importance in the maritime SME environment as it will help the entrepreneurs to identify areas that need improvements and to

implement new strategies when necessary. McAdam and Bailie (2002) added that business performance measurement is beneficial as the business environment is not static; there many changes happen. Business performance measurement is a tool to identify the changes in the business environment.

This is especially so in the marine industry. The success of the business can only be attributed by regular assessments and the business owners' awareness of the changes that are taking place in the industry. There are many factors that affect business performance. For the purposes of this research study, the following variables have been identified and dealt with: lack of resources, lack of knowledge, lack of skills, poor controls, poor risk management, and poor control environment. This is supported by Dubihlela and Rundora (2014) who agree that SMEs' development is highly and negatively affected by lack of knowledge, lack of access to appropriate technology, financial constraints and high demands of available laws and regulations.

Healthy businesses are established with sufficient resources, a strong management background and strong financial background. Kinyua (2014) claimed that the poor performance of SMEs is mostly attributed to lack of finance and poor management skills. It can thus be concluded that management skills and professional development are essential in enhancing business well-being.

2.14. CONCLUSION

The literature review explained the importance of risk management in SMEs and their contribution to the world economy, rendering them a vital part of any nation's economy; with South Africa being no exception. SMEs success however, is not something that one can really count on as they face many challenges. These challenges are lack of financial support, poor management skills, lack of awareness, poor communication, poor control structures and poor technological advancement amongst others, which give rise to risks leading to poor performance within the SMEs sector.

The literature review of SMEs owners and managers should establish, develop, implement, evaluate, maintain and continually improve the risk management system, in accordance with international standards. SMEs owners and managers in the maritime industry should determine the boundaries and applicability of the system. The literature review highlighted that risk management can be used as a protective measure that assists business in averting losses. Additionally, the literature review identified ERM as a key factor in assuring business objectives fulfilment. Apart from the objectives being achieved, it also enhances the reduction of unacceptable performance variables aligning and integration of different views of risk management, thus to establish the link between risk management and a well-organized capital allocation, risk transfer decision, hence providing assurance to stakeholders to enhance good control environment.

Furthermore from literature, SMEs experience pronounced challenges in pursuing environmentally friendly business. These challenges include limited financial access, lack of business skills and unpleasant business environment. In the maritime industry, due to the nature of business it is hard for entrepreneurs to be purely environmental friendly. Finally, the literature review has explained that entrepreneurial risk management system provides the means to ensure consistent operating conditions that support business success in SMEs operating in the maritime industry. In terms of challenges to an effective entrepreneurial risk management processes in the maritime industry in Cape Town, there is typically a lack of necessary knowledge and skills within the SMEs. This research focused on risk entrepreneurial risk management of SMEs in the maritime industry in Cape Town. The next chapter describes the research design and methodology utilized in this study to pursue its objectives. The chapter includes discussion of the data collection methods as well as the statistics used to analyse the data.

CHAPTER 3

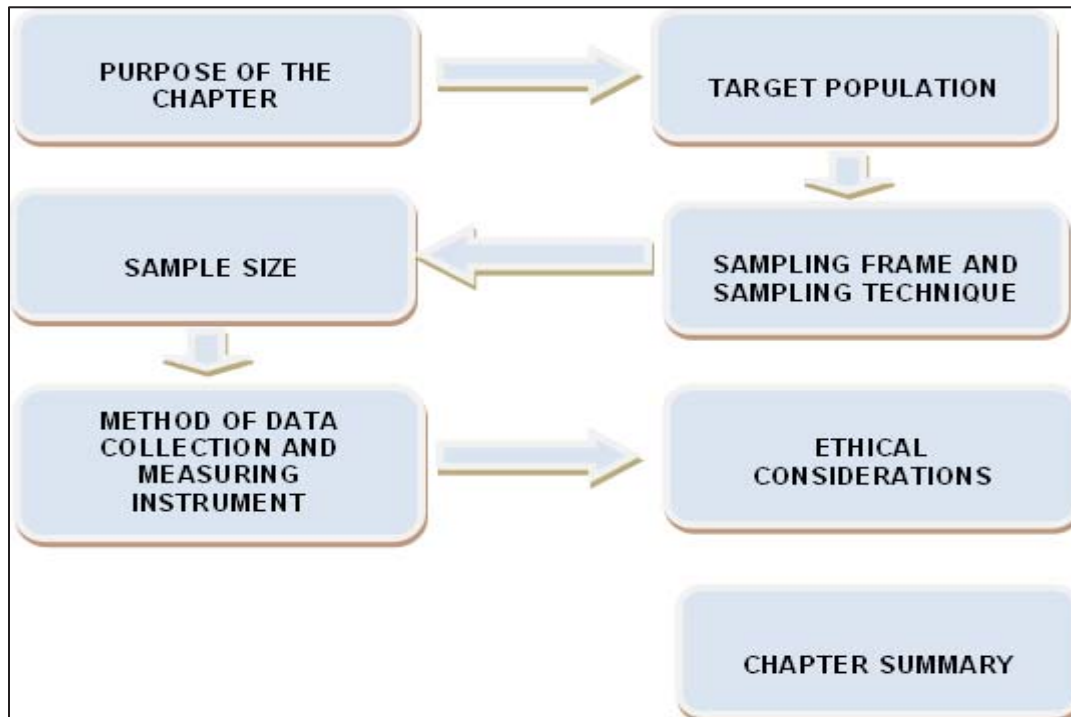
RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter presented the literature that provides the foundation of this research study. The purpose of this chapter is to describe how the research was conducted and the tools that were used for the research Study. The research design and methodology followed in this study are discussed under the following headings: Research Approach and Design, Methodology, Data Collection, Reliability and Validity of Data, Target Population, Pretesting of Data Collection Instruments, Sampling Methods, Ethics and Chapter Summary

The schematic flow of the sections in this chapter 3 is illustrated in Figure 3.1 below.

Figure 3.1: Layout of research methodology



Source: *Researcher's computations, 2018*

3.2. RESEARCH APPROACH

This study uses a mixed approach method. A mixed research approach consists of both quantitative and qualitative designs. Bryman and Bell (2011) define quantitative research as a research model that elucidates the quantification of how data is collected and analysed and deriving the link between theory and research as deductive. In addition, Cooper and Emory (1995) opine that quantitative research includes the use of a large sample that is representative of the population, broadening the range of possible data for analysis. To complete the mixed method criteria, the qualitative method is also involved. Marczyk et al. (2010) describe qualitative research as a process used in those studies that do not try to quantify their results through statistical summary analysis. In pursuance of this technique researchers use interviews and physical observations.

Academic research is viewed as the cornerstone of technical progress with the main purpose of answering questions and acquiring new knowledge (Marczyk *et al.*, 2010). Nyambandi (2016) is of the opinion that, the world of knowledge is divided into three spheres namely the world of science, the daily world and the world beyond science. The daily world consists of humans, which, in this research study, relates to owner or managers and employees of SMEs, organisations (SMEs), and problems such as risk management challenges that are faced by many SMEs in the maritime industry. In this study the information was gathered through self-administered questionnaires (as a quantitative technique) and interview questions (as a qualitative technique).

The writer administered the questionnaires to the participants of the research study in order to gather the relevant data from the respondents. Questionnaires were distributed to the owners, managers and employees in SMEs within the maritime industry and interview questions were directed to the owner/ manager of SMEs in the maritime sector in order to gain rich data and to have a wide coverage.

The questionnaire was designed with five sections. Section A consists of questions regarding demographic information of the participants such as age, gender and questions on the general

knowledge of SMEs as adapted by Mei *et al.* (2012), and Morel and Kwakye (2012). Section B covered eco-friendliness and environmental concerns. Section C consisted of questions assessing performance indicators. Section D comprised questions related to risk management and controls. Section E comprised questions on ecological sensitive and environmental issues. The sections were structured as four point Likert scale as adapted by Souza et 2006, with 1 denoting strongly disagree and 4 denoting strongly agree or never and frequently or vice-versa. A questionnaire template is included as appendix D.

3.3 RESEARCH SETTING

The study was carried out on SMEs in the maritime industry sector in Cape Town. The study did not discriminate on whether businesses were registered or not. All small and medium enterprises in the maritime sector were included.

3.4 POPULATION AND SAMPLING PROCEDURES

A population also known as the ‘universe’ can be defined as all the individuals, items or units relevant to the study. It comprises individuals, groups, organizations, documents, campaigns, and so on (Quinlan, 2011). In this study, the target population consists of the owner, managers and employees of SMEs operating in the maritime industry in Cape Town. Target population was defined by McDaniel and Gates (1998) as a group presentation from which data is drawn. For the purposes of this study, owners or managers of SMEs operating in the maritime industry in Cape Town as well as their employees were the target population. A sample frame is a representation of the elements of the target population (Malhotra 2010). Coldwell and Herbst (2004) define it as a list that consists of the directions of identifying a target population. The sampling frame was the database of members randomly selected from different organisations. Only respondents who are the members and permanently employed within SMEs in the maritime sector formed part of the study.

3.4.1 Sampling Criteria

The sampling criteria were as follows:

- SMEs operating in the maritime industry;
- Turnover not exceeding R4,5 million;
- Business owners, entrepreneurs and managers; and
- Employing at least 1 employee and not exceeding 20.

3.4.2 Sampling Methods

The use of convenience sampling ensures equal chances of selection for each population element. Etikan, Musa and Alkassim (2016) defined convenient sampling as a non-random sampling method, which includes members of the target population that are willing to participate in a study. Convenience sampling is considered to be the best sampling method, since it considers the accessibility, availability of a time frame, willingness to participate and geographical vicinity.

A list of SMEs which was obtained from the maritime listed companies (Sadid Directory) as the best measure in selection of the sample size. The size factor was used to determine appropriate respondents and the main focus was on SMEs as defined by the Small Business Act. This eliminated large entities operating in the maritime industry. Questionnaires were distributed to 70 companies so as to gather, relevant data for the research.

While 59 companies completed the questionnaires, two questionnaires were completed from one company to make it 60 a total of 60 respondents. This was due to the following constraints:

- The other entities did not want to disclose information pertaining to financial performance and risk management due to confidentiality.
- The other entities decided to give the general employees the opportunity of completing the surveys while they did not have sufficient knowledge on entrepreneurial risk management and business performance, which rendered the surveys irrelevant. This was determined by the respondents on unanswered questions.
- One entity decided to withdraw due to unknown reasons.

3.4.3 Sample Size

A list of businesses was obtained from the business directory as a criterion to select maritime SMEs operating in Cape Town. Thereafter, SMEs that operate in Cape Town but outside the marine industry was eliminated so as to remain with only suitable candidates left. The study considered the size factor criteria in determining suitable business providers based on SMEs operating in the maritime industry. This eliminated large commercial businesses that operate in the marine industry. In the end the researcher decided to focus on 59 SMEs, which were relevant to the study and the research questions.

A sample size of 59 was determined, based on the above mentioned parameters. The data was collected from conveniently selected companies in the maritime industry: fisheries, conservation, fast foods, corrosion controls, and aquariums but to mention few. The data was gleaned from 60 respondents. 51 for questionnaires and 9 for interview question to make a total of 60.

3.5 DATA COLLECTION

3.5.1 Data Collection Instruments

Questionnaires and interview questions were used as data collection instruments. Data collection instruments are a series of questions that are designed to compile evidence of a problem under study (Zaza *et al.*, 2000). The questionnaires and interview questions can be used obtain the same data, however they differ in structure and layout as interviews tend to provide high depth of responses to respondents with unlimited responses (Lewis, 2015).

The data was collected in order to evaluate the status of risk management, knowledge and the challenges to the implementation of structured risk management techniques. The questionnaires were self-administered by the respondents and collected at a later date in order to ensure a high response rate. Some research questions on the survey were too sensitive and some respondents were not comfortable in participating at all. The interview questions were structured in such a way that they could be answered and the response recorded on the spot. Apart from that, they were less time consuming as most of them were Likert scale, close ended questions with no room

for bias as they were presented in a consistent manner. The interview questions also shared the same treatment.

Regarding the questionnaires, the majority of the questions were close ended. These were used because they are easier to administer and analyse as well as being less time consuming. The questionnaires and interview question were developed and responses were also in English as this is considered the *lingua franca*. The respondents were assured of anonymity; neither their names nor company would be mentioned in the discussion. The surveys were designed in such a way that information gathered assisted the research results by determining whether the participants were operating in a friendly environment and are following the appropriate risk management techniques (see appendix C and D). The surveys were completed by owner, managers or top management as these were the individuals who have knowledge and information of how their business operates.

3.5.2 Data Collection Procedures

Questionnaires were physically distributed, with some *via* e-mail and the interviews were conducted. The data was collected over a six month period. The researcher found the respondents at the sites busy with work and others at the offices. Some businesses that operate in the maritime industry have offices outside the marine environment. In that case an appointment had to be made and the respondents made available to the researcher their office addresses for easier contact.

3.6 RELIABILITY

Streubert & Carpenter (1995) indicate that validity and reliability are the measuring tools that assures an excellent survey instrument. Reliability is used to measure accuracy and consistency, for instance, if instruments are used repeatedly, they should yield the same results. Validity focusses on the data's accuracy. To meet the validity and reliability criteria, SPSS was used to determine reliability of the various constructs used in the study. All constructs used exceeded **0,70** which proves to be good indicators of reliability. The questionnaires were designed in a

manner that they covered all the risk management aspects affecting SMEs in the maritime industry.

3.7 VALIDITY

The validity of an instrument is the degree to which an instrument measures what it is intended to measure (Polit & Hungler, 1993). Content validity refers to the extent to which an instrument represents the factors under study. To achieve content validity in their context, questionnaires included a variety of questions on the knowledge of patients and their family members about *diabetes mellitus* and its treatment regimen (Polit & Hungler, 1993).

Furthermore, questions were based on information gathered during the compilation of their literature review in order to ensure that they were representative of what patients should know about *diabetes mellitus* and its treatment. Content validity was further ensured by consistency in administering the questionnaires. All questionnaires were physically distributed to subjects by the researcher. The questions were formulated in a simple language for clarity and ease of understanding. Clear instructions were given to the subjects.

All the subjects completed the questionnaires in the presence of the researcher. This was done to prevent subjects from giving questionnaires to other people to complete on their behalf. For validation, the questionnaires were submitted to a researcher and statistician at UNISA. As a result more questions were added to ensure higher representativeness. Rephrasing of some questions was done to clarify the questions and more appropriate alternative response choices were added to the closed-ended questions to provide for meaningful data analysis (Burns & Grove, 1993).

External validity in this this research study was ensured. Burns & Grove (1993) refer to external validity as the extent to which study findings can be generalised beyond the sample used. All the persons approached to participate in the study completed the questionnaires. No single person

who was approached refused to participate. Generalising the findings to all members of the population is therefore justified.

3.8 ETHICAL CONSIDERATIONS

By incorporating the guidelines of Cooper & Emory (1995) and Cooper & Schindler (2006), the following ethical considerations were upheld in this study:

- *Informing participants the benefit of the research:* SMEs managers of the Cape Town maritime industry were informed of the purpose and expected benefits of the research study;
- *Maintaining confidentiality and anonymity of participants:* Managers were informed that no survey data that may identify the specific business entity would be made available and completed questionnaires would remain confidential at all times;
- *Informed consent:* Managers were informed of the nature of the questionnaire. They were made aware that their participation in the research is of a voluntary nature and that they are under no obligation to answer any questions with which they are uncomfortable. Participants may withdraw from the study at any point they so wish; and
- *Debriefing:* Managers were offered the option to receive follow-up information about the research results. If this choice was selected by the participants, contact details were provided by the research participant.

3.9 DATA PREPARATION AND ANALYSIS

3.9.1 Data Preparation

The process of data preparation involves checking data for accuracy before entering into the computer to transform it (Cooper & Schindler, 2006). Ultimately, there are two phases of data preparation used in this study namely: data editing and coding. These phases were employed to ensure that the data collected was complete and ready for analysing (Kumar, Aaker & Day, 2002).

3.9.2 Data Cleaning

Data cleaning is the most imperative part of the data preparation process (McDaniel & Gates 2008). The process of transformation from data to intelligence will be made more risky and more difficult if there are still errors in the data (Zikmund & Babin 2007). Data cleaning involved error checking and treatment of missing responses, substitution of neutral values, substitution of imputed response, and a case-wise and pair-wise deletion (Malhotra 2010).

3.10 DATA ANALYSIS

Quantitative data was analysed using Statistical Package for Social Sciences (SPSS) version 25.0 Windows. For qualitative data the responds from the participants were captured as is and then later discussed. The incomplete questions were dummy coded in the database. Some participants were not comfortable in answering questions related to their financial wellbeing as they considered this information as being too sensitive and confidential. In addition, regression analysis and Analysis of variance (ANOVA) were used to scrutinise the differences and relationships among the variables used in the study (Cooper & Emory 1995).

3.11 CHAPTER SUMMARY

This chapter presented the methodological framework for this study. The study involved a mixed methods technique involving surveys and interviews. It further outlined the methods followed in conducting this research. The analysis of research design and methodology were covered under the following headings: Research Design and Methodology, Data Collection Design, Reliability and Validity of Data, Target Population, Sampling Methods, and Ethical Considerations. A convenient sample of 60 individuals was selected from fifty-nine different companies. Distribution of sixty respondents consists of 51 questionnaires and 9 interview questions. A brief explanation of data analysis and detailed analysis will be presented in the next chapter.

CHAPTER 4

DATA ANALYSIS AND RESULTS PRESENTATION

4.1 INTRODUCTION

Data analysis is defined as a series of process and procedures used to explain, interpret and to develop an understanding of collected data (Bernard, 2012). The main aim of this chapter is to discuss the results of data analysis obtained from surveys carried out in order to empirically examine eco-entrepreneurial risk management for SMEs within maritime industry in Cape Town and their impacts on business performance. Responses to the questionnaires were analysed using SPSS version 25.0. Results obtained from the completed questionnaires will be presented in graphical and tabular forms. This chapter provides an outline of research participants, discussions of interview responses and summarized finding to provide an insight on the status of eco-entrepreneurial risk management of SMEs.

4.2. RESEARCH PARTICIPANTS

A research participant in this context represents those managers and owner/ managers of SMEs who take charge in completing the survey questionnaire or interview. The following criteria were used in selecting research participants:

- The respondent should be regarded as a SME Leader (owner/ managers);
- The SME should adhere to the definition of SMEs in the National Small business Amendment Act, No.102 of 1996;
- The SME should operate in the maritime industry, Cape Town; and
- Respondents should be employed by the company.

Participants involved in this study were involved in different business activities. The businesses include: fisheries, fast foods, waste management, corrosion controls to mention but a few. During the interviews and survey, some individuals were not comfortable in answering questions related to their financial performance as well as some of the risk management questions. They felt that this information was too sensitive and confidential to disclose. Differences in participant's business activities will be shown in their responses.

4.3. DATA FORMAT

Closed ended questions required responses structured in a Likert scale format as well as “Yes” or “No”. Completed surveys were then coded for easy capturing on SPSS. The codes that were used were 1 to 4. “Yes” is coded 1, “No” is coded 2 for the “Yes” and “No” responses. Apart from the “yes”, “no” questions, 1 represents strongly disagree, 2 = Disagree, 3 = Agree and 4 = Strongly Agree. The 1 to 4 rule also applies to other Likert responses such as: never, sometimes, rarely, and others. The coding was then entered and defined on the SPSS database. After checking for correctness of data captured, the analysis was performed using different statistics commands. Statistics commands are listed below:

4.4. STATISTICS COMMANDS

The following commands were performed on data:

- Descriptive frequencies
- Analysis of Variance(ANOVA)
- T-test
- Regression analysis.

The above were performed to ensure the depth of data analysis. These commands were used to analyse quantitative data (questionnaires) and qualitative data; responses from participants were used.

4.5. RESULTS AND DISCUSSION

4.5.1 Section 1 – Qualitative Approach results

The survey focused on: goals and objectives of the organization, employees, number of departments within an organization, customers served by the industry, risks or challenges faced by an entity, risk management, government intervention and financial support. The most important matters the respondents responded to with emphasis, were risk management and financial constraints. These matters are further explained below:

4.5.1.1 Description of Business Activities

The participants were involved in varying business activities although all businesses were operating within the maritime industry. Of the nine companies who participated in the study, five of the participants were involved in the fast food industry, one corrosion control, one in waste management, one in repairs and maintenance, and two in fisheries. The businesses had been in operation within the range of 0.5 and 10 years. Most of the participants were owners with the actual number of five, followed by four managers and finally one who identified himself as Chief Executive.

4.5.1.2 Goals and Objectives of an Organization

Goals are defined as something that one strives to achieve, by making use of certain measures (objectives) (Turner & Cochrane, 1993). Different sectors have different goals and objectives as they have different purposes of existence. The differences in goals and objectives are described in the responses below:

Respondent 1: "Waste management, Multi logistics in other words, provision of waste containers, appliance and removal of disposals", "Main goal of this company is to financially establish itself in the waste industry and then to play a role in waste reduction and waste minimization activities. However, we do not engage in recycling, we separate waste and send to recycling companies."

Respondent 2: "We are a 100% black owned company, our aim is to expand our core business functions of Corrosion Control & Protection to Construction and Maintenance, Project management and Logistics. We also attempt to produce good quality and as well as raise the value proposition to the client."

Respondent 8: "To provide quality products to our customers and to be the best service providers in the fishing companies."

Respondent 9: “To be the best service providers in our area, to deliver quality and good standards products as compared to our other competitors. This will always help us to win the hearts of our customers.”

Respondents 3,4,5,6 and 7 are from the same industry therefore their goals and objectives are summarized as follows: The main goal is to provide good and satisfactory services to the customers, to attract new customers and to reduce unnecessary expenses such as food waste, excessive labour and to provide cheap and affordable meals. The above, can only be achieved by reducing food waste, maximizing available resources, making use of cheap food vendors and by making use of social media to engage with potential customers.

4.5.1.3 Targeted Customers

The businesses serve all customers. They generally do not discriminate, although it also depends on what services are on offer. Some services are offered on contract basis, project basis, full time basis and it also dependent on the type of service offered.

Respondent 1: “We serve all industrial waste producers from construction to shipping, retail and commercial, and any company that has a need for large waste containers. We have different types of clientele, for example, in manufacturing long term, construction, project based/ contract based and we also do tender.”

Respondent 2: “Our main business is done in the marine sector, we service the following industries: ship repairs, oil rigs, offshores, fish boats and on-shore vessels. However, we also provide service to pipelines, storage facilities and to the transport industry. In particular, all the areas that requires corrosion control and sand blasting. We normally operate on a contract basis because of the nature of our business, but sometimes we do tender.”

Respondent 4: “The nature of our business allows us to serve all clients, all who feel a need to fill the stomach. We do not discriminate among our customers as we serve all kinds of foods.”

Respondent 9: “We serve all who are in need.”

Most of the respondents agreed that, they have majority’s best interests at heart. They therefore provide services to all in need, especially those operating in the fast foods. Their main purpose is to attract as many customers as they can, irrespective of where they operate at. They therefore tried their best to provide quality products to attract more customers.

4.5.1.4 Processes and Procedures Documented in the Procedure Manuals

Some businesses feel that there is no need for them to have their process and procedures documented. It also depends on how many members are involved in that business. Most of the family businesses do not see the necessity of having processes documented. The following responses were obtained:

Respondent 1: “Yes, but not everything we do. But when we realize there is a need, we will implement procedures; however we have an updated Health and Safety Procedure.”

Respondent 2: “Yes we do. As we normally rely on unskilled contractors or employees it is necessary to have all the processes and procedures documented in procedure manuals so that they always refer to the manuals for guidance.”

Respondent 3: “I did not see the need really as this is my own business. I know what to do and when to do it.”

“Not really”, by respondents 4, 5, 6 and 7. Respondent 7 further stated that: “Since I run the business myself there is no need for that. I know what to do and when to do it in my company so why waste precious time in drafting those process and procedures?”

Respondent 8 & 9: “Yes we do, but we do not refer to them every time. Only when necessary.”

By observing at the above responses, one can conclude that the reasons why SMEs are not doing so well is due to ignorance. Having process and procedure in place can help them to quickly identify the areas that need improvements and to not repeat the same mistakes time and again. Stoneburner *et al.* (2004) noted that documented process and procedures is important in business operation. It leads to operational compliance, improvements in managing risks, continuous improvement and guidance to businesses in resource distributions to meet their goals and objectives. However, the majority of the respondents think that it is not necessary to have them documented and followed accordingly.

4.5.1.5 Government Support and other Financial Institutions

The entrepreneurs do not believe in their government as they perceive that government is there to collect their hard earned cash and squander it through corruption. Government is there to assist and help the business to excel and sustain in a competitive environment. SMEs also have a belief that they are too small to benefit from government intervention. There have been many limitations, however, in service delivery since 1996. This is evident by the section of SME in the National Small Business Act. SME and government relations were found to be fragmented as most of the participants display a lack of knowledge and awareness. Apart from government, SMEs also face challenges in accessing funds from financial institutions as most of them do not believe that they will be able to repay the money on time. This is supported by Beck & Demircuc-Kunt (2006). They found that SME financial constraint is the major challenge that most SMEs are facing. It also affects business growth.

Respondent 1: “We don’t receive any financial support. We rely on revenue generated, and there is no government support. I prefer if financial institution available should speak or make a point to communicate with all stakeholders to increase awareness. However, our company has an overdraft facility that we normally rely on whenever a need arise.”

Respondent 2: Honestly speaking we do not know what the processes and procedures are that need to be taken for us to seek government support. As for financial support from other institution, the business will not afford to pay the interest rates that come up with all those loans. Only if there is any lender who is willing to provide at no cost, therefore we were going to use their services.”

Respondent 3: Honestly speaking no government support has been received so far, we just make sure that we do our best to finance our business, Yes sometimes we run out of cash but taking loans is something that keeps our business very low as we end-up using profits to pay back the interest charges.”

Respondent 4: “The business is still very small and we just cater for small services, therefore no government support or financial support is really required. I do not have much expenses to take care off as it just me. I am the owner and employee as well.”

Respondent 7: “As far as I know, there is none what so ever. This business is where it is now because of the income generated and my own contribution. I used to make deliveries of foods to workers in the marine industry. I was cooking at home and during lunch time I would then deliver foods to workers as per the requested orders, then after 6 months when I saw that there was huge potential, I started renting a shop where I cook and then people would come to buy and enjoy their warm meals. I also have a menu I serve from breakfast to lunch. We operate from 8am till 5pm.”

Respondent 8: “No government intervention though, but when we ran out of funds we normally take loans from financial institution, but their interest rates are extremely high. I wish if we can have a way to use the government I will rather go for that. I hope their interest rates will be favourable.”

The government has established many institutions that are available to support SMEs in South Africa as discussed in chapter 2 of the study. However, most of the respondents are not aware

about the great opportunities made available to them, due to ignorance and lack of experience. . Lack of knowledge and lack of awareness play an important role in affecting business performance and growth negatively. The latter is supported by Kamunge, Njeru and Tirimba (2014). Even though the government is trying by all means to make funds availability to SMEs, lack of knowledge and awareness plays an important role in entrepreneurial businesses.

4.5.1.6 Economic Sector

All SMEs surveyed were operating in the maritime industry in Cape Town. A few of them were service providers while others were operating fast foods and fisheries outlets. This is illustrated by the following responses:

Respondent 1: “Definitely service providers, as we belong to a waste management, Multi logistics category, in other words, provision of waste containers, appliance and removal of disposals. Uhm, we also separate waste and send to the recycling companies, we do not do recycling.”

Respondent 2: “Ok, I am an ambitious entrepreneur craving to develop business growth in the areas of marine, industrial and mining corrosion control and protection services. Our business is mainly operating in the marine environment where we do corrosion controls on ships and metals.”

Respondent 3: “The health of our customers are our main concern, therefore we tried our best to provide healthy and tasty foods. Some of the foods we make are salads, sandwich, grilled chicken but to mention few. We also do beverage sales.”

Respondent 4: “Ok, my business mostly caters for fast foods, including fries, fish and chips and many more.”

Respondent 5: "I own a coffee shop; we serve coffee, sandwiches, muffins and hot dogs. However, we also stretch our market to small items such as cigarettes, sweets and cool drinks as well, as you can see that our shop does not specialize only in one line of products."

Responded 8: "We are a small scale fishing company. We do fishing on a small basis and sell directly to the consumers as well as fast foods companies. Uhm, we do not do fish processing."

Respondent 9: "We are a small sea food wholesaler. We sell sea foods to the customers and on a supply basis, we do fishing and provide high quality fish products."

Considering the above responses, it can be appreciated that, marine industry is not all about fishing or boat building, but is a rather more diverse industry.

4.5.1.7 Employees

The number of employees differed among the respondents. The differences were attributed to business activities and financial capacity. Due to financial constraints in most SMEs participating in the survey, only few employees were employed on a permanent basis while some SMEs make use of contractors when the need arises. In addition to that, others were outsourcing other business function as they could not afford to have that function running in their business. Most importantly, the business only relies on less experienced, cheap labour as they cannot afford highly skilled personnel. Respondents 1 and 2 stress the point of lack of skilled labour in their organization due to financial constraints.

Some businesses indicated that the reason why they do not employ many people is because they are comfortable in running their own entities and also in order to not incur unnecessary expenses. The following responses were gathered from the interviews:

Respondent 1: "Yah, we have 31 permanently employed staff, but most of our staff members are unskilled, as we cannot afford a skilled labour force and also our Human Resource function is

outsourced as we cannot afford to have them to settle at the organization as this will increase our wages. Whenever, we need new staff members we just send a request then they will send us people.”

Respondent 2: “All in all we are 12 permanent members including me and my partner; however we normally get contractors when the need arises. We generally get people from the centre point (where job seekers normally queue looking for part-time jobs). We do not really care about their skills and experience. We explain the task when they get to the site where they can then start working.”

Respondent 3: “I have four people that help me with the food preparation.”

Respondent 4: “I normally have three people that works for me, but we normally get busy during summer and we will hire three more on a contract basis to make them six.”

Respondent 5: “No, I can’t say I have employees as this is a family business. It’s only me and my wife who run this business. We really do not need other members for now. We are still okay.”

Respondent 7: “No, I don’t employee other people. I do it myself.”

Respondent 8: “I have thirty five members who can assist with different task. However the issue of lack of skills is a main concern; but due to their hard work I may say the business is doing well. If only we had a skilled labour force we should achieve faraway more than what we are right now.”

Respondent 9: “Yah as I have mentioned earlier, we deliver quality products. This is only made possible because I have twenty seven skilled employees that help in every corner of the business. Even if I am not available, I always know that I have a good team who will support me through thick and thin. I am very proud of my staff.”

Considering the above, it can be concluded that these SMEs could not afford labour, since most of the companies only rely on labour on a cheap and casual basis. This could be due to a lack of funds or a poor market environment.

4.5.1.8 The Risk Challenges faced by Business

Risk challenges that are mainly faced by SMEs in the maritime industry are related to business risks, employees' risk and operational risks. Business risks are the risks related to business strategy, severe competition, socio-economic environment, financial constraints, liquidity, as well as transaction risks. Apart from the main business risks identified above, the SMEs were also affected by industry specific risks such as not being paid, having to deal with large upfront costs of doing a project and long repayment periods such as 90 to 120 days, even more, and dealing with issues of allegedly corrupt competitors who use bribes to win tenders. SMEs identified business risks as their main risk along with operational risk. Work availability was observed to be one of the major risks within their businesses. This was confirmed by respondents 1 and 2. It was indicated by them that the economic environment in South Africa contributed to business risk and also indicated that competition amongst larger firms was their concern hence all respondents agreed on this point:

Respondent 1: "Business faces a huge challenge because of the unpredictability of work, not only not knowing what vessels are coming in but also with the resources available, what are the potentials of waste coming off, and also what the work plan is. We often struggle because of unpredictability. Very few companies have a pre-project plan. As for us we just get a call: you must come now. There is huge financial risk in that as all our clients are on 30 days payment period. Sometimes they push to 60 or 90, but for us to do the work, we pay the permits and all the necessary expenses first and also, our wages are weekly, so we run out of cash so it is quite feasible that if a few big jobs come we will not be able to cope, especially from a financial perspective in funding the work. That is a big risk for us. Also, it's always competition, there is always someone who thinks that they can do the job cheaper and better. There is corruption, of course, where the job goes to people who pay bribes, however we do not have evidence for that but we heard that it can happen. The financial perspective in a nut shell: the work is not

predictable and the requirements are not transparent. That is how they operate in the marine industry. On a more basic level, there are people who are busy with dangerous machines (moving parts, trucks, cranes) so there is a risk for them, but they attend, biannually, health and safety training with our health and safety officer. We feel that we do our best to keep the guys mindful of the risks that they face.

By law we are contributing to compensation offices, so if someone is injured we continue to pay them their wages until the other source of income arises, that is, until compensation from the UIF comes through.

We are a niche company, labour is our main resource. The business is bad in that sector, it's worse than it has been in many years so we are dependent on how much work is brought by government. If the maritime industry went off, we can divert all our resources to other areas. Our company is flexible. We can go look in any other areas such as the retail sector but that might take time to boost ourselves up as our main source is the maritime sector. We just hope that this will never happen. The other issue that really affects our business to a greater extent is lack of skilled labour, as we cannot afford to employ highly skilled personnel.”

Respondent 2: “Apart from competition, our business is very high risk (threat to employee’s life). The past year we lost a huge amount of money due to employees injured on site. We had to incur additional expenses such as medical bills as well as in compensating that employee. Apart from that we have to get a new member to join the team and it is hard to train a new member; to equip him with knowledge, due to time constraints. Our businesses are always deadline driven. This was the only huge disaster we witnessed in relation to our employees. Also, in order for us to get more clients we have to keep on advertising our company. After a huge effort, you can only get one or two clients. The reward is not really tied to the effort and cost invested. Yah, that’s all I can think of for now.”

Respondent 3: “We normally specialize in perishable foods, therefore the major problem we have is that our products easily go bad when not sold out. If we only have a way to extend our market,

but as for us, market access is still a great challenge. The other thing is that no matter how hard you try to make nice products, there is always one unhappy customer who is there to tarnish your business reputation. Once that happen it will lead to a huge loss of customers. The other main issue is risk of theft as no strict access controls are adhered to.”

Respondents 4, 5, 6 and 7: “Competition is the greatest threat to our business. There are many business who offer fast foods, however, we are trying our best to fit in the industry however, our competitors always win due to financial strength as they deliver the best services to the customers, unlike us. If only we had funding, maybe we can upgrade to better standards”.

Respondent 4: “The other major bad experience that we had is the breakage of machinery, our chip and meat fryer was damaged and it takes us days, without a replacement. Our business’ main sales are dependent on this machine’s functionality. We lost sales during that week. This is a major incident that cost us a lot. Yah, we do not have a back-up plan.”

Respondent 8: “Due to lack of financial support most of our employees are unskilled. This will, therefore prevent growth and impair our performances. The business is also highly affected by high interest rates that we pay for the loans we took from lenders. That money should be put to a greater use in the business, but what can we do that’s the only way that seems to be available.”

Respondent 9: “The main challenges our business has is competition, market access and lack of advanced equipment. If I had my way, I wish to have better infrastructure that we can use to increase our production capacity.”

From the survey, the above challenges show that measures need to be implemented in terms of the risk management of SMEs operating in the maritime industry. Most of the risks that the SMEs were experiencing are caused by the nature of business and environmental influences. The above mentioned is not all the risks that faced by the entities, as some show lack of awareness, for example, one respondent can answer: “Yah, that’s all I can think of for now.” Some might think that that is normal when running a business. Bad things are bound to happen at some point

in time. This will give rise to many more risks in SMEs. However, a lack of risk awareness leads to high probabilities of potential failure in SMEs in the maritime industry.

4.5.1.9 Status of risk management within organizations

From the responses, it may be observed that most SMEs do not have risk management techniques in place. Their main aim is to run a business. They regard risk management implementation as a waste of resources while some respondents showed that they lack knowledge and awareness as well. They value the one rand they have, mostly not realising that if they manage risks better something great might be achieved. Most of them were under the impression that it is only the responsibility of large entities to implement risk management techniques. Risk management is a necessity for every organization, irrespective of size. Risks are challenges that businesses encounter, regardless of size. The high failure rate of entities is attributed to weak or poor risk management implemented by owner managers (Mcneil, Frey & Embrechts, 2015). The responses gathered are as follows:

Respondent 1: "I don't think, from what I know, none of our competitors do what we are doing. For example, we have our health and safety department who does the regular assessment to make sure everything is up to date. For financial risk we find out that the bigger companies do not want to do business in the maritime industry because of the unpredictability, so our threats are more from smaller companies than bigger companies and high demands so they manage risks based on the predictable work. For financial risks we have an overdraft facility that is there to help us when there is a huge cash outlay on a large project. For late, payments, we do not have a solution for that, what we do we do is some follow up and thereafter we just wait for the client to settle."

Respondent 2: "As far as I know, we are still looking into that. At the moment we do not have risk management techniques in place. I normally get helped by a friend of mine who has knowledge of risk management but we haven't implemented as yet as I am still getting my head around that concept, but in the near future we will definitely get there. Uhm, I do understand that we are

facing challenges in our business but for now, we are just working with what is available. We just accept whatever problem comes our way. That's business."

Respondent 3: "No, we do not have. My business is still growing. Maybe in future."

Respondent 4: "I haven't taken that into consideration really. Isn't this going to increase our operating cost though?"

Respondent 6: "Having risk management. It costs a million, of which that's what this company does not have. It keeps you busy to such an extent that you won't even have time and money to keep up to standard. If it was a once off thing, then it would be necessary. Therefore, I did not see the need though, as soon as we're still doing better, that's what matters in our industry."

Respondent 7: "The things like completion is affecting everyone. Whether you have risk management techniques in place, there is no way to escape that. For me, I will rather concentrate on what to do to provide the best to my customers and to be the best in our competitive industry, other than wasting scarce resources on something that I have no clue about. I know it sounds funny, but for me that's the truth. Only if there are forums that educate us on the importance of risk management, maybe I will think about it. Yha, that's my opinion really."

Considering the above responses, lack of knowledge and awareness is the main implication of SME risk management implementation. Another point is the fact that SMEs do not keep records of the challenges that affect their enterprises the most. By doing so, they end-up experiencing the same problem time and again. Some do not bother to find a solution. The closest to a risk management that SMEs try to practice is that they make sure that they meet their customer's needs by provide quality goods and services. This falls under operation risk minimization. In their risk management strategies SMEs make use of the following: in minimising cash flow risks, the entities make use overdraft facilities and loans. These strategies, however, lead to a burden of interest rates. This leads to informal ways of dealing with risks.

Risk management in SMEs is systematically lacking, since the survey revealed that they do not incorporate the aspects of a business's strategic orientation or account for either successes or failures. In addition, these SMEs do not rate risks on a scale of effectuality, nor do they anticipate the risks that exist in business. Controls are resourced, and reactions are planned once risks have already been encountered. In the absence of a large cash flow reserve, this could result in bankruptcy.

The researcher has gathered evidence that goes to show that most SMEs are willing to have risk management in place, on if they gain a deeper understanding of how to implement risk management, considering the benefits of having a structured risk management system in place. They are willing to sacrifice the little that they have if it can benefit them the most at a point when they require it the most. This emerged as the SMEs were greatly convinced by the researcher; this realisation was possible when researcher explained the definition of risk management by Bannock and Manser (2003), as a process that involves identification and acceptance or balancing of the risks threatening the success, growth and its existence. This shed light to the owner/ managers, on the subject, as they were assured that having a good structured risk management in place would minimize the chances of loss that might occur as well as reducing a high reliance on insurance.

4.5.2 Section 2 – Results from Quantitative Approach

Results of the study are provided below in line with the problem statement, research questions and objectives of the study. Results are presented in this order: general information of the organization, eco-friendliness of SMEs, assessments of performance, factors affecting performance and, finally, risks and controls associated with SMEs.

In this study, 51 questionnaires were collected from various SMEs in the maritime industry. The questionnaires were collected from the 51 due to the difficulties faced by the researcher during the questionnaire's distribution; this was considered a good number. The industry was fairly closed, to such an extent that some businesses were not comfortable in accept questionnaires or

being interviewed, due to confidentiality and other unknown reasons. From the SMEs visited, it is evident that not only South African citizens owned and managed the SMEs in South Africa. Some SMEs were owned by foreign nationals. This is presented in table 2 below:

Table 4.1: Organizational distribution

| Nationality | Frequency | Percentage |
|--------------------|------------------|-------------------|
| South Africa | 46 | 90.2 |
| Zimbabwe | 3 | 5.9 |
| Portugal | 1 | 1.96 |
| Congo | 1 | 1.96 |
| Total | 51 | 100.0 |

From Table 4.1 above, 90% of SMEs surveyed are owned by South African citizens and approximately 10% constitute foreign nationals including Zimbabwe, Portugal and DRC Congo. Ownership aside, their goals and objectives are the same: to reduce unemployment and economic development. SMEs' main objectives are to reduce economic challenges such as unemployment, poverty, inequalities and demographic challenges (Nkwinika & Munzhedzi, 2016).

Policies and procedures are considered a crucial aspect in every organization. In ensuring that their main goals and purposes are achieved, many small businesses have policies and procedures on hiring and dismissal of employees. The employees have access to all dismissal procedures; this is done in order to reduce unnecessary cost in unfair dismissal cases. Data in this respect are presented in the table below:

Table 4.2: Policies and procedures on hiring and dismissal of employees

| Hiring Policies and Procedures | | |
|---------------------------------------|-----------|------------|
| | Frequency | Percentage |
| Yes | 49 | 96.1 |
| No | 2 | 3.9 |
| Total | 51 | 100 |

As indicated in table 4.2 above, most organisations have policies and procedures in place as represented by 96% of the population while 3.9% of the organizations do not have. Even though they have policies and procedures in place, there are no controls that are in place to enforce the use of these policies and procedures. Respondent 1 and 2: Also stated that *“we have policies and procedures documented in the policy and procedure manual, that we refer to whenever a need arises.”*

The surveys were completed by owners, managers, senior, consultant and middle management, fleet managers and part owners. Interview questions were answered by owner, managers and, one respondent identified as chief executive officer. Each of these have a direct role in the business operation. The reason why the top executives of the company were selected is because low level employees could not have information about the number of employees in an organization, financial information as well as some important information that was important to this study. The other issue is that the employees do not have the power to disclose certain information as they might be afraid that their job might be at risk. To avoid biased information, the top officials were used, since lower level employees would be required to still have to seek permission to divulge said information. Due to time constraints, the information was obtained from top management. The positions of the respondents are presented in the table below:

Table 2.3: Positions of respondents

| Variable | Frequency | Percentage |
|---------------------------|------------------|-------------------|
| Owner | 8 | 16 |
| Manager | 21 | 40 |
| Owner and Manager | 7 | 14 |
| Senior Management | 8 | 16 |
| Middle Management | 4 | 8 |
| Consultant Manager | 1 | 2 |
| Fleet manager | 1 | 2 |
| Part Owner | 1 | 2 |
| Total | 51 | 100 |

Table 4.3 shows that 40% of respondents were managers, followed by senior management that covers 16% of the population. Less than 10% were middle management, consultant managers, part owner and fleet managers. However, all respondents perform crucial roles in the business operation and their information was considered valid and appropriate. Considering the above, it is clear that owners are relying on managers to run and manage their businesses. It means that specific criteria might have been used for this trend. Significance is clearly placed on experience in running the business. Management should therefore have an idea of how to manage and run a business in line with best management practice. This means they should be aware of the use of a sound control environment as well as good risk management techniques.

The respondents are characterised by different age groups. Most of the respondents are over 35 years of age. This is represented by 55% of the population. 16% comprises of 26-30 years while the rest are under 16%. These includes (16-20 years), (21-25 years) and (31-35 years). Looking at the high number of respondents that are over 35 years of age, it is fair enough to state that managers need to have knowledge and experience on how to run businesses. This is shown by Table 4.4 below:

Table 4.4: Age group of respondents

| Age group of respondents | | |
|---------------------------------|------------------|-------------------|
| Years | Frequency | Percentage |
| | | From 16-20 |
| From 21-25 | 6 | 11.8 |
| From 26-30 | 8 | 15.7 |
| From 31-35 | 7 | 13.7 |
| Over 35 | 28 | 54.9 |
| Total | 51 | 100.0 |

Results on numbers of employees confirm that almost all respondents comply with SME definition as per the National Small Business Act 1996, No. 102 of 1996. This is evident in table 4.5 below. 12% of SMEs have less than 5 employees. These are considered to be family businesses. Results also show that 50% SMEs have 5 to 20 employees while 4 % are slightly above 100 employees.

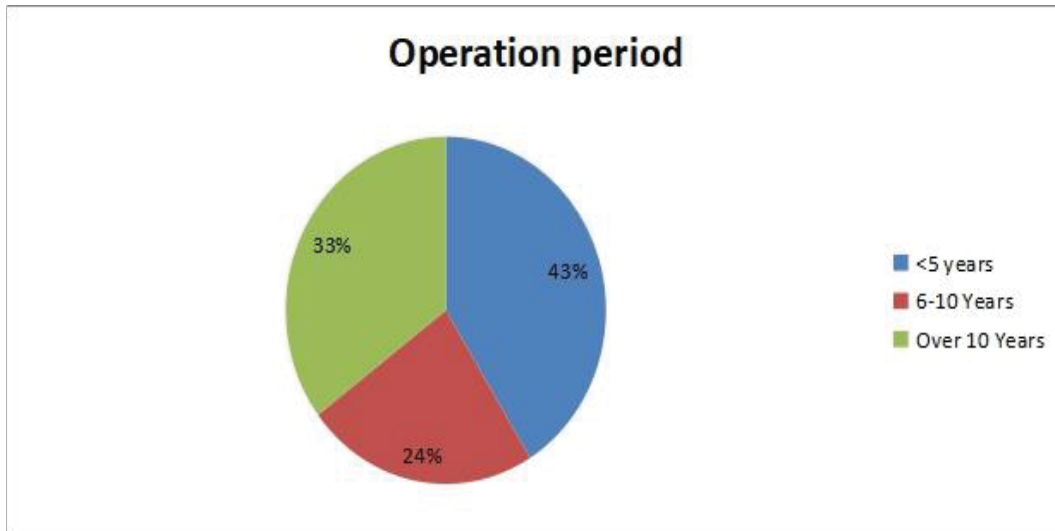
Table 4.5: Number of employees

| How many employees does your business have? | | |
|--|------------------|-------------------|
| Number of Employees | Frequency | Percentage |
| 3 | 3 | 5.9 |
| 4 | 3 | 5.9 |
| 5 | 5 | 9.8 |
| 6 | 5 | 9.8 |
| 7 | 1 | 2.0 |
| 8 | 1 | 2.0 |
| 10 | 5 | 9.8 |
| 11 | 1 | 2.0 |
| 12 | 2 | 3.9 |

| | | |
|-------|----|-------|
| 14 | 2 | 3.9 |
| 15 | 1 | 2.0 |
| 16 | 1 | 2.0 |
| 17 | 1 | 2.0 |
| 20 | 1 | 2.0 |
| 22 | 1 | 2.0 |
| 23 | 1 | 2.0 |
| 24 | 1 | 2.0 |
| 31 | 2 | 3.9 |
| 34 | 2 | 3.9 |
| 35 | 1 | 2.0 |
| 40 | 2 | 3.9 |
| 50 | 1 | 2.0 |
| 51 | 1 | 2.0 |
| 58 | 1 | 2.0 |
| 65 | 1 | 2.0 |
| 70 | 1 | 2.0 |
| 78 | 1 | 2.0 |
| 90 | 1 | 2.0 |
| 107 | 1 | 2.0 |
| 130 | 1 | 2.0 |
| Total | 51 | 100.0 |

Apart from the number of employees and age groups, business' operation periods also differ. The highest percentage (41%) is represented by businesses that have been in operation for less than 5 years. This shows that most enterprises are still in the start-up phase. This is a critical stage, having challenges on pursuing growth (DTI, 2008b). This is followed by businesses that have been operating between 6-10 years (35%) and finally 24% that have been operating for over 10 years. This is represented by figure 4.1 below.

Figure 4.1: Number of years in operation



Considering figure 4.1 above, it indicates that 43% of the SMEs have been in operation for a period of 1 to 5 years, 24% for the period ranging from 6 to 10 years and 33% for the period greater than 10 years. From the results indicated it is clear that 59% (that are above 5 years of operation) must be doing something right if they can stay afloat for such a long period of time as the previous studies perceive that SMEs fail within the period of 4 - 5 years, on average.

Factors affecting performance in SMEs are characterised by lack of resources, lack of knowledge, and lack of awareness, lack of skills, poor risk management and poor control environment (Yahya & Susela, 2011; Kamunge, Njeru and Tirimba, 2014). This study shows that, for all respondents who answered this question, SMEs are mostly suffering from high lack of resources, knowledge awareness, skills, poor risk management and environmental control. This is represented in Figure 4.2 below. The highest percentages denoted very high, high, as well as lack of resources. The percentage distribution shows that lack of resources is critical to SMEs continued existence. This finding is supported by Kamunge, Njeru and Tirimba (2014). Furthermore, in their study it was found that SME owners and managers lack skills and experience in managing their businesses.

In support of the above Shepard, Douglas and Shanley (2000) noted that entrepreneurs frequently start businesses but most importantly fail to address the elements of running businesses. Not all

of them, however; others might be fully aware but lack of resources will force them to employ an unskilled labour force.

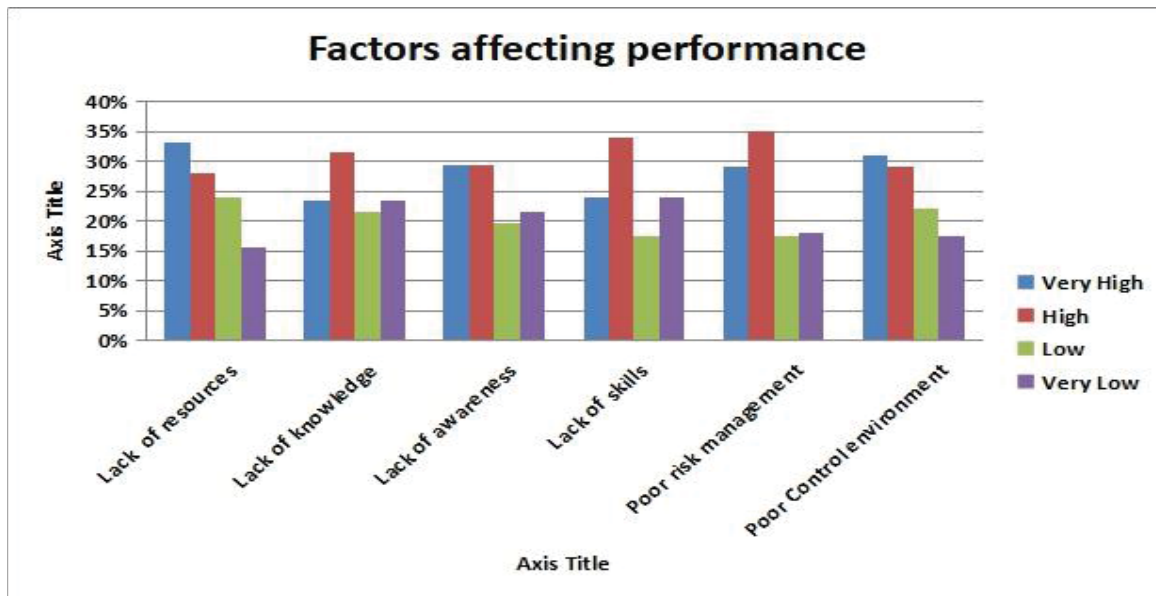
This was mentioned by respondent 8 who indicated that: *“Due to lack of financial support most of our employees are unskilled; therefore this will prevent growth and impair our performance.”*

Respondent 1 stated that: *“The organization does not have enough funds to employ skilled personnel. Therefore, we go for unskilled cheap labour.”*

Respondent 3 also in support of lack of knowledge stated that: *“We not aware about the financial support that is available for us and we do not know how to go about requesting funding to available financial support institutions.”*

It is of utmost importance for SMEs to enhance their skills, knowledge and to be fully aware of what is happening in their area of business. Apart from that, a good control environment and risk management technique is of utmost importance. The problem, however, is the lack of resources in the form of financial support as all other elements depend on resource availability. The summary of this finding is presented in figure 4.2 below:

Figure 4.2: Summary of performance measures



Apart from performance measurement elements above, the results also show that most SMEs are facing challenges in monitoring and recording actual performance as represented by table 4.6 below. None of the respondents have full capacity to implement performances measures. The highest percentage among the respondents on those who strongly agree is 45%, and agree is 33%. The latter is as a result of lack of skills, awareness. This is supported by Kamunge, Njeru and Tirimba (2014) who found that access to business information, financing access and availability of managerial experience due to lack of knowledge have a great impact on business performance. This was also elaborated in figure 4.2 above.

Table 4.6: Performance measures

| Performance Measures | | | | |
|---|----------------|-------|----------|-------------------|
| | Strongly Agree | Agree | Disagree | Strongly Disagree |
| Monitor and record actual performance | 39% | 31% | 16% | 14% |
| Identify and close gaps between expected and actual performance | 33% | 33% | 26% | 8% |
| Identify performance improvement opportunities | 37% | 33% | 16% | 14% |
| Provide information in strategic decision making | 45% | 16% | 28% | 12% |
| Enabling communication across processes and stakeholders | 35% | 22% | 33% | 10% |
| Encourage improvements | 45% | 22% | 18% | 16% |

In terms of revenue performance, the present study shows that approximately 39% of the respondents attained profit above R1 Million, followed by 26% that ranges between R150 000 - R300 000 and lastly, approximately 22% falls in the R60 001 - R1000 000 range. These results, however were only obtained from 47 companies out of 51, as the rest were not comfortable in

disclosing their revenue due to their confidentiality concerns. The summary of the revenue is presented in table 4.7 below:

Table 4.7: Revenue attained for the past three years

| Revenue attained by SMEs | | |
|---------------------------------|-----------|------------|
| | Frequency | Percentage |
| R150 000-R300 000 | 13 | 25.5 |
| R300 001-R600 000 | 3 | 5.88 |
| R600 001-R1000 000 | 11 | 21.6 |
| Above R1000 000 | 20 | 39.22 |
| Missing figure | 4 | 7.84 |
| Total | 51 | 100.0 |

SME growth is very low (refer to table 4.8 below). This is supported by the finding on increase in profit. Only 17% strongly agreed that there was a 50% increase in profit for the past 3 years. Three years is a long time. In such a period businesses should show significant improvements and changes. This might be due to financial challenges faced by SMEs. In support of this, Kamunge and Njeru (2014) argue that access to finance is the greatest challenge that hinders SME growth and development. The revenue obtained from operation is insufficient to boost development and growth.

Apart from revenue increase in the businesses, the results shows that 11% respondents strongly agreed on a decrease in revenue followed by 22% who agreed on revenue decrease, however 35% and 33% disagree and strongly disagree to the decline of revenue respectively. The revenue loss might be due to loss in customer loyalty and reduction of product quality as compared to what was offered by competitors. To solve this problem, experts in the industry are required to inform managers about the changes in consumer t-test and buying powers. The employment changes, the highest percentage agreed that the employment rates have been constant, with 29% strongly agreed and 27% agreed. This proves that growth and development in SME businesses is very low. The table below summarises business performances

Table 4.8: Performance measures and growth

| Performance measures and growth | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|-----------------------|--------------|-----------------|--------------------------|
| 50% Increase in profit for the past 3 years | 17% | 19% | 30% | 34% |
| Decline in revenue for the past 3 years | 11% | 22% | 35% | 33% |
| Huge retirement and retrenchment for the past 3 years | 14% | 10% | 20% | 55% |
| Constant number of employment to date | 29% | 27% | 25% | 20% |

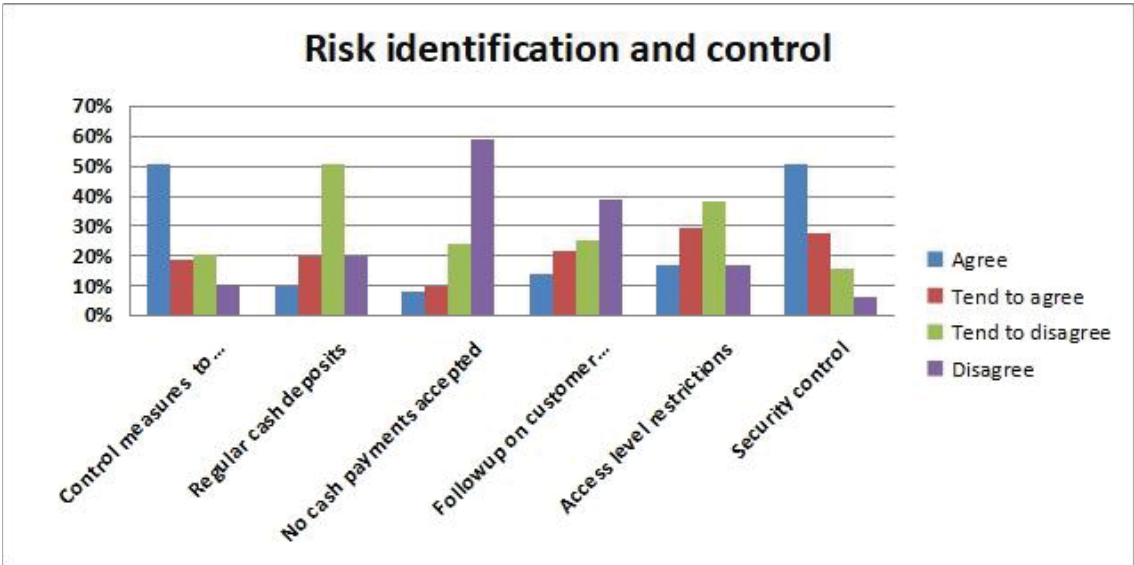
Risk control management is another critical issue that needs to be paid attention to, in every business operation. Results of this study show that more than half of the respondents have security controls to access the premises and to safeguard physical assets as indicated by 51%. However, the control environment, as a whole, is weak as it does not only revolve around access and safety of assets.

Risk identification and control is crucial as it is the best part of business management. The results obtained from the surveys as indicated by the graph below are as follows: 51% of the respondents agreed that they have security control and control measure to safeguards the assets. They have trust in their security system as they do not consider regular cash deposits in the banks and the majority of them rely only on cash payment from customers. Accepting payment in cash and keeping cash on hand is done to reduce unnecessary expenses such as bank charges.

This, however, is very risky as, in times of burglary or theft, the company might lose everything. Even though there is high security control, there is poor control on access restrictions. This might be because of the type of businesses. Taking fast foods as an example, tight security will annoy customers, therefore they are trying to make them feel welcome and comfortable.

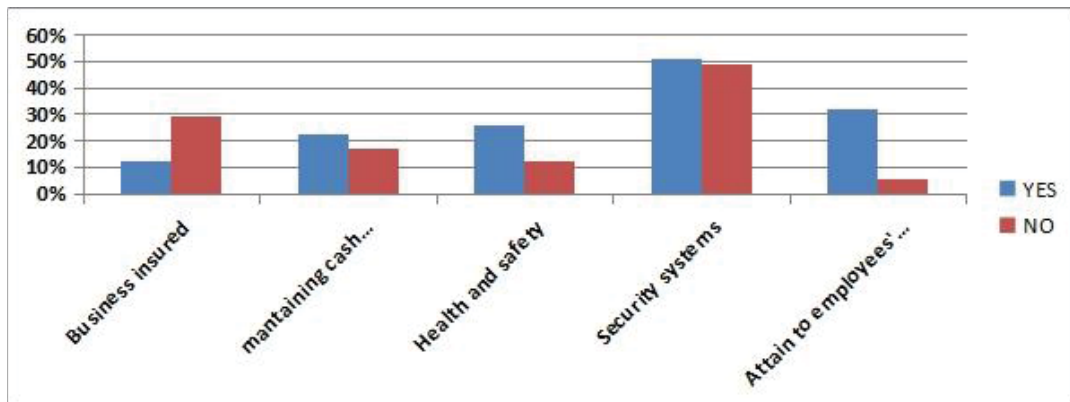
39% and 25% indicated disagree and tend to disagree, respectively on customers follow up on payments. This will contribute high bad debts and losses to the company as customers fail to settle their accounts. Consider businesses that allow credit sales. They will encounter a shortage of funds to cover for operating expenses due to customers' late payments. The summary of the findings is presented in figure 4.3 below:

Figure 4.3: Risk identification and control



In addition to the risks identified above, the following control measures should also be considered as they are important in daily business operation: insurances cover, health and safety, maintaining cash reserves, security systems and employee harassment. The results of these controls are represented in figure 4.4 below:

Figure 4.4: Other control measures

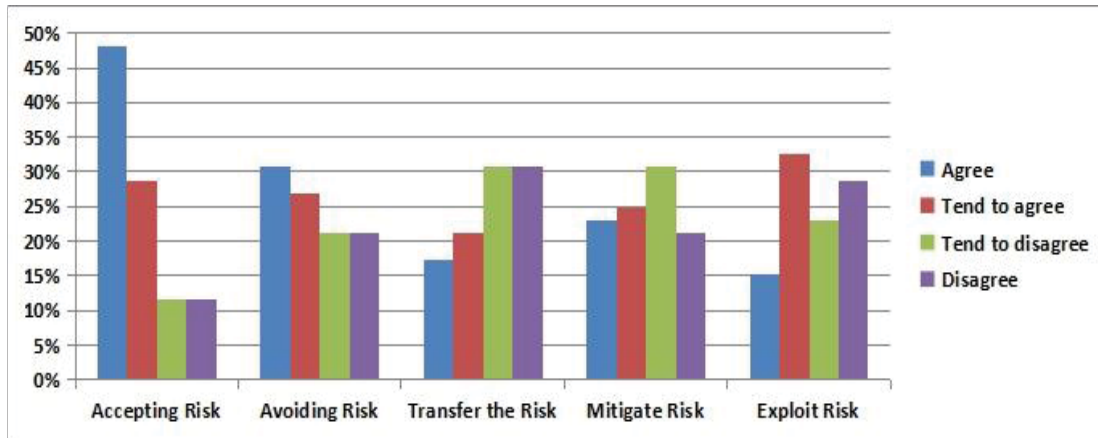


Insurance is very important in every business, however, considering figure 4.4 above most SMEs do not insure their businesses. The businesses are affected by natural disaster, burglary and theft, to mention but a few. If the businesses encounter such problems and not insured, it is a great challenge for the business to rise again. The survey shows that, only 13% are insured and the rest are not. This will have a negative impact on future performance of businesses. Most businesses show that they have security in place but security is not a reliable factor, considering natural disasters.

Do you have procedures in place to identify risks?

SMEs have different ways of dealing with risks in their day to day operations. These ways are as follows: accepting, avoiding, transfer, mitigate and exploit risks. The responses are presented by means of graphical presentations below:

Figure 4.5: Measures taken for risk identified



From figure 4.5 above, it is evident that on risk acceptance, 48% stated that they agreed that in their organisations they accept risks, 29% tend to agree, while 12% disagree. Accepting risk is when an individual identifies risk and take no action on it, however it is only acceptable to minor risk that does not have a huge impact on business performance. Considering the above graph, the respondents use this measure mostly. It may be concluded that they just accept the fact that the nature of their business is very risky, therefore whatever happens, happens, irrespective of the negative impact on business performance. This is due to a lack of resources in implementing risk management.

Considering risk avoidance, the following distribution was found: 31% agreed, 27% tended to agree, and 21% disagreed. In this scenario, entrepreneurs tend to stay away from riskier opportunities in order to prevent losses. Atrill (2005), however, has pointed to the fact that higher risk is often associated with higher return. By pursuing this criterion, therefore, SMEs are depriving themselves of growth and great potential of success.

On risk transfer, 31% of the respondents disagree that they are using that option as a risk measure, followed by 21% who tend to agree and 17% who disagree. Transferring risk is only common to entities where there are several parties involved. Considering SME structure, risk transfer is impossible as most of the business do not insure their business as seen on figure 4.5.

Regarding mitigation of risks, most respondents indicated disagree with the matter, (31% & 21%) while 23% and 25% represents the agree component. Mitigating risks is a way of limiting the risk impacts so that when occurs, it causes less harm than expected and is easier to fix (Stoneburner, 2014). Mitigation can only be assured with excellent control environments. Figure 4.5 above shows that most SMEs have poor control environments to facilitate this risk measure.

Lastly, risk exploitation represents risk that has a positive impact on the business operation. The graph above shows that agree and tend to agree shows 15% and 33% respectively while tend to disagree and disagree represents 29% and 23% respectively. In this case the owner or managers should make sure that there are high chances of risk occurring. However, from figure 4.5 it shows that more respondents tend to accept risk rather than mitigate or develop contingencies. This may be due to lack of knowledge, lack of skills and awareness.

Considering employees' health and safety systems, for those who answered the question of "Do workers make use of paints, brushes, varnishes and glues), it is indicated that about 92% have medical aid kits in place as well as 86% who provide protective clothing. This is done to prevent injuries and to attend to the affected personnel on time. This shows that the employers are concerned about the employee's well-being. Employees' injuries might lead to unnecessary expenses, as by law they have to pay the person while on sick leave and also to pay that person's replacement in the time that they are off sick. See table 4.9 below for summary:

Table 4.93: Do workers make use of the following at your organization

| | Yes | No |
|---|------------|-----------|
| Paints | 29% | 71% |
| Varnishes | 26% | 75% |
| Brushes | 35% | 65% |
| Paint strippers | 22% | 78% |
| Glues | 24% | 77% |
| If answered yes, do you provide the following: | | |
| Medical aid kit | 92% | 83% |
| Protective clothing | 86% | 11% |
| Fresh milk | 61% | 36% |

Apart from the safety of employees, the businesses need to consider the environment as well. From the question asked about the businesses' compliance with environmentally friendly policies and procedures, to ensure the business' eco-friendliness the following results were obtained as indicated in Table 4.10 below:

Table 4.10: Compliance of environmental friendliness policies and procedures

| Policies and Procedures on environmental friendliness | | |
|--|-----------|------------|
| | Frequency | Percentage |
| Never | 1 | 2 |
| Rarely | 11 | 21.6 |
| Sometimes | 13 | 25.5 |
| Frequently | 26 | 51 |
| Total | 51 | 100 |

From the results in table 4.10 above, it is evident that most businesses comply with policies and procedures relating to environmental friendliness. This is indicated by 51% of the respondents

who stated that they frequently do while 25.5% sometimes consider policies and procedures. One can conclude that those who said sometimes refer to where necessary. The rest of the respondents, however, do not comply with policies and procedures. Their main agenda is to run a business and earn profits, not considering the negative impacts that they have on the environment. Despite the environmental pressure as stated by Gupta (1995), the business are doing their best to maintain environmental friendliness.

Apart from complying with the policies and procedures, the researcher decided to check as to what extent the business manages waste and recycling as part of maintaining a clean environment as well as resource conservation. The results to this question are indicated in tables 4.11 and 4.12 below:

Table 4.11: Waste management

| Waste Management | | |
|-------------------------|-----------|------------|
| | Frequency | Percentage |
| Never | 3 | 5.9 |
| Rarely | 8 | 15.7 |
| Sometimes | 12 | 23.5 |
| Frequently | 28 | 54.9 |
| Total | 51 | 100 |

As indicated in table 4.11 above, it is clear that the owners or managers are focusing on waste management. This is indicated by 54.9% of owners/ managers. As indicated by Gladwin and Nordstrom (1992), it is management's responsibility to ensure that waste is correctly disposed of in every organization. The issue of recycling in the business visited, however, is a concern. They do not stress the importance of recycling or provide an indication of initiating recycling projects. Recycling is crucial as it serves as a way of reducing limitation of available resources. This is apparent by the response in table 4.12 below:

Table 4.12: Recycling activities

| Does the company do recycling? | | |
|---------------------------------------|-----------|------------|
| | Frequency | Percentage |
| Never | 25 | 49.0 |
| Rarely | 11 | 21.6 |
| Sometimes | 9 | 17.6 |
| Frequently | 6 | 11.8 |
| Total | 51 | 100.0 |

Recycling is an important aspect of waste management and resource conservations. Almost half of the businesses never recycle the resources as indicated by 49% of the respondents as shown in table 4.12. This aspect shows the lack of environmental compliance as discussed in chapter 2 of this study. Gupta (1995) considered recycling as the direct aspect on environmental health and safety. However, most of the SMEs seem to ignore that aspect.

4.5.2.1 Regression Analysis

Regression was used to determine the effects of independent variables on risk management. Table 4.13 indicates the summary of the results where stepwise regression was used. Risk management is a dependent variable and lack of skills, lack of resources, lack of awareness and lack of knowledge are independent variables.

Table 4.13: Regression Analysis

| Model Summary: Risk Management | | | | |
|---|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .731 ^a | .534 | .494 | .78162 |
| a. Predictors: (Constant), Lack of skills, Lack of resources, Lack of awareness, Lack of knowledge | | | | |

The *r square* measures the proportion of the total variation in the dependent variable that explains the independent variable in the model. Considering the above, it shows that lack of

resources and lack of awareness account for about 53% of poor risk management. This implies that there is a strong relationship between the independent and dependent variables.

Table 4.14: Analysis of Variance

| Model | | Sum of Squares | Difference | Mean Square | F-Value | Sig. Value |
|---|------------|----------------|------------|-------------|---------|------------------|
| 1 | Regression | 32.250 | 4 | 8.062 | 13.197 | .06 ^b |
| | Residual | 28.103 | 46 | .611 | | |
| | Total | 60.353 | 50 | | | |
| a. Dependent Variable: Poor risk Management | | | | | | |
| b. Predictors: (Constant), Lack of skills, Lack of resources, Lack of awareness, Lack of knowledge | | | | | | |

The *F* coefficient in the ANOVA model for the independent variable is noted. This, thus signifies that none of the other independent variables have any impact in predicting the dependent variables as per the survey model. The null hypothesis therefore applies. The null hypothesis for this model is that the model has no explanatory power as all the co-efficients of the independent variables are zero. The survey therefore concludes that none of the variables can be used to predict dependent variables. By comparing the significant value denoted, significance and the model should be accepted.

Table 4.15: T-Test statistics

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|-------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .356 | .331 | | 1.077 | .287 |
| | Lack of resources | .432 | .112 | .415 | 3.848 | .000 |
| | Lack of knowledge | .190 | .154 | .190 | 1.232 | .224 |
| | Lack of awareness | .298 | .148 | .305 | 2.005 | .051 |
| | Lack of skills | .017 | .038 | .046 | .454 | .652 |
| Dependent Variable: Poor risk Management | | | | | | |

Table 4.15 shows how the model establishes the relationship between the dependent and independent variables. Considering the independent variable, lack of resources, the findings are significant (t-value is 3.848 and $p < 0.00$). Lack of knowledge is not significant (t-value = 1.232 and $p < 0.224$). Lack of awareness is significant (t-value = 2.005 and $p < 0,051$). Lack of skills is not significant (t-value = 0.454 and $p < 0,652$).

Considering the above explanation of the *t* and *sig.* values, the survey concludes that, poor risk management is greatly attributed to resources. Lack of resources, therefore, explains significant variation in the dependent variable. The latter is also supported by Abor and Quartey (2010), when stating that, resources are available in limited supply, therefore the price attached to them is very high which makes them unaffordable by most SMEs.

Shunmugam and Rwelamila (2014) regarded lack of skills as the main impact of risk management implementation, however, this study found no significance. In addition to that,

Abor and Quartey (2010) identify lack of finance, managerial skills, equipment and technology as the biggest challenge that leads to poor risk management. Following the above literature, it is evident that, all the above mentioned drawbacks contributed to the poor risk management, inferred from SMEs operating within the maritime industry, with lack of resources and awareness as the main cause.

Considering standardized and unstandardized co-efficients, they are all positive. Therefore, considering unstandardized B, the relationship is that the higher the co-efficient of independent variable the greater the effect, on dependent variable. For example, the model shows that the highest factor is lack of resources, with 0.432, followed by 0.298 lack of awareness, then lack of knowledge 0.190 and lack of skills 0.17. In that order, poor risk management is highly attributed to lack of resources, lack of awareness, lack of knowledge and the least significant factor is lack of skills. The higher the lack of resources, knowledge awareness, skills, the higher the poor risk management implemented. When considering the above, however, all factors are very important as they all have a hand in poor risk management techniques in maritime SMEs. In addition, the model predicts that for every 0.4 increase in lack of resources it leads to 0.4 increase in poor risk management. The same also applies to the other factors assuming that all other factors are constant.

4.6 CHAPTER SUMMARY

In this chapter, data collected was presented and analysed. The results were presented in different ways. These include graphical presentation, tabular formatting and explanations depending on the nature of data. References to other researchers were also highlighted where necessary. The degree to which the research questions and problem statements have been achieved from the findings as well as conclusion drawn from the information gathered from surveys will be emphasised in the next chapter.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The previous chapter provided the analysis, discussions and interpretations of the empirical findings. The stages for data collection and analysis were identified and described. The information was analysed and summarised using cross-tabulations, regression analysis and qualitative techniques. The current chapter concludes the study by providing details of research implications and some extracted recommendations deemed useful to academia, practitioners and policy makers. The implications and recommendations are focussed on matters of sustainable entrepreneurial risk management, the oceans economy and SMEs' performance. As alluded to in chapter one, the main aim of this research was to empirically examine eco-entrepreneurial risk management for SMEs within the maritime industrial sector in Cape Town and their impact on business performance.

To achieve the research aim and objective the main research question was formulated as follows:- “What are the entrepreneurial risk management challenges of SMEs operating within the maritime industry sector of South Africa, and how are these challenges affecting their business performance, particularly focusing on Cape Town?”

This research report comprises five chapters. These are as follows: Chapter 1: In this chapter the problem statement was discussed in order to motivate the importance of this research study. Considering the problem statement, it is evident that most SMEs do not seem to effectively manage enterprise risks due to, respectively a lack of knowledge, awareness, resources and skills. Stemming from the problem statement, the research objective formulated was to examine the status of eco-entrepreneurial risk management within SMEs in the Maritime Industry. This was followed by a discussion on research procedures followed, sub questions, sub objectives and an outline of the study.

Chapter 1 and 2 provided the theoretical framework of the study. An in depth literature review that focussed on the concepts related to eco-entrepreneurial risk management and other related matters such as lack of skills, knowledge, resources and awareness, with their impact on risk management skills in SMEs. Smit and Watkins (2012) stress the point that, the main reason why most SMEs do not have effective entrepreneurial risk management processes in place is mostly attributable to lack of knowledge, lack of resources and lack of risk management skills. In chapter three the design and methodology was discussed. In chapter 4, the data and results were analysed, presented and interpreted. The implication of the research findings to academia, policy makers and decision makers is also dealt with in this chapter. By doing so, relevant recommendations and conclusions will be derived, based on results or findings obtained from the research study.

5.2 INFERENCES OF THE STUDY

The main aim of this research, as stated in chapter one, was to examine the eco-entrepreneurial risk management for SMEs within the maritime industry in Cape Town and its impact on business performance. To achieve the main aim, five sub objectives were formulated. To ensure that all the objectives were met through the research journey, it is necessary to cross-examine them with the findings obtained in chapter four.

First objective: To identify entrepreneurial risks managed by SMEs in the maritime industry. Considering the results obtained from qualitative data, it is evident that, all the businesses indicated do not place any major emphasis on risk management techniques. Their arguments were that the business is still growing and that they did not see the value in implementing a risk management framework. In addition, policies and procedures are most popular in most of the SMEs contacted but they are not utilized properly. The latter is evident from findings indicating that the lack of skills, lack of awareness, lack of knowledge and poor control environment are rated as key factors in the SMEs operating in the maritime industry. This can also be supported by the finding where most respondents argued that the root cause of their risk management status is financial constraints and lack of resources and awareness. It is therefore difficult for SMEs to employ individuals with high expertise as they will not be able to afford to pay them. The

latter has a direct influence on entrepreneurial risk management. It is argued in the literature in chapter 2 that structured risk management is only possible in businesses with managers who have necessary experience and expertise.

Second objective: To determine whether there are control systems in place to detect risks for SMEs operating in the ocean economy. From the results (See chapter 4) obtained it is evident that there is no strict access control measures in place due to the nature of businesses. The latter relates to the fast foods. They did not feel the need to tighten their access control measures in order to allow customers to feel welcome and comfortable when visiting their organisations. Apart from access control most businesses are not insured as they regard insurance as a waste of money. Their argument was if nothing happened and then what? The other problem was found in businesses that accept cash payments and with no regular cash deposits being made. This leads to a high risk of theft occurring. Considering the discussion of qualitative results (under the same section), it is assured that the employment policies are correctly followed. If this were not so, it would attract a great deal of legal expenses if the company were sued by employees. Clear hiring and dismissal procedures followed saves the company unnecessary cost.

The best way to minimize risk is to place strong control measures in place in a business. It serves as the best assurance for a going concern and employees will also feel secure, since they have assurance of financial security. In almost all organizations that value the importance of their employees these measures includes health and safety procedures and would also be pertain to employee harassment. Most business enterprises participating in this study have tight security at their facilities. This was observed first hand during the survey period. One company has dogs, others have security fences as well as limited access to the premises by means of security guards. This was only at those businesses that are not directly interacting with customers.

At other companies, the only controls present were access control. Considering that in businesses run by one individual there was no segregation of duties or a proper handling of cash. There was no separate accountability on business and family matters. This is in violation of business policy.

Third and Sixth objectives: To determine whether the risks realised are properly managed within the maritime SMEs sector and to determine what measures the maritime SMEs should take in mitigating risk exposures. From the finding as indicated in chapter 4, it is indicated that the SMEs follows the following measurements risk acceptance to a greater extent, followed by avoidance, transfer, mitigation and exploitation. Also in compliance of environmental friendliness, the results obtained indicated that only 51% of the respondents comply with the policies and procedures. Others are just in between as indicated by their response “sometimes” while others selected “rarely”. This might mean they only consider them where necessary or they have not paid much attention to the issue of the green economy.

Fourth and Fifth objectives: To determine how well developed the risk management system of maritime SMEs are, and to determine what type of risks maritime SMEs normally encounter. From the information gathered, the risk management in the maritime industry is not well developed. The businesses are trying their best to survive and some show no interest in having one in place due to a lack of knowledge. Financial constraints also play a greater role in the scarcity of effective risk management in the industry. From the survey, the major risks that were affecting the business were grouped as financial risks, operational risks as well as market access risks and competitions.

5.3 OVERALL IMPLICATIONS OF THE STUDY

5.3.1 Managerial and Pragmatic Implications

The results obtained from this study seems to indicate that managers are not aware and do not have the necessary skills and knowledge to implement structured risk management techniques. There is no perfect structure followed when it comes to risk management. As a result this has an impact on business performance. Poor risk management skills have the following managerial impact in SMEs operating in the maritime industry. The first impact being delay to project results. This will give rise to poor revenue and profits streams. Having a standardized risk management structure helps the SMEs to identify significant risks that could jeopardize their success or existence as well as affecting achieving targeted goals on time. Both employees and

managers will be aware that following the proper process will result in favourable results and there will not be a waste of available resources. From the results obtained, however, it seems as if most of the managers are not aware of the benefits that structured risk management techniques bring to their organisations.

The other implication is of reckless risk taking. This is a serious problem as the manager will jump to conclusions without taking the necessary factors into consideration. As a result, the business will be in serious trouble. However, if the best decision is made it is for the business's best advantage.

5.3.2 Implications to maritime SMEs sector

The finding that most SMEs consider risk acceptance and avoidance as their main way of solving risks implies that, most SMEs do not employ a structured risk management technique. Risk acceptance may be a very dangerous approach as the businesses do not have the necessary knowledge for understanding risk and its context in relation to business outcomes. There are certain considerations to be considered before one selects ways of dealing with available risk. This will require requisite skills and expertise.

From the findings it is evident that, most of the SMEs surveyed and interviewed are not insured. It is very important for SMEs in the maritime industry to have insurance cover. In case of natural disasters, a clear and present risk in this sector, the owner will recover all the losses through adequate insurance cover. The insurance policy is regarded as a waste of resources. Businesses, however, only recognize the importance when the problem arises.

5.3.3 Implications to Policy on Operation Phakisa

The most recognized policy makers in the maritime industry all refer to the oceans economy, currently popularized as Operation Phakisa. From the findings obtained, most of the respondents were not aware of the effectiveness of Operation Phakisa. They are aware that such a drive is there, being driven by government, but they are not aware of how it could be of great help in

their businesses and in the oceans economy as a whole. As per the literature review in chapter 2, operation Phakisa is the main driver of an economically friendly environment. Considering the results provided by the respondents, most SMEs in the maritime sector are not aware of operation Phakisa. Considering the governance issue, this should be a breakthrough for SMEs to sustain a strong governance and control environment in their organization. Considering the main impetus of contributing to the green economy, the results show that most of the SMEs under study are not complying with environmental friendliness as less attention is placed on waste management and recycling.

5.4 RESEARCH LIMITATIONS

In assessing the finding of this study, it should be noted that this study is by no means without limitations. In fact, one of its limitations was restricted to only maritime industry in Cape Town. Further studies can consider South African maritime industry as a whole. A convenience sampling method was undertaken. Since it was difficult to locate an accurate sample for the study, convenience sampling was employed to generate an initial sample. Future studies could use other sampling techniques. Another limitation is the fact that the method of data collection relied on accurate introspection of each respondent. Therefore the responses may be subject to a degree of bias. Despite these limitations the study advances knowledge regarding effects entrepreneurial risk management on business performances, considering that there is a noticeable absence of prior research within South African context related to this study. The sample size was set at 70 respondents.

A larger sample size could be used in future research and perhaps better results could be obtained. The study could also be conducted in another geographical location in South Africa and comparisons could be made. In regard to the impact of entrepreneurial risk management on business performance, the findings suggest that risk management may lead to better business performances if correctly implemented and correctly monitored.

5.5 RECOMMENDATIONS

SMEs in the maritime industry should consider designing a structured risk management framework in line with the firm's business strategy. The government could invest more in training for all small business owners, managers and entrepreneurs in an attempt to alleviate the challenges identified to in this study. During the training events, the importance of having structured risk management strategies in place within SMEs should be highlighted. The SMEs should also be open minded in order for them to keep up with the economic and environmental changes. This solves the unpredictability of business in the maritime industry as mentioned by other respondents.

Apart from the above, the entrepreneurs should consider making use of social media. This will curb the unawareness of available opportunities that government recently implemented and is available and at their disposal. They should not expect people to deliver information to their door steps, as no such services exist in a real world. The owners should also consider employing individuals to help in the business. It is better to have someone other than yourself running your business. This idea will lead to brainstorming as there is no way that competitors might share information with your organisation. Apart from that, it will also reduce the high employment level in South Africa. Most importantly, management and employees of SMEs should acquire the necessary skills to run and manage their businesses in order to have an effectively controlled environment.

Training SMEs in risk management and the implementation of risk methods are critical in order to ensure sustainable growth and longevity. Most training programs tend to adopt a one size fits all approach. SMEs vary quite significantly regarding their specific requirements and needs. Future training programs must be customised sufficiently through government, industry associations and the SETAs. The MERSETA in particular, has specific programmes aimed at advancing the industry through learnerships, apprenticeships and artisanship programs. These programs can be adapted to accommodate a wider range of SMEs requiring more specific needs such as risk management.

Health and safety is another aspect that needs to be addressed in relation to risk management. Often SMEs operating in the maritime sector fail to meet requirements in this regard and fail to become successfully accredited supplier vendors for larger companies. These companies include larger global companies that have bases in Cape Town and other coastal locations. Saldanha Bay, for example, represents a location that is favourably located for emerging business activity as new gas lines are extended into the city. This will unlock new opportunities for SMEs and the requirements such as health and safety will become an imperative. Proposed interventions, therefore, must take into account the development of health and safety officers from SMEs.

Another critical area is finance and financial control. Financial management is an area that is well known as an Achilles heel to SMEs, particularly as this sort of skill and expertise is severely lacking. When SMEs obtain new, lucrative contracts in the maritime sector, payment terms are often structured around thirty to sixty days. During this period of time the SMEs must allow for operational overheads such as wages, materials etc. On the other hand, the internal control should also be considered a driving factor risk management goes hand in hand with a better control environment.

5.6 CONCLUSION

This research study placed the emphasis on the status of risk management on SMEs operating within the maritime industry. Based on the literature review conducted, it is evident that SMEs do not follow a structured system of risk management. This is supported by the results obtained from the survey, as discussed in the previous chapter.

Moreover, it is apparent that most of the SMEs are not aware of formal risk management frameworks that can be implemented in their businesses. This is due to lack of experience, awareness and insufficient knowledge among SME owner or managers. However they did make use of informal risk management techniques which were deemed as effective in mitigating and/or eliminating risks, but does not cover all the risks that the business encountered. The identified risk management measures were mainly attributed to financial constraints, employee challenges

such as providing compensation to employees when injured and other risk management measures such as acceptance.

In addition, findings revealed that respondents are not aware of available risk management frameworks and their importance; hence risk management implementation is very low. Based on the results obtained from the research surveys, SMEs risk management strategies are the greatest challenge among SMEs owner/ managers and entrepreneurs. The businesses do not use structured risk management strategies and neither are they taking appropriate measures in terms of risks identified within their businesses. Some businesses give an excuse of business size. Risk management can be implemented at an early stage. Business progress and growth can easily be reached. Most of the businesses do not keep records of all the risks that arise. This results in huge risks being omitted for consideration and is not paid attention to. Financial problems, lack of resources and lack of knowledge are all actually playing a greater role in the implementation of risk management techniques in this SME sector.

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APPENDICIES

Appendix A: Ethical Clearance Certificate

Appendix B: Language editor's letter

Appendix C: Interview Guides used in the Study

Interview Guides

| | |
|------------------------------------|--|
| | |
| Purpose | This research study seeks to uncover and understand the Eco-entrepreneurial Risk Management within Small and Medium Enterprises. The study will foster a better understanding of whether the current Risk management techniques within the SME sector are sufficient or are in need of alteration. |
| Instrument | |
| 1. Introduction | <ul style="list-style-type: none"> • Researcher : Phyllis Chikwati, MTECH: Business Administration Student • Reason for study: to gain the insight as to what role do Risk management play in • Give an explanation of what is going to be done with data and agree on the confidentiality of data and anonymity. • Explain the process of collecting data, and as well as to establish whether interview can be recorded. |
| 2. Collect the interviewee details | <ul style="list-style-type: none"> • Name • Current position in your organization • Years in that position |
| 3. Questions : General | <ol style="list-style-type: none"> 1. How long has your organization been in operation? 2. What is the main purpose of this organization and principal goals and objectives of your organization? 3. Are you part of Franchise? 4. What group of customers do you serve and are you permanently service providers or contract bases or tenders? 5. How many departments do you have in your organization? 6. How many employees do you have? 7. Are the business processes simple and routine or complex and non-routine? 8. Are procedures and processes documented in procedure manuals? 9. Do you send newly appointed staff members for training and do you send the employees for professional development programs 10. Do you have an employment policy in place that deals with the recruitment of employees? 11. How do you go about recruiting employees, what are the procedures? |
| In depth | <ol style="list-style-type: none"> 12. Do you normal get support from any institution, if yes what kind of support and by whom? 13. What risks do you normally encounter? If there are, are there any strategies in place to executing them? 14. What is the current situation in industry in terms of risk management? If there are, what is the importance of having structured risk management in place? 15. What are the factors affecting your ability to respond to unexpected changes? 16. Do you have Health and Safety policies in place? 17. Do you also create a suitable work environment to the employees by providing them with protective clothing to prevent injuries? 18. In case of an employee get injured at work place, what procedures do you normally take? |

| | |
|------------------------------|--|
| 4. Wrapping up the interview | 19. Where do you see your organization in the next five years? 20. Do you have any other insights you would want to share on your organization's performance or risk management issues? |
| 5. Thanking interviewee | Thank interviewee and share the insights you gained in the process to create a room for any follow-ups during interview analysis. |
| 6. Post interview summary | Organize the notes and produce transcript of the relevant parts of the interview. |
| Format | Allow for the conversation to flow, look for confirmation of the insights gained from the interviews with subject matter experts; probing and clarifying questions based on responses. |

Appendix D: Covering Letter to Questionnaire



| RESEARCHER DETAILS | |
|---------------------------|--|
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| RESEARCH TITLE |
|---|
| ENTREPRENEURIAL RISK MANAGEMENT CHALLENGES OF SELECTED SMALL AND MEDIUM ENTERPRISES IN THE MARITIME INDUSTRY IN CAPE TOWN |

| HOW TO COMPLETE THIS SURVEY |
|---|
| <p>This survey comprises of mostly closed-ended questions which requires the respondent to fill in a numerical digit and/or mark an 'X' in the most appropriate box most of the time. Clear instructions for each question are given under each section. If you do not understand the question, please feel free to contact either the researcher and/or supervisor indicated on this front-page.</p> |

| ETHICAL CONSIDERATIONS |
|--|
| <p>All information provided by respondents will be treated with the strictest levels of confidentiality and all respondents will remain anonymous. The information provided will be strictly used for research purposes only. All respondents who participate in this research study do so on a voluntarily basis and, as such, respondents may withdraw from the study at any time they should so wish.</p> |

OBJECTIVES OF THIS SURVEY

SMEs are not performing as well as many are close down within a period of 3 to 5 years. Mainly, these entities fail due to economic factors which cause risks to realise and, unfortunately, prior research shows that these risks are not effectively controlled. Considering the above, the researcher formulated the perception that SMEs in the maritime industry are not sustainable due to inadequate and ineffective use of risk management. This results to realisation of risks which adversely influence the business performance of entities that are operating within the SME sector. Therefore, the purpose of this research is to empirically examine risk management for small and medium enterprises within maritime industry in Cape Town and their impacts on business performance. Hence, the objectives of this survey are to:

- To identify if risks are managed in a small business operating in a maritime industry.
- To determine whether there are control systems in place to detect risks.
- To determine whether the risks realised are properly managed. within the SMEs
- To determine how well developed is the risk management system of an SME.

Appendix D: Questionnaire

SECTION A: GENERAL ORGANIZATIONAL INFORMATION

1. Name of your organization (please fill in open space provided)

2. Do you have policies and procedures consisting hiring and employee dismissal

1. Yes

2. No

3. Nationality (tick/click as appropriate)

1. Botswana 2. Kenya 3. Malawi 4. Namibia 5. South Africa
6. Tanzania 7. Uganda 8. Zambia 9. Zimbabwe 10. Other specify

4. Indicate your industry (tick/click as appropriate)

1. Fishing 2. Boat building
3. Manufacturing 4. Oil and gas exploration
5. Construction 6. Marine Transport and manufacturing
7. Aquaculture 8. Tourism & Hospitality
9. Marine protection and governance service 10. Information & communication
11. Financial & Insurance 12. Other (specify)

5. Number of employees for your organization (Fill open space)

6. Your current position (tick/ appropriate)

1. Owner 2. Manager 3. Owner and manager
4. Senior Management 5. Middle Management 6. Other (specify)

7. How long has your business in operation?

8. Number of years you have been in service (tick appropriate)

1. Less than 6 years 2. From 6-10 years
3. From 11-15 years 4. From 16-20 years
5. From 21-25 years 6. Over 25 years

9. What is your age group (tick appropriate)

1. Less than 16 years 2. From 16-20 years
 3. From 21-25 years 4. From 26-30 years
 5. From 31-35 years 6. Over 35 years

10. Does your organization offer products within the maritime industry sector?

1. Yes 2. No

| SECTION B: ASSESSMENT OF ECO-FRIENDLINESS | | |
|--|---|---|
| 11. The following questions would require you to indicate the frequency of eco-friendly activities, a tool to measure organisational eco-friendliness (Please mark with "X" in the appropriate box). | | |
| Ranking Key: 1. Never 2. Rarely 3. Sometimes 4. Frequently | | |
| 1 | How often does your organisation do Community Charity | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 2 | How often Is your business involved in Community safety and security awareness programme | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 3 | How frequently does your business purchase from local suppliers and using local raw material | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 4 | How often does your business employ local residents | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 5 | How often do they consume water | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 6 | How frequently do your business utilise energy | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 7 | How often your organisation follow material practices (e.g. use and produce environmentally friendly products) | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 8 | How often your business ensure energy conservation | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 9 | How often your business keep touch with your customers | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 10 | How frequently does your business comply environmental friendly policies and governance | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 11 | How often do your business manage waste (waste reduction) | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 12 | How often does your business recycle | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 13 | How frequently does your business re- use waste | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 14 | How frequently does your Increase customer satisfaction | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 15 | How often does your organisation benchmark performance against that of competitors | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 16 | How frequently does your company train, promote, equip, develop and motivating employees | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

| SECTION C: ASSESSMENT OF PERFORMANCE INDICATORS | | |
|---|---|---|
| 13. There are different statements for each of the six themes on this section. In your opinion, tick on a level of each scale that represents the strength of your agreement/disagreement regarding the statements about your organization. | | |
| Ranking Key: 1. Strongly Disagree 2. Disagree 3. Agree 4. Strongly Agree | | |
| 1 | We create employment opportunities for low-income people | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 2 | Our innovations in low-income markets enable creation of employment opportunities | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| 3 | We create markets for products produced by low-income markets | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

| There are different statements, In your opinion, tick on a level of each scale that represents the effect on business performance | | |
|---|--------------------------|---|
| Ranking : 1. Very High 2. High 3. Low 4. Very Low | | Rating |
| a | Lack of resources | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| b. | Lack of knowledge | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| c. | Lack of awareness | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| d. | Lack of skills | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| e. | Poor risk Management | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| f | Poor control environment | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

| 20. In your organization do you make use of the following tools to measure business performance? Rate the following by using the following legends Ranking Key: 1- Strongly Agree, 2-Agree, Disagree and 4-strongly disagree | | |
|--|--|---|
| Components | | Rating |
| a. | Monitor and record actual performance | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| b. | Identify and close the gap between expected performance and actual performance | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| c. | Identifying performance improvement opportunities | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| d. | Providing information in making a strategic decision. | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| e. | Enabling internal communication across processes and stakeholders. | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| f. | Encourage continuous improvement | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

| 21. The company attained the revenue between the following range for the past 3 years | | |
|---|-------------------------------------|--------------------------|
| 1. Year 2013 | -Between R150000 and R3000 000 | <input type="checkbox"/> |
| 2. Year 2014 | -Between R3000 001 and R15000 000 | <input type="checkbox"/> |
| 3. Year 2015 | -Between R15000 000 and R30 000 000 | <input type="checkbox"/> |
| 4. | Above R1000 000 | <input type="checkbox"/> |

| 22. Rate the following by using the following legends 1-5 (1-Strongly Disagree and 5-Strongly Agree) | | | |
|--|----------------------------|----------------------------|---|
| Ranking Key:1 Strongly Agree | 2. Agree | 3. Disagree | 4. Strongly Disagree |
| | Rating | | |
| a. There was more than 50% increase in profit for the past 3 years | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| b. There was a decline in revenue for the past 3years | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| c. There was an increase in employment for the past 3 years | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| d. There was huge retirement/ retrenchment from the past 3 years | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| e. Enabling internal communication across processes and stakeholders | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| f. There number of employees have been constant up to date | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

SECTION D-RISKS IDENTIFICATIONS AND CONTROLS

23. Rate the following by using the following legends

Ranking Key:1.Agree 2. Tend to Agree 3. Tend to disagree 4. Disagree

| A | Do you have controls measures to safe guard your assets | Rating |
|---|---|---|
| B | Regular depositing of cash | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| C | Customers deposit cash into the company's account no cash payment is accepted | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| D | Regular follow up on customers for payments | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| E | Access level Restrictions to the premises | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| F | Follow-up on customers' complaints | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| G | Securities(CCTV, biometric scanner, locks at the premises) | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

24. Do You have procedures in place to identify the following Risks

Tick the appropriate option

| | | | | |
|---|---|-------------------------------|---|-----------------------------|
| A | Strategic risks(Business Vision and mission) | 1Yes <input type="checkbox"/> | 2 | No <input type="checkbox"/> |
| B | Operational Risks (Risks that affects business operations) | 1Yes <input type="checkbox"/> | 2 | No <input type="checkbox"/> |
| C | Reporting Risks (Financial disclosures) | 1Yes <input type="checkbox"/> | 2 | No <input type="checkbox"/> |
| D | Compliance Risks (Adherence to policies and procedures) | 1Yes <input type="checkbox"/> | 2 | No <input type="checkbox"/> |

| 26. Do you make use of the following measures for the risk identified | | |
|--|-----------------------|---|
| Rate the following by using the following legends | | |
| Ranking key : Strongly disagree, 2-Disagree , 3-Agree , 4-Strongly Agree | | |
| A | Accept the risk | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| B | Avoid the risk | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| C | Transfer the risk | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| D | Mitigate the risk | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| E | Exploit the risk | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| F | Other(Please specify) | |

| 27. Do you have the following in place at your entity? | | | |
|--|--|---------------------------------|--------------------------------|
| Tick the appropriate option | | | |
| A | Is your business insured? | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| B | Do you maintain Cash reserves? | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| C | Do you have security system in place? | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| D | Do you have health and safety in place | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| E | Do you attend to employee harassments and complaints effectively | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |

| SECTION E: Ecological sensitive and environmental issues questions | | | |
|---|-----------------|---------------------------------|--------------------------------|
| 28. At your company does your worker make use of the following? | | | |
| Tick Appropriate | | | |
| a | Paints | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| b | Varnishes | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| c | Brushes | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| d | Paint strippers | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| e | Glues | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |

| 28.1 If answered yes from question 28 above | | | |
|---|---------------------|---------------------------------|--------------------------------|
| Do you provide the employees with the following (Tick appropriately) | | | |
| a | Medical aid Kit | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| b | Protective clothing | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| c | Fresh Milk | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |

29. In your organisation do you do you have policies and procedures that stress the importance of recycling and waste management?

1 Yes 2 No

| 30. Does your business operation affected by the following transport issues ? | | |
|---|---|---|
| Rate the following by using the following legends | | |
| Ranking Key: 1. Strongly Agree 2. Agree 3. Disagree 4. Strongly Disagree | | |
| a) | Congestion and other obstacles to transportation created by an excessive concentration of automobile | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| b) | Insufficient/poor quality of public transportation and infrastructure distribution e.g Networks of roads and railways | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| c) | Decline in convenience and comfort of public transportation due to overcrowded conditions | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| d) | Environmental destruction e.g air and noise pollution caused by transit vehicles | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| e) | Frequent incidents of accidents and disasters caused by excessive numbers of transportation vehicles | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| f) | No transportation problem in particular | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |

| 31. Does your business operation affected by the following most pressing urban environmental challenges? | | |
|--|--|---|
| Rate the following by using the following legends | | |
| Ranking Key: 1. Strongly Agree 2. Agree 3. Disagree 4. Strongly Disagree | | |
| a) | Increase in Waste | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| b) | Air and noise pollution | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| c) | Decline in convenience and comfort of public transport due to overcrowded conditions | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| d) | Disappearance of greenery and natural environments | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| e) | Urban extension and deterioration of urban environments | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| f) | Maintenance of water supply, sewages and sanitation systems | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> |
| g) | Other (Please specify) | |

Appendix E: Plagiarism Test Results

Appendix F: Informed consent to conduct an empirical research

INFORMED CONSENT TO CONDUCT AN EMPIRICAL RESEARCH

Dear Participant

The attached questionnaire represents a survey of 60 respondents in 59 different organisations. The study intends to investigate the entrepreneurial risk management challenges of selected small and medium enterprises in the maritime industry in Cape Town where the outcome can assist with better understanding and improve risk management techniques implementation to increase business performances. The survey is part of a research project towards the completion of the Master's degree which will be submitted to the Cape Peninsula University of Technology.

Your agreement to participate in the questionnaire is voluntary. You are hereby assured that all information will be treated confidentially and participation is voluntary. Should you wish to withdraw for any reasons at any time during the study, you are welcome to do so without any objection to your decision. All findings will be dealt with anonymously. You are also allowed to omit any questions you don't feel comfortable answering.

Instructions are provided on each page of the questionnaire and should take between 10 and 15 minutes to complete.

For further inquiries, you may contact me on

Cell: 0833170667 or Via email: pchikwati931@gmail.com or

My Supervisor: Prof. J. Dubihlela on 021 650 3266/3477 or Via email: DubihlelaJ@cput.ac.za

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 G: Draft Article

Entrepreneurial Risks within the Maritime SMEs Sector of South Africa: An eco-Entrepreneurship Perspective

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ABSTRACT

Maritime SMEs play a key role in South Africa's results-driven approach to economic development, involving various stakeholders, code named 'Operation Phakisa'; whose main agenda is to address the triple challenges of poverty, unemployment and inequality. It is disdained that Maritime SMEs face the dilemma of building good operating and governance structures while trying to foster eco-entrepreneurial spirit. Simply put, eco-entrepreneurship helps guide sustainable business operations driven by environmentally sensitive entrepreneurs or "eco-entrepreneurs". At the back of this is the fact that sordidly high numbers of entrepreneurs are in dissolute situations struggling to manage their business operations' sustainability agendas due to high costs of such ecological activities along the coastline, or simply because of failure to manage entrepreneurial risks. It is acknowledged that Generation-Z (Gen-Z) entrepreneurs (the teens, tweens and young adults born between 1995 and 2010) are more dynamic, have a high risk appetite and are more aggressive in wrestling entrepreneurial risks. Agents, organisations and investors targeting Gen-Z thus need to have organic corporate social investment initiatives and strive to invest in their cause, and not simply to polish organizational images. A quantitative research approach was conducted to collect data by way of a structured questionnaire. The purposive snowball sampling method was used to identify the sample of Gen-Z employees working in selected maritime SMEs in Cape Town. Participants were identified through their friends and from the alumni records at a local university from which they graduated. Gen-Z acknowledges maritime SMEs as exposed to substantial amount of entrepreneurial risks, deterring overall entrepreneurial performance, especially from the technological perspective. Gen-Z perceives the risk appetite of younger employees as a solution to the development of eco-entrepreneurial sustainability of maritime SMEs. In spite of their lack of experience, they think they have information at their fingertips; and that they are increasingly aware of social issues and related environmental risks. The results also indicate that although maritime SMEs have written policies that incorporate optimum levels of training on ecological importance, poor ethical standards are still prevalent within their operational environments. Surprisingly, Gen-Z perceive social environment as an important factor to them within the business community. The findings in this study supports ongoing body of

research that project Gen-Z as having potential to seize opportunities, find solutions and possibly help eradicate vulnerability issues and enhance entrepreneurial risk mitigation. This paper adds value to the domain of Gen-Z and maritime SMEs focused on the ocean economy, and also propose possible future studies.

Keywords: *Generation-Z, Maritime SMEs, South Africa, Eco-entrepreneurship, Environmental risks, Oceans economy.*

INTRODUCTION

The world is characterized by two critical worldwide wonders, globalization and global warming, different eco-entrepreneurs who hold a typical perspective for resolving key environmental challenges and ensuring sustainable development. These kinds of eco-entrepreneurs are available to provide solutions to environmental problems. The word eco-entrepreneurs were derived from the word entrepreneur while eco-entrepreneurs focus more on green economy and environmental friendliness (Shishcan & Kaim, 2017).

These two types of entrepreneurs' share common history, challenges and perceptions. Some of the similarities they possess are economic importance, trials and bottlenecks, irrespective of different industries they are operating in. Their experience in social economic environment drives most entrepreneurs to start-up small enterprise to enhance social and economic change other than an instrument for achieving economic goals. Most of the entrepreneurial businesses are generated based on new discoveries and innovations (Haan, 2010). The main factor affecting entrepreneurial business in the South African economy is risk management challenge (Dickson & Giglierano, 1996). Naldi, Nordqvist, Sjöberg, and Wiklund, (2007) pointed to the fact that evidence that support the relationship between entrepreneurship and risk taking is very limited, as entrepreneurs do not take higher risk as compared to managers. The entrepreneurs were characterized as risk avoiders and risk optimizers.

The main aim of this paper is the perception of generation Z on eco-entrepreneurial risk management. Generation Z possesses entrepreneurial mind set, eager to face the environmental challenges and taking responsibility by starting business venture. The entrepreneurial skills, includes creativeness, hardworking and innovations (Sparks & Honey, 2018). The latter serves as

cornerstone that drives the Generation Z cohort to introduce balance on eco-friendliness and introduction of green economy (Shishcan & Kaim, 2017).

But who are the generation Z? Gen-Z also known as Tweens refers to individuals who were born between year 1995 and 2009. Due to exposure of technology and social networks, this generation can do well in the entrepreneurial creativity to save the world from the triple bottom challenges (unemployment, poverty and high standard of living) (Bolser & Gosciej, 2015)

Starting a business is not an easy task as it requires a lot of thinking and sacrifices as well as taking risks. Williams and Page (2011) noted that Generation Z value the importance of security, have confidence in what they are doing, very optimistic and they are ready to start-up the venture (being on mission). Introducing Generation Z to the marine industry will be of great important, as this generation is of most technological advanced. The entrepreneurial business can also be recognized as Small and Medium enterprises (SMEs). SMEs business ventures arise as a result of entrepreneurial practices and conceiving new market opportunities (Mbhele, 2012). There is a huge emergence of SMEs all over the world. Despite of the vast emerge of SMEs, the SMEs are failing at the start-up phase due to risks that are not properly managed. Many researchers have noted that SMEs in South Africa's greatest weakness is the do not implement good risk management techniques. The owner/managers do not effectively manage enterprise risks due to lack of knowledge, lack of awareness and the value they place on risk identification and control environment (Smit & Watkins, 2012). This will give rise to risks which have a greater probability to realise which ultimately more often than not adversely influencing the performance of SMEs. It is not mandatory for SMEs to implement the structured risk management plan in their ventures but it is of utmost important to have one in place in order to survive (Smit, 2012). The main aim of this paper is to see the impact of Generation z on entrepreneurial risks on Small and medium Enterprises operating in the Maritime industry. The layout of this paper will be as follows: Literature review, Research methodology (data analysis) and conclusion.

PURPOSE OF STUDY

The aim of this paper is to determine the sensitivity owners, managers and employees to the entrepreneurial risks and their behaviour in the entrepreneurial environment. To determine the individual reaction towards entrepreneurial risks in the ecological environment they operate in (Maritime industry). This can be measured by looking at the strategies used by the owners, managers and employees on risk assessment, identification and prioritisation.

LITERATURE REVIEW

Some definitions of entrepreneurship

The word entrepreneurship is considered comprehensive; many researchers such as Mbhele (2012) and, Cuervo *et al.* (2007) have same interpretation, views, opinion and definition of entrepreneurship in the academic dominion. According to Davidsson (2004) research on entrepreneurship definition is considered exciting, fascinating, frustration and important. Davidsson (2005) considered that it is frustration due to a lack of understanding and meaning of the word entrepreneurship. Palich and Bagby (1995) are of the perception that entrepreneurs are a way of engaging into a risky behaviour. Researchers such as Scott (2006) and Grossmann (2009) argues that, this behaviour encompasses both the extension of existing business through new discoveries and innovation as well as the establishment of new organisation.

Mbele (2012) defined entrepreneurship as an activity that involves evaluation, discovery and utilization of available opportunities to introduce new goods and services. Thompson (1999) defined entrepreneurship as a way of exploiting available resources to achieve a certain opportunity and growth. The entrepreneurs are perceived a way of using available opportunity with the attendant to take risks (Norton & Moore, 2006). Hisrich (1990) defined entrepreneurship as the process of producing something different with significance by devoting the necessary time and effort; assuming the accompanying financial, psychological, and social risks; and receiving the resulting rewards of monetary and personal satisfaction. Considering the above definition a conclusion has been drawn by the researcher, that entrepreneurship merely referring to the

utilisation of available resources in whether establishing a new venture or growth in the existing venture in a different line of profitable opportunity.

The concept of eco-entrepreneurship

Chemicals, land changes, entrepreneurial activities such as business activities will lead to environmental change either good or bad. Global warming, acid rain, reduction of natural resources, waste management, green consumerism; and pollution including both air and noise are the main environmental challenges that are faced in today's economy (Gupta, 1995). The increase in environmental disturbances and interferences is termed environmental risks (Allan, Adam & Carter, 2000). This can include both large and small scales interferences.

There is a concern on the eco-friendliness of the business operating in the maritime industry. Eco-entrepreneurship is defined as the environmental friendly way of doing business (Kainrath, 2009). In other words, the way of doing business without causing any harm or changes to the environment and surrounding such as plants, animals and water. Thus less disturbances to soil, plants and animals in the exposed environment. Manesh and Rialp-Criado (2018) identifies eco-entrepreneurs as entrepreneurs who seek to promote eco-friendly concepts, business operations and technologies. Their main focus is on environmental friendly way of operation, by trying to minimise those ideas and products leads to environmental degradation.

Steurer (2013) elaborated that; eco-entrepreneurship's main agenda is to solve environmental problems, to make sure that resources are used effectively and efficiently. Identifying environmental challenges and considers them as gaps of business opportunities, closing them by establishing new market ventures.

To curb the above mentioned environmental challenges business should consider follow designated policies and procedures in their business in either production or strategic operations as a whole. Gladwin and Nordstrom (1992) noted that, it is management's first priority to identify and assess environmental effects of the business operation, and ensure that the business operation do not have any major effects in the business environment. In case of major effects, to identify the

best way to reduce those impacts, for example if in production, should consider the implementation of most advanced equipment that is environmental friendly.

Shishcan and Kaim (2017) identify the concept of green economy as the other concept of eco-entrepreneurship. The green economy entails the utilization of resources efficiently taking into considering the health of human and nature as well as maintaining natural environment. Demuth (2014) added that, the natural environment preservation is encouraged to reduce environmental risks for the future generation. The entrepreneurs have to be cautious when using resources to ensure ecosystem silence.

SMEs experiences great challenges to pursue environmental friendly business. These challenges include limited financial access, lack of business skills and unpleasant business environment (Bymolt *et al.*, 2015). In the maritime industry, the nature of businesses makes it complicated to fully achieve the ecological friendliness. To support the latter, Schaper (2002) mentioned that, the maritime industry most business is associated with waste, noise pollution and resources that produce dirty substances. In this case, business activities can closely monitored to ensure environmental friendliness

The entrepreneurial risk and eco-friendliness leaves a lot to be desired in the business realm. This is attributed by higher level of uncertainties and risk challenging. The entrepreneurial risk management is of crucial important in the newly emerged ventures and small enterprises in all industries. Woods and Dowd (2008) stressed to the point that, the best way to deal with entrepreneurial risk is by implementing a strong risk management process at an early stage of the business. Risk management is another important factor that has to be implemented at business foundation stage.

Entrepreneurial risks

Risks can be noted as the likelihood of financial and economic gain or losses due to unforeseen events during the business operation. Risk is something that can be somewhat predictable using the business past experience (Ekwere, 2016). Ching and Colombo (2014) recognized risks as the

opportunity basis for value establishment and no matter how businesses try; it is not possible to escape the challenges completely. Risk definition varies with the area of focus and Purpose. Šotić and Rajić (2015) defined risk as the probability, encumbrance of unwanted circumstances as well as expected damages. It is a combination of likelihood, significance, causal scenario and affected population.

The types of risks; includes but not limited to financial risks, business risk, compliance risk, operation risk, human resource risks. Successful businesses always have controls in places to mitigate eliminate and prevent risks depending on the type of risks that are associated with the business that is inherent, control and detective risks. Risk can only be minimized, being assessed and not avoided. Due to the nature, high volumes and avoidance of risk, most of the companies demonstrated the necessity of structured risk management due to financial scandals and misplacements (Ching & Colombo, 2014).

Norton and Moore (2006) recognised the prospect theory as a risk theory. Prospect theory relates to the individual's attitude towards risks taking. These include risk averse or risk seeking. This theory applies to entrepreneurs as some are reluctant in taking risks while others are not hesitant in taking risks (Burmeister-Lamp, Lévesque & Schade, 2012). Most of entrepreneurs are of the perceived that there is a direct relationship between risk appetite and potential outcomes either gain or losses (Norton & Moore, 2006).

Banham (2010) noted that SMEs are most vulnerable to risk challenges, because insufficient resources to put proactive measures in place. The author further stated that resources such as skilled labour and financial constraints are available in limited capacity. Considering scarcity of resources the owner and managers employed scarce resources to meet their short term goals. The external factors will be dealt with when arises. It is crucial for the business to focus on building strong base as it will lead to high reward. The awareness and knowing what the business is facing, it will help management to implement an effective risk management plan. The emerging of risks has a negative impact on business performance.

McAdam and Baile (2002) indicated that business performance is affected by the internal factors, external factors and environmental changes at large. These include market instability, technological and economic instability (Dubihlela, 2015). These factors need to be closely monitored to enhance the business performances. Much attention and models on business environment have been developed to focus on large entities. Hence less attention has been focused on SME (Banham, 2010). Therefore, this gives rise to high environmental risk on SMEs hence poor performance.

It is of utmost important for the business operating in the maritime industry to consider risk assessment and disaster management before starting an organisation as the environment is considered a high risk area. It always noted that high risk area leads to high return that is most profitability (Horne & Wachowicz, 2008:555). Manaf and Anwar, (2017) defined risk assessment as a structured process that identify hazards and ensures that all risks that might affect the business operation are reduced to an appropriate level in an effective and efficient manner. It is further noted that the business owners have to list all the risks that a business might encounter during the process. These include healthy and safety and environmental issues as these are regarded as the root of major problems that have impacts on business performance and existence. The risk assessment also addresses at early business stage the risks, their importance, occurrence, the environmental impact and at large to take the appropriate measures to mitigate or eliminate all identified risks through the risk assessment system. The risk assessment structure also sets the procedures that need to be taken in case of emergencies to avoid high risks of accidents. This will help to improve workers and business safety measures.

However it is still a challenge since most SME owners are ignorant towards implementing proper risk management strategies. This is due to lack of knowledge since they do not have necessary skills to implement and lack of funds to employ skilled labour with expertise in that area. Therefore, poor risk management will lead to poor business performance. Generation Z entrepreneurial comes as a life saver to the economic crisis in South African economy. The Generation Z's technological advancement will come as a break through to most of business. Brodeur et al. (2008) support that, generation Z's are very skilled and more talented due to high technological advantages.

The influence of Generation Z

The latest generation of young and energetic individual that are still capable of innovation, entrepreneurial and bring capital changes is Generation Z (Tweens). The Tweens value creativity, admire innovation, and are not afraid to work hard. Creativity, innovation and hardworking resembles quality of successful entrepreneurs. Brodeur *et al.* (2008) mentioned that, a lot of changes were brought during this phase, including working towards green economy and engaging in environmental friendly businesses activities. Tweens managed to solve a lot of challenges, these includes “economic uncertainties, and loan crisis in 2008”.

During year 2008, a lot of entrepreneurs suffered a great loss due to inflation and most of entrepreneurs closed down. The businesses who managed to adjust to those difficulties are only those with strong backgrounds and strong entrepreneurial mind-set. They managed to come in with new business ideas and strategies to resolve all the problems that were not addressed by the previous generations. Bolser and Gosciej (2015) noted that this generation created a concussive working environment, through technological advancement. Technological advancement marks as the bases of an opportunity for high research and innovation. Research and innovation is very important in the business realm as people will gain knowledge and get a better understanding on how to run a successful business.

RESEARCH DESIGN

Sample and sampling

Participants in the study consisted of young owner, managers and employees hold top management positions, and were born after 1995, working in small business in the Maritime industry. Both male and female participants were contacted. The purposive snowballing method was used to identify the sample of Gen-Z employees working in selected maritime SMEs in Cape Town. 51 participants were selected from twenty different enterprises. This was the most convenient sampling method considering the nature of the study. Snowballing was the best sampling method considering the finite population under study (Goodman, 1961). Participants

were identified through their friends, referral and from the alumni records at a local university from which they graduated.

Questionnaire and data collection

Questionnaires were used as a data collection instrument. The structured questionnaires were designed to obtain valid and relevant data from the respondents. Questionnaires were developed as an instrument to collect data from various individuals. This tool was used as a standard to determine the sensitivity of Generation Z to the entrepreneurial risks and their behaviour in the entrepreneurial environment. To determine the individual reaction towards entrepreneurial risks in the ecological environment operate in Maritime industry. This can be measured by looking at the strategies used by the young generation on risk assessment, identification and prioritisation.

The questionnaire comprised five sections, structured in the following manner section A- Biographical information, Section B-Eco-friendliness, Section C- performance, Section D- Risks and control measures and E-Ecological sensitiveness and environmental issues. It also included a covering letter, informing participants about the ethical considerations considered, emphasising on issues of confidentiality and anonymity. It also explaining study purposes and providing instructions on how to answer the various sections of the questionnaire. The researcher collected data from 51 respondents. The captured data was analysed using the Statistical Package for Social Sciences (SPSS), version 22.0 for Windows

DISCUSSION OF RESULTS

Sample description

The survey was completed by the employees aged 24 years and below. Most of the employees were employees possess different top management position eg supervisors, fleet managers but to mention few (these were represented by other in all tables, see table 1 below), three managers and one owner. This is presented by the table below:

Table 1: Position of respondents

| | | Frequency | Valid Percent |
|-------|-------------------|-----------|---------------|
| Valid | Owner | 1 | 2 |
| | Manager | 3 | 6 |
| | Owner and Manager | 0 | 0 |
| | Senior Management | 0 | 0 |
| | Other | 47 | 92 |
| | Total | 51 | 100.0 |
| Total | | 51 | |

Table above indicated from the tweens approached, few of them obtained top management position; most of them are top management employees who have proper knowledge about the business as a whole, however they do not have rights to make strategic decision concerning risk management plans. Their duties are to oversee the business process and monitor if the business is running according to plan. As indicated by Schwulst, (2014), risk management techniques are implemented by top owners and managers in the organisation. This shows that employees with seniority position have no say in this decision making. Their duty is to monitor and follow the available procedures.

Regression Analysis.

The table below shows the finding results from the surveys contacted. Having risk management as a dependent variable and Lack of skills, Lack of resources, Lack of awareness and Lack of knowledge (independent variables).

Table 2: Model summary

| Model Summary | | | | |
|---------------|---|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |

| | | | | |
|--|-------------------|------|------|--------|
| 1 | .731 ^a | .534 | .494 | .78162 |
| a. Predictors: (Constant), Lack of skills, Lack of resources, Lack of awareness, Lack of knowledge | | | | |

The r square measures the proportion of the total variability in the dependent variable that explains the independent variable in the model. The above shows that approximately 50% in total variability in poor risk management is explained in the model.

Table 3

| ANOVA ^a | | | | | | |
|--|------------|----------------|----|-------------|--------|------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 32.250 | 4 | 8.062 | 13.197 | .06 ^b |
| | Residual | 28.103 | 46 | .611 | | |
| | Total | 60.353 | 50 | | | |
| a. Dependent Variable: Poor risk Management | | | | | | |
| b. Predictors: (Constant), Lack of skills, Lack of resources, Lack of awareness, Lack of knowledge | | | | | | |

The F co-efficient in the ANOVA model for the independent variable is note therefore this signifies that non other independent variables has an impact to predict the dependent variable as per this model. Therefore, the null hypothesis applies. The null hypothesis for this model is the model has no explanatory power as all the co-efficient of the independent variables are zero. Therefore, one can conclude that none of the variable can be used to predict dependent variable. By comparing the significant value denoted sig. the model should not be rejected as the sig. of 0.06 is greater than 0.05. Therefore there are explanatory values

Table 4

| T-test Indicators | | | | | | |
|---|-------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .356 | .331 | | 1.077 | .287 |
| | Lack of resources | .432 | .112 | .415 | 3.848 | .000 |
| | Lack of knowledge | .190 | .154 | .190 | 1.232 | .224 |
| | Lack of awareness | .298 | .148 | .305 | 2.005 | .051 |
| | Lack of skills | .017 | .038 | .046 | .454 | .652 |
| a. Dependent Variable: Poor risk Management | | | | | | |

This model highlights the relationship between the dependent and independent variables. Considering the independent variable lack of resources, t-statistics is 3.848 and sig. is .000. In this circumstance the null for the independent variable is 0 it have helps to predict the dependent variable. Lack of knowledge, t-is 1.232 and sig. is .224. The sig. is greater than 0.05 therefore it does not help to predict the dependent variable .Lack of awareness, t- is denoted by 2.005 and sig. 0.051, the sig is greater than 0.05 therefore it does not contribute positively in the prediction of the poor risk management. Lack of skills have a t-value of 0.454 and significant of 0.652 that is greater than 0.05, this implies that it does not have great impact and relationship with dependent variable.

Considering the above explanation of the t and sig. values one can conclude that, poor risk management is greatly attributed by resources, and lack of skills. However, lack of resources have greatest impact as null it shows significant values.

Shunmugam and Rwelamila (2014) regarded lack of skills as they main impact of risk management implementation. In addition to that, Abor and Quartey (2010) identifies lack of finance, managerial skills, equipment and technology as the the greatest challenge that leads to poor risk management. Following the above literature, it is evident that, all the above mentioned drawbacks contributed to the poor risk management implication on SMEs operating within the maritime industry, with lack of resources and awareness as the main cause.

Considering standardized and unstandardized co-efficient, they are all positive. Therefore, considering unstandardized B the relationship will be like the higher the co-efficient of independent variable the greater the effect, on dependent variable. For example the model shows that the highest factor is lack of resources with 0.432 followed by 0.298 lack of awareness, then lack of knowledge 0.190 and lack of skills 0.17. In that order, poor risk management is highly attributed by lack of resources, lack of awareness, lack of knowledge and the lease factor is lack of skills. The higher the lack of resources, knowledge awareness, skills the higher the poor risk management implemented. However, considering the above all factors are very important as they all have a hand on poor risk management techniques in maritime SMEs.

In addition to the above, the model predicts that for every 0.4 increase in lack of resources will leads to 0.4 increase in poor risk management. The same will also apply to the other factors assuming that all other factors are holding all other independent constant.

Table 5: Correlations

| Correlations | | | | |
|--|---------------------|---|--|--|
| | | have policies and procedures that stress the importance of recycling and waste management | Congestion and other obstacles to transportation | Environmental destruction, e.g. air and noise pollution caused by transit vehicles |
| have policies and procedures that stress the importance of | Pearson Correlation | 1 | .441** | .214 |
| | Sig. (2-tailed) | | .002 | .144 |

| | | | | |
|--|---------------------|--------|------|------|
| recycling and waste management | N | 50 | 48 | 48 |
| Congestion and other obstacles to transportation | Pearson Correlation | .441** | 1 | .056 |
| | Sig. (2-tailed) | .002 | | .704 |
| | N | 48 | 49 | 49 |
| Environmental destruction, e.g. air and noise pollution caused by transit vehicles | Pearson Correlation | .214 | .056 | 1 |
| | Sig. (2-tailed) | .144 | .704 | |
| | N | 48 | 49 | 49 |

** . Correlation is significant at the 0.01 level (2-tailed).

The results indicated positive correlation of eco-entrepreneurship established by the Generation Z. The correlation results show that there is a strong positive relationship as all the points are above the minimum as the significant figure can be shown by an amount ≥ 0.1 . These results show that the Tweens tries their best to support eco-entrepreneurship, by avoiding environmental destructions, and waste management. The eco-friendliness could be due to technological advancement of the Generation Z entrepreneurs. This is supported by Bolser and Gosciej (2015) when stating that, young generations created a concussive working environment due to high experienced in technological know-how.

Conclusion

This research study placed emphasis on the status of entrepreneurial risk management on SMEs operating within the maritime industry. Based on the literature review that was conducted it is evident that SMEs do not follow structured system of risk management. This was supported by the results obtained from the surveys conducted as discussed in the previous chapter. It is apparent that most of the SMEs are not aware of formal risk management frameworks that can be implemented in their businesses. This is due to lack of experience, awareness and insufficient knowledge among SME owner or managers. However they did make use of informal risk management techniques which were deemed as effective in mitigating and/or eliminating risks, but does not cover all the risk that the business encountered.

Apart from the above, it is definite that the businesses are environmental friendly as indicated by the results indicated. More emphasis needs to be placed on risk management.

Implications

The researcher is confident that the following should be considered to encourage Generation Z entrepreneurs to encourage their management to implement structured risk management: Seminars to be educated about the importance of having a structured risk management in place, government to offer training to all small business owners, managers and entrepreneurs, SMEs should also be open minded in order for them to keep up with the economic and environmental changes and management and employees of SMEs should acquire the necessary skills to run and manage their businesses in order to have effective control environment.

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Appendix H: Descriptive Statistics

Frequencies

[DataSet1] C:\@Data\Research\Research PostGraduate\MTech\CPUT\2018\ChikwatiPhyllis\SME Data.sav

Frequency Table

| | Organization Name | | | |
|--|-------------------|---------|---------------|--------------------|
| | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1 | 1.9 | 1.9 | 1.9 |
| Atlantic Boat Club | 1 | 1.9 | 1.9 | 3.8 |
| Balducci Restaurant | 1 | 1.9 | 1.9 | 5.8 |
| Blue Look | 1 | 1.9 | 1.9 | 7.7 |
| Cafe Alfredo | 1 | 1.9 | 1.9 | 9.6 |
| Combined Fishers | 1 | 1.9 | 1.9 | 11.5 |
| Combined Fishers Boatyards | 1 | 1.9 | 1.9 | 13.5 |
| Damen Shipyards | 1 | 1.9 | 1.9 | 15.4 |
| Edina Rempress Printing | 1 | 1.9 | 1.9 | 17.3 |
| Fish on the Rocks cc | 1 | 1.9 | 1.9 | 19.2 |
| Freshly Crafted | 1 | 1.9 | 1.9 | 21.2 |
| Gino's Fast Food | 1 | 1.9 | 1.9 | 23.1 |
| Glory Bay Trade | 1 | 1.9 | 1.9 | 25.0 |
| Goltek Computing | 1 | 1.9 | 1.9 | 26.9 |
| Green People organic food | 1 | 1.9 | 1.9 | 28.8 |
| Heritage Charter | 1 | 1.9 | 1.9 | 30.8 |
| Honest Chocolate CC | 1 | 1.9 | 1.9 | 32.7 |
| Hun Sushi | 1 | 1.9 | 1.9 | 34.6 |
| Imvusa Corrosion Control | 1 | 1.9 | 1.9 | 36.5 |
| Inkosi Keta Marine | 1 | 1.9 | 1.9 | 38.5 |
| JC Brasserie & Pub | 1 | 1.9 | 1.9 | 40.4 |
| Liquor Island | 1 | 1.9 | 1.9 | 42.3 |
| Lookout Deck | 1 | 1.9 | 1.9 | 44.2 |
| Majos Tafas Bar | 1 | 1.9 | 1.9 | 46.2 |
| Marisol | 1 | 1.9 | 1.9 | 48.1 |
| National cape suppliers CC | 1 | 1.9 | 1.9 | 50.0 |
| Nauticat Charters | 1 | 1.9 | 1.9 | 51.9 |
| Ocean Fisheries | 1 | 1.9 | 1.9 | 53.8 |
| Ocean Jewels | 1 | 1.9 | 1.9 | 55.8 |
| Ocean Lobster | 1 | 1.9 | 1.9 | 57.7 |
| Peche Fast Foods | 1 | 1.9 | 1.9 | 59.6 |
| Pescaluna | 1 | 1.9 | 1.9 | 61.5 |
| Plaza fast foods | 1 | 1.9 | 1.9 | 63.5 |
| Porto Rico Fisheries | 1 | 1.9 | 1.9 | 65.4 |
| Quick Cash Limited (Loans and Savings) | 1 | 1.9 | 1.9 | 67.3 |
| Rosetta Roastery | 1 | 1.9 | 1.9 | 69.2 |
| Sanmarool | 1 | 1.9 | 1.9 | 71.2 |
| Sea Freeze (pty) Ltd | 1 | 1.9 | 1.9 | 73.1 |
| Seattle Coffee Co | 2 | 3.8 | 3.8 | 76.9 |
| Sizzlers | 1 | 1.9 | 1.9 | 78.8 |

| | | | | |
|------------------------|----|-------|-------|-------|
| Snokies | 1 | 1.9 | 1.9 | 80.8 |
| Super body Repairs CC | 1 | 1.9 | 1.9 | 82.7 |
| The Greek Fisherman | 1 | 1.9 | 1.9 | 84.6 |
| Vovo Telo | 1 | 1.9 | 1.9 | 86.5 |
| Waste Busters | 2 | 3.8 | 3.8 | 90.4 |
| Water Front Charley | 1 | 1.9 | 1.9 | 92.3 |
| Waterfront adventurers | 1 | 1.9 | 1.9 | 94.2 |
| Yacht Club | 1 | 1.9 | 1.9 | 96.2 |
| Yacoob Yatchts | 1 | 1.9 | 1.9 | 98.1 |
| Zebro's | 1 | 1.9 | 1.9 | 100.0 |
| Total | 52 | 100.0 | 100.0 | |

Have Hiring Policies and Procedures

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 49 | 94.2 | 96.0 | 96.0 |
| | No | 2 | 3.8 | 3.9 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

Nationality

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------------|-----------|---------|---------------|--------------------|
| Valid | South Africa | 46 | 88.5 | 93.9 | 93.9 |
| | Zimbabwe | 3 | 5.8 | 6.1 | 100.0 |
| | Total | 49 | 94.2 | 100.0 | |
| Missing | System | 3 | 5.8 | | |
| Total | | 52 | 100.0 | | |

Other

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | | 50 | 96.2 | 96.2 | 96.2 |
| | Congo | 1 | 1.9 | 1.9 | 98.1 |
| | Portuguese | 1 | 1.9 | 1.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

Industry

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--|-----------|---------|---------------|--------------------|
| Valid | Fishing | 8 | 15.4 | 19.0 | 19.0 |
| | Boat Building | 3 | 5.8 | 7.1 | 26.2 |
| | Manufacturing | 2 | 3.8 | 4.8 | 31.0 |
| | Construction | 2 | 3.8 | 4.8 | 35.7 |
| | Tourism & Hospitality | 23 | 44.2 | 54.8 | 90.5 |
| | Marine protection and governance service | 1 | 1.9 | 2.4 | 92.9 |
| | Information & communication | 2 | 3.8 | 4.8 | 97.6 |
| | Financial & Insurance | 1 | 1.9 | 2.4 | 100.0 |

| | | | | |
|---------|--------|----|-------|-------|
| | Total | 42 | 80.8 | 100.0 |
| Missing | System | 10 | 19.2 | |
| Total | | 52 | 100.0 | |

| | | Other Industry | | | |
|-------|----------------------------------|----------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 43 | 82.7 | 82.7 | 82.7 |
| | Corrosion control | 1 | 1.9 | 1.9 | 84.6 |
| | Fast foods | 3 | 5.8 | 5.8 | 90.4 |
| | Private members club | 1 | 1.9 | 1.9 | 92.3 |
| | Recreational Boating and Fishing | 1 | 1.9 | 1.9 | 94.2 |
| | Retail | 1 | 1.9 | 1.9 | 96.2 |
| | Waste management | 2 | 3.8 | 3.8 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

| | | Number of employees | | | |
|---------|--------|---------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 3 | 3 | 5.8 | 5.9 | 5.9 |
| | 4 | 3 | 5.8 | 5.9 | 11.8 |
| | 5 | 5 | 9.6 | 9.8 | 21.6 |
| | 6 | 5 | 9.6 | 9.8 | 31.4 |
| | 7 | 1 | 1.9 | 2.0 | 33.3 |
| | 8 | 1 | 1.9 | 2.0 | 35.3 |
| | 10 | 5 | 9.6 | 9.8 | 45.1 |
| | 11 | 1 | 1.9 | 2.0 | 47.1 |
| | 12 | 2 | 3.8 | 3.9 | 51.0 |
| | 14 | 2 | 3.8 | 3.9 | 54.9 |
| | 15 | 1 | 1.9 | 2.0 | 56.9 |
| | 16 | 1 | 1.9 | 2.0 | 58.8 |
| | 17 | 1 | 1.9 | 2.0 | 60.8 |
| | 20 | 1 | 1.9 | 2.0 | 62.7 |
| | 22 | 1 | 1.9 | 2.0 | 64.7 |
| | 23 | 1 | 1.9 | 2.0 | 66.7 |
| | 24 | 1 | 1.9 | 2.0 | 68.6 |
| | 31 | 2 | 3.8 | 3.9 | 72.5 |
| | 34 | 2 | 3.8 | 3.9 | 76.5 |
| | 35 | 1 | 1.9 | 2.0 | 78.4 |
| | 40 | 2 | 3.8 | 3.9 | 82.4 |
| | 50 | 1 | 1.9 | 2.0 | 84.3 |
| | 51 | 1 | 1.9 | 2.0 | 86.3 |
| | 58 | 1 | 1.9 | 2.0 | 88.2 |
| | 65 | 1 | 1.9 | 2.0 | 90.2 |
| | 70 | 1 | 1.9 | 2.0 | 92.2 |
| | 78 | 1 | 1.9 | 2.0 | 94.1 |
| | 90 | 1 | 1.9 | 2.0 | 96.1 |
| | 107 | 1 | 1.9 | 2.0 | 98.0 |
| | 130 | 1 | 1.9 | 2.0 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

Current Position

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Owner | 8 | 15.4 | 16.7 | 16.7 |
| | Manager | 21 | 40.4 | 43.8 | 60.4 |
| | Owner and Manager | 7 | 13.5 | 14.6 | 75.0 |
| | Senior Management | 8 | 15.4 | 16.7 | 91.7 |
| | Middle Management | 4 | 7.7 | 8.3 | 100.0 |
| | Total | 48 | 92.3 | 100.0 | |
| Missing | System | 4 | 7.7 | | |
| Total | | 52 | 100.0 | | |

Other Position

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------------|-----------|---------|---------------|--------------------|
| Valid | | 49 | 94.2 | 94.2 | 94.2 |
| | Consultant Manager | 1 | 1.9 | 1.9 | 96.2 |
| | Fleet manager | 1 | 1.9 | 1.9 | 98.1 |
| | Part Owner | 1 | 1.9 | 1.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

Years in operation

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | .3 | 1 | 1.9 | 2.0 | 2.0 |
| | 1.0 | 2 | 3.8 | 3.9 | 5.9 |
| | 3.0 | 5 | 9.6 | 9.8 | 15.7 |
| | 4.0 | 10 | 19.2 | 19.6 | 35.3 |
| | 5.0 | 4 | 7.7 | 7.8 | 43.1 |
| | 6.0 | 1 | 1.9 | 2.0 | 45.1 |
| | 7.0 | 5 | 9.6 | 9.8 | 54.9 |
| | 8.0 | 1 | 1.9 | 2.0 | 56.9 |
| | 9.0 | 1 | 1.9 | 2.0 | 58.8 |
| | 10.0 | 4 | 7.7 | 7.8 | 66.7 |
| | 11.0 | 2 | 3.8 | 3.9 | 70.6 |
| | 14.0 | 1 | 1.9 | 2.0 | 72.5 |
| | 15.0 | 1 | 1.9 | 2.0 | 74.5 |
| | 17.0 | 2 | 3.8 | 3.9 | 78.4 |
| | 18.0 | 1 | 1.9 | 2.0 | 80.4 |
| | 20.0 | 2 | 3.8 | 3.9 | 84.3 |
| | 21.0 | 1 | 1.9 | 2.0 | 86.3 |
| | 22.0 | 1 | 1.9 | 2.0 | 88.2 |
| | 25.0 | 3 | 5.8 | 5.9 | 94.1 |
| | 28.0 | 1 | 1.9 | 2.0 | 96.1 |
| 42.0 | 1 | 1.9 | 2.0 | 98.0 | |
| 99.0 | 1 | 1.9 | 2.0 | 100.0 | |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

Years in Service

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Less than 6 years | 25 | 48.1 | 49.0 | 49.0 |

| | | | | | |
|---------|------------------|----|-------|-------|-------|
| | From 6-10 years | 8 | 15.4 | 15.7 | 64.7 |
| | From 11-15 years | 7 | 13.5 | 13.7 | 78.4 |
| | From 16-20 years | 1 | 1.9 | 2.0 | 80.4 |
| | From 21-25 years | 4 | 7.7 | 7.8 | 88.2 |
| | Over 25 years | 6 | 11.5 | 11.8 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

| | | Age Group | | | |
|---------|------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | From 16-20 years | 2 | 3.8 | 3.9 | 3.9 |
| | From 21-25 years | 6 | 11.5 | 11.8 | 15.7 |
| | From 26-30 years | 8 | 15.4 | 15.7 | 31.4 |
| | From 31-35 years | 7 | 13.5 | 13.7 | 45.1 |
| | Over 35 years | 28 | 53.8 | 54.9 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

| | | Offering products in the maritime | | | |
|---------|--------|-----------------------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Yes | 28 | 53.8 | 54.9 | 54.9 |
| | No | 22 | 42.3 | 43.1 | 98.0 |
| | 3 | 1 | 1.9 | 2.0 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

| | | How often does your organisation do Community Charity | | | |
|---------|------------|---|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Never | 9 | 17.3 | 17.6 | 17.6 |
| | Rarely | 7 | 13.5 | 13.7 | 31.4 |
| | Sometimes | 17 | 32.7 | 33.3 | 64.7 |
| | Frequently | 18 | 34.6 | 35.3 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

| | | How often Is your business involved in Community safety and security awareness programme | | | |
|-------|------------|--|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Never | 13 | 25.0 | 25.5 | 25.5 |
| | Rarely | 12 | 23.1 | 23.5 | 49.0 |
| | Sometimes | 12 | 23.1 | 23.5 | 72.5 |
| | Frequently | 14 | 26.9 | 27.5 | 100.0 |

| | | | | | |
|---------|--------|----|-------|-------|--|
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How frequently does your business purchase from local suppliers and using local raw material

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 3 | 5.8 | 5.9 | 5.9 |
| | Rarely | 7 | 13.5 | 13.7 | 19.6 |
| | Sometimes | 5 | 9.6 | 9.8 | 29.4 |
| | Frequently | 36 | 69.2 | 70.6 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How often does your business employ local residents

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 3 | 5.8 | 5.9 | 5.9 |
| | Rarely | 5 | 9.6 | 9.8 | 15.7 |
| | Sometimes | 5 | 9.6 | 9.8 | 25.5 |
| | Frequently | 38 | 73.1 | 74.5 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How often do they consume water

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 3 | 5.8 | 5.9 | 5.9 |
| | Rarely | 9 | 17.3 | 17.6 | 23.5 |
| | Sometimes | 11 | 21.2 | 21.6 | 45.1 |
| | Frequently | 28 | 53.8 | 54.9 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How frequently do your business utilise energy

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 3 | 5.8 | 5.9 | 5.9 |
| | Rarely | 5 | 9.6 | 9.8 | 15.7 |
| | Sometimes | 11 | 21.2 | 21.6 | 37.3 |
| | Frequently | 32 | 61.5 | 62.7 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How often your organisation follow material practices (e.g. use and produce environmentally friendly products)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 2 | 3.8 | 3.9 | 3.9 |
| | Rarely | 10 | 19.2 | 19.6 | 23.5 |
| | Sometimes | 15 | 28.8 | 29.4 | 52.9 |
| | Frequently | 23 | 44.2 | 45.1 | 98.0 |
| | 44 | 1 | 1.9 | 2.0 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How often your business ensure energy conservation

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 2 | 3.8 | 4.0 | 4.0 |
| | Rarely | 12 | 23.1 | 24.0 | 28.0 |
| | Sometimes | 13 | 25.0 | 26.0 | 54.0 |
| | Frequently | 23 | 44.2 | 46.0 | 100.0 |
| | Total | 50 | 96.2 | 100.0 | |
| Missing | System | 2 | 3.8 | | |
| Total | | 52 | 100.0 | | |

How often your business keep touch with your customers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Rarely | 5 | 9.6 | 9.8 | 9.8 |
| | Sometimes | 6 | 11.5 | 11.8 | 21.6 |
| | Frequently | 40 | 76.9 | 78.4 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How frequently does your business comply environmental friendly policies and governance

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 1 | 1.9 | 2.0 | 2.0 |
| | Rarely | 11 | 21.2 | 21.6 | 23.5 |
| | Sometimes | 13 | 25.0 | 25.5 | 49.0 |
| | Frequently | 26 | 50.0 | 51.0 | 100.0 |
| | Total | 51 | 98.1 | 100.0 | |
| Missing | System | 1 | 1.9 | | |
| Total | | 52 | 100.0 | | |

How often do your business manage waste (waste reduction)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Never | 3 | 5.8 | 5.9 | 5.9 |
| | Rarely | 8 | 15.4 | 15.7 | 21.6 |
| | Sometimes | 12 | 23.1 | 23.5 | 45.1 |
| | Frequently | 28 | 53.8 | 54.9 | 100.0 |

