

An assessment of corporate entrepreneurship at a selected innovation hub

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ABSTRACT

The aim of this research study was to assess the corporate entrepreneurship in small, medium micro sized enterprises (SMMEs) participating at The Innovation Hub in Tshwane. In a global era characterised by extremely uncertain environments involving strong competition based on innovation, SMMEs are pushed to look for strategies that could assist them to acquire dynamic capacities that are rare and difficult to imitate in order to compete in the global market and achieve high performance.

Corporate entrepreneurship is marked by individuals who are creative, innovative and spend time on taking risks. To reinforce these entrepreneurial activities, organisations need to have a culture and climate that cultivate these activities. An SMME with an entrepreneurial orientation is characterised by dimensions such as innovativeness, pro-activeness, risk-taking, competitive aggressiveness and autonomy. Entrepreneurial behaviour among members in the organisation is critical for effective implementation of corporate entrepreneurship.

A comprehensive literature review was instrumental in gathering secondary data on corporate entrepreneurship and in the comprehension of its dynamics. This was carried out in chapter 2 where within the literature review entrepreneurship, corporate entrepreneurship and an entrepreneurial climate were defined. The dimensions of corporate entrepreneurship and the 13 constructs measuring entrepreneurial climate were discussed, after which the constructs measuring the perceived success of the organisation were presented. Chapter 2 concluded by presenting literature on SMMEs in South Africa highlighting some of the challenges they encounter.

A holistic overview of the innovation hub is also presented. Among other things, the history, strategy, vision and mission were discussed. The chapter then ends with the unique casual factors that encouraged the study research.

In the attempt to gather primary data, a quantitative research was conducted. The empirical research focused on discussing the results obtained from the corporate entrepreneurship questionnaire. The study population is made up of members and workers in SMMEs who have residency at The Innovation Hub.

The demographic information was dealt with first, which was followed by the perception of the respondents with regards to the 13 constructs measuring the entrepreneurial climate and constructs measuring the perceived success of the organisations. To add, the relationships between the demographic variables and the constructs measured by the questionnaire were determined.

Keywords: corporate entrepreneurship; entrepreneurship; innovation; entrepreneurial climate;

LIST OF ABBREVIATIONS

SMME Small, Medium and Micro-sized Enterprise (SMME)

TIH The Innovation Hub

CE Corporate Entrepreneurship

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TABLE OF CONTENTS

LIS	T OF A	BBREVIATIONS	ii
ACI	KNOW	LEDGMENTS	i\
LIS	T OF F	IGURES	vii
LIS	T OF T	ABLES	ix
CH	APTER	1: NATURE AND SCOPE OF THE STUDY	1
1.	.1 IN	ITRODUCTION	1
1.	.2 P	ROBLEM STATEMENT	2
1.	.3 R	ESEARCH OBJECTIVE	3
	1.3.1	Primary objective	3
	1.3.2	Secondary objective	3
1.	.4 S	COPE OF THE STUDY	4
	1.4.1	Field of study	4
	1.4.2	Industry demarcation	5
1.	.5 R	ESEARCH METHODOLOGY	5
	1.5.1	Literature Study	5
	1.5.2	Empirical Research	ε
	1.5.3	Research Design	ε
	1.5.4	Constructing the research instrument	7
1.	.6 L	MITATIONS OF THE STUDY	8
1.	.7 L	AYOUT OF STUDY	g
CH	APTER	2: LITERATURE REVIEW OF CORPORATE ENTREPRENEURSHIP	12
2.	.1 IN	ITRODUCTION	12
2.	.2 D	EFINING THE TERMINOLOGY	13
	2.2.1	Entrepreneurship	14
	2.2.2	Characteristics of entrepreneurs	15
2.	.3. C	ORPORATE ENTREPRENUERSHIP	15
	2.3.1	Defining corporate entrepreneurship	16
	2.3.2	Forms of Corporate Entrepreneurship	17
2.	.4. E	NTREPRENEURIAL ORIENTATION	20
	2.4.1	Defining Entrepreneurial Orientation	20
2.	.5 C	ONSTRUCTS OF CORPORATE ENTREPRENUERSHIP	24
	2.5.1	Entrepreneurial leadership	25
	2.5.2	Management support	27

2.5	5.3	Sponsors and champions	28
2.5	5.4	Tolerance of risk, mistakes and failure	29
2.5	5.5	Innovation and creativity, new ideas encouraged	30
2.5.6 2.5.7		Appropriate rewards and reinforcement	31
		Vision and strategic intent	32
2.5	5.8	Discretionary time and work	33
2.5	5.9	Empowered teams, multi-disciplinary teamwork and diversity	34
2.5	5.10 F	Resource availability and accessibility	35
2.5	5.11 (Continuous and cross functional learning	36
2.5	5.12 \$	Strong customer orientation	37
2.6	PΕ	RCEIVED BUSINESS SUCCESS	39
2.6	6.1	Financial Measures	39
2.6	6.2	Customer satisfaction	40
2.6	6.3	Process	40
2.6	6.4	People development	41
2.6	6.5 F	Future success	42
2.7	SM	ALL MICRO AND MEDIUM ENTREPRISES (SMME's)	42
2.7	7.1	Defining Small Micro and Medium Enterprises (SMMEs)	42
2.7	7.2	The importance of the SMMEs in the economy	44
2.7	7.3	Constraints faced by small businesses in South Africa	45
2.8	SU	MMARY	46
CHAPT	ΓER 3	3 : AN OVERVIEW OF THE INNOVATION HUB	48
3.1	INT	RODUCTION	48
3.2	ВА	CKGROUND TO THE INNOVATION HUB	49
3.2	2.1	Alignment with Regional Policy Strategies	51
3.2	2.2	Addressing Issues of Infrastructure	51
3.2	2.3	Skills and Enterprise Development	51
3.4	Su	mmary	52
CHAPT	ΓER 4	I: RESEARCH METHODOLOGY	53
4.1	INT	RODUCTION	53
4.2	GA	THERING OF DATA	54
4.2	2.1	Construction and development of the questionnaire	54
4.2	2.2.	Confidentiality	56
4.2	2.3 St	udy population	56
4.2	2.4	Statistical analysis of data	57
4.3	3.2	Gender of respondents	58

4.3.	.3 Classification of respondents by race	59
4.3.	.4 Highest academic qualifications of respondents	60
4.4	RELIABILITY OF THE MEASURING INSTRUMENT	61
SECT	TON B: CORPORATE ENTREPRENEURIAL CLIMATE	62
CRO	NBACH ALPHA	62
SECT	TION C: PERCEIVED SUCCESS OF THE ORGANISATION	63
CRO	NBACH ALPHA	63
4.5	ASSESSMENT OF ENTREPRENEURAL CLIMATE	64
4.5.	.1 Variables measuring entrepreneurial climate	64
CONS	STRUCTS	64
4.5.	.2 Variables measuring the perceived success of the organisation	67
CONS	STRUCTS	67
4.6 ENTR	RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND REPRENEURIAL CONTRUCTS	69
4.6.	.1 Relationship between gender and the entrepreneurial constructs	70
4.7 ENTR	RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND REPRENEURIAL CONTRUCTS	74
4.8.	.1 Number of employees	77
4.8.	.2 Industry of business	77
4.8.	.3 Duration of business operations	78
4.8.	.4 Legal status of the business	79
4.9 SI	UMMARY	79
	ER 5 : DISCUSSIONS OF THE FINDINGS, CONCLUSIONS AND IMENDATIONS	80
5.1	INTRODUCTION	
5.2	CONCLUSIONS	81
5.2.	.1 Demographic Information	81
5.2. que	.2 Conclusions on reliability of the corporate entrepreneurship	83
5.2.	.3 Conclusions on corporate entrepreneurial climate	83
5.2.	.4 Assessment of the perceived success of the organisation	90
5.3	RECOMMENDATIONS & ACTION PLAN	92
5.4	ACHIEVEMENT OF OBJECTIVES	95
5.5	SUGGESTIONS FOR FURTHER RESEARCH	96
5.6	SUMMARY	97
REFER	ENCES	99
ΔΝΝΕΥ	URE 1: ENTREPRENEURIAL CLIMATE QUESTIONNAIRE	104

LIST OF FIGURES

	PAGE	
Figure 1.1 Synopsis of Chapter 1		1
Figure 1.2 Research Methodology		5
Figure 2.1 Synopsis of Chapter 2		12
Figure 2.2 Correlation between innovativeness and risk		22
Figure 2.3 Constructs of an entrepreneurial climate		24
Figure 3.1 Synopsis of Chapter 3		48
Figure 3.2 The CoachLab Environment		50
Figure 3.3 The Maxum Business Incubator		52
Figure 4.1 Synopsis of Chapter 4		53
Figure 4.2 Age of interval distribution by respondents		58
Figure 4.3Gender distribution		59
Figure 4.4 Race classification of respondents by race group		60
Figure 4.5 Highest academic qualifications of respondents		61
Figure 4.6 Cluster bar graph of corporate entrepreneurial climate analysis		66
Figure 4.7 Cluster bar graph of perceived business success		68
Figure 4.8 Number of permanent employees employed by the business		77
Figure 4.9 Industry where the business operates		78
Figure 4.10 The Age of the business		78
Figure 4.11 The legal status of the business		79
Figure 5.1 Synopsis of Chapter 5		81

LIST OF TABLES

	PAGE
Table 2.1 Definition of Entrepreneurship	14
Table 2.2 Characteristics of entrepreneur	15
Table 2.3 Key attributes of the forms of Corporate Entrepreneurship	17
Table 2.4 Definitions of enterprises	44
Table 4.1 Response to survey	55
Table 4.2 Cronbach Alpha coefficients of variables	63
Table 4.3 The dimensions of entrepreneurial climate	65
Table 4.4 Results for business success	67
Table 4.5 Classification of d-values	70
Table 4.6 Comparison between gender & entrepreneurial climate constructs	71
Table 4.7Comparison between age group & entrepreneurial climate constructs	72
Table 4.8 Comparison between race & entrepreneurial climate constructs	73
Table 4.9 Comparison between highest qualifications & entrepreneurial climate	
constructs	74
Table 4.10 Comparison between gender and business success constructs	75
Table 4.11 Comparison between age group and business success constructs	75
Table 4.12 Comparison between race and business success constructs	76
Table 4.13 Comparison between highest qualification and business success	
constructs	76

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

In a global era characterised by extremely uncertain environments involving strong competition based on innovation, small and medium micro sized enterprises (SMMEs) are pushed to look for strategies that could assist them to acquire dynamic capacities that are rare and difficult to imitate in order to compete in the global market and archive high performance (Kaya, 2015: 662). SMMEs that are internationally competitive are able to expand as well as survive better in the domestic market. In order to become internationally competitive, SMMEs must be market oriented and offer products and services of international quality (Carlea, Chinie & Tantau, 2014: 353). Below Figure 1.1 gives a layout of chapter 1.

Figure 1.1: Synopsis of Chapter 1



- INTRODUCTION
- PROBLEM STATEMENT
- SCOPE OF STUDY
- RESARCH METHODOLOGY
- PRELIMINARY CHAPTER CLASSIFICATION
- SUMMARY

Source: own compilation.

Corporate entrepreneurship in today's fiercely competitive business environment is seen as a dependable way of creating a sustainable competitive advantage (Kassa, 2014:50). Sustained competitive advantage stems from the ability to be flexible, adaptable, aggressive, fast and innovative as a business (Morris *et al.*, 2008:8).

Scholars like Drucker (1985) have identified innovation in organisations as one important strategy for long term marketplace success especially in SMMEs.

Encouraging innovation in SMMEs remains at the core of policy initiatives in South Africa in an attempt to stimulate economic development and growth at a local, regional, national and African level (Tilley & Parrish, 2006). Unfortunately, due to various reasons, the business environment in South Africa has not been conducive for small business growth as only a few small businesses are able to establish themselves past the first four years after establishment (Tshabalala & Rankhumise, 2011:1).

The Innovation Hub (TIH) in Pretoria is a science and technology park promoting socio-economic development and competitiveness in Gauteng through innovation. TIH offers incubation programmes in the Bio economy (agro processing and pharmaceutical), Smart Industries (ICT and advanced manufacturing) and Green Economy (Water purification, waste management and renewable energy). TIH operates a range of enterprise development, skills development and innovation enabling programmes both in the science park and throughout the Gauteng region

The relevance of corporate entrepreneurship in companies hosted at the hub is explored further in the problem statement.

1.2 PROBLEM STATEMENT

The context in which the developmental process takes place in South Africa is embedded in challenges that are widely not present in industrialized societies and lead to different technology incorporation and production (Srinivas & Sutz, 2008:129). SMMEs that have well developed entrepreneurial capabilities are able to sustain growth and innovation, which is critical to surviving under competitive market conditions (Scheepers, Hough & Bloom, 2008: 50).

In South Africa SMME's experience severe challenges in maintaining their existence and expanding operations. A review of small business literature highlights that the challenges faced by SMMEs results mainly from internal and external environmental factors, namely lack of capabilities and resources, poor management, low and

outdated technology, and lack of finances amongst other things (Chrisman & McMullan, 2004; Cant, Brink & Ligthelm, 2003; Mboyane, 2006; Smith & Perks, 2006; O'Connell, 2007; Scheers, 2011; Tlhomola, Rankhumise & Van Niekerk, 2010).

Within the economic spectrum, some researchers agree that the development of the abilities and skills of SMME owners and managers is key to increased competitiveness and sustainable growth of SMMEs along with growth of the national economy (Tustin,2003:43; Volkman, 2004:1; Lowe & Marriot, 2006:105).

One major of the main obstacles within SMMEs is lack of corporate entrepreneurship. Despite the importance of corporate entrepreneurship, very few studies have assessed the level of corporate entrepreneurial climate within SMMEs. Championing a climate of corporate entrepreneurship within SMMEs in the end cultivates innovation and leads to sustainable competitive advantage. An assessment of corporate entrepreneurship within SMMEs at The Innovation Hub in Tshwane might enlighten or contribute to understanding the ability to innovate under challenging conditions.

1.3 RESEARCH OBJECTIVE

1.3.1 Primary objective

The primary objective of this study is to assess the level of entrepreneurial climate within SMME's located at The Innovation Hub in Tshwane. In the conclusion, recommendations will be made on how to foster and improve the entrepreneurial climate and innovation in SMME's that may leads to success and new income streams.

1.3.2 Secondary objective

In order to address the primary objective, the secondary objectives of this study are to:

- define corporate entrepreneurship;
- Gain understanding into the determinants of corporate entrepreneurship and innovation by means of a literature study;
- measure the current entrepreneurial climate at The Innovation Hub SMMEs;
- Ascertain the reliability of the questionnaire by means of statistical analysis;
- determine the relationship between selected demographic variables and the entrepreneurial climate constructs;
- determine the managers perception of the success of the organization;
 and
- suggest practical recommendations to ensure and enhance corporate entrepreneurship in SMMEs.

1.4 SCOPE OF THE STUDY

This section describes the field of study, industry demarcation and the geographical demarcation.

1.4.1 Field of study

The area of study lies within the subject of entrepreneurship in existing enterprises, i.e. corporate entrepreneurship and innovation which includes terminologies like creativity, risk taking and research and development.

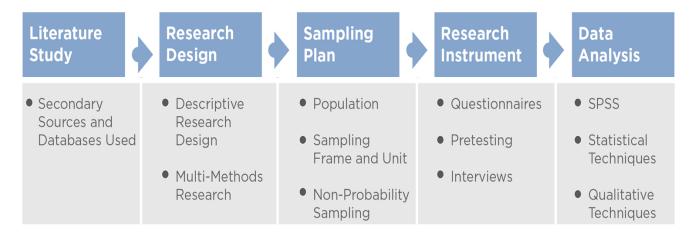
1.4.2 Industry demarcation

This study is limited to the enterprises involved at the Innovation Hub in Tshwane. There are about 60 SMMEs which have residency at the Hub and are under incubation.

1.5 RESEARCH METHODOLOGY

This study is conducted in two phases. Phase one consists of a literature study and phase two of empirical research. Figure 1.2 provides an outline of the methodology used in this research.

Figure 1.2 Research Methodology



Source: Berndt and Petzer (2011:42)

1.5.1 Literature Study

The literature review for this study focuses on the various aspects in the nature of innovation. Mainly, the literature focuses on:

 Deriving at a definition for corporate entrepreneurship innovation and determining the factors of an innovation oriented organisation.

- Discussing creativity and innovation as key dimensions for business success.
- Determining the internal business factors that have an influence on the innovation climate within a business.
- Finally, the literature review focussed on the theme within which the study
 was conducted namely innovation and more specifically on the changes and
 challenges faced by SMMEs in innovating.

The literature review is composed of mainly assessing secondary sources for example, journal articles, books, unpublished theses and dissertations, internet sources and papers. The literature review assisted in getting a good understanding of the problem that is being investigated. This further aided in preparing an appropriate empirical research methodology and formed the basis of the questionnaire.

1.5.2 Empirical Research

Empirical research primarily deals with the means of data collection and the use of data (Riley, Wood, Clark, Wilkie & Szivas, 2007). The section is made up of the specific techniques to be used, specific measuring instruments (questionnaire) employed and activities undertaken in conducting the research (quantitative research). The empirical research, for this study, consisted of the research design, sample design, the research instrument, method of data collection and the procedures for data analysis.

1.5.3 Research Design

In conducting the study two phases were implemented. Phase one is the literature review on corporate entrepreneurship and Small Medium Enterprises (SMMEs) in South Africa, with the emphasis on innovative SMMEs located in The Innovation Hub. WHAT IS THE SECOND PHASE?

1.5.4 Constructing the research instrument

A structured questionnaire as research instrument was employed for this study. Making sure that the questionnaire addresses the needs of the research is a crucial part of a good research design (Burgess, 2001:3).

1.5.4.1 Selection of a questionnaire

A questionnaire developed by Oosthuizen and adapted by Jordan (2008) was used to measure corporate entrepreneurship within SMMEs at The Innovation Hub. Responses were given using a five-point Likert-type questionnaire, varying between 1 (for "strongly disagree") to 5 ("strongly agree").

The questionnaire is divided into four sections (see Appendix A), namely:

Section A: In this section, the biographical information (age group, gender, race, highest

qualification) of the business owners were measured.

Section B: The section is aimed at measuring the 13 constructs of an entrepreneurial climate in an SMME: entrepreneurial leadership, management support, the presence of sponsors and champions, tolerance of risk, mistake and failure, innovation and creativity/ new ideas encouraged, appropriate reward and reinforcement, vision and strategic intent, discretionary time and work, empowered teams, resource availability and accessibility, continuous and cross-functional learning, customer orientation and flat organisational structures with open communication. The climate questionnaire consists 65 items.

Section C: This section focused on evaluating the performance of the organisation in terms of people development, market and or customers, processes, financial and

long term successes. The aim was to determine the effect of innovation and creativity on employee performance in a turbulent economy.

Section D: The section captured the structure and the financial information of the business.

1.5.4.2 Study population

The study population for this study consists of enterprises registered and having residency at the Innovation Hub in Tshwane. At the time the study was conducted there we sixty SMMEs that have residency at the Hub.

1.5.4.3 Collection of Data

Both electronic and telephonic means were used in gathering data with relevant organizational personnel's. An explanation of the intention of the study was provided and confidentiality was guaranteed to participants. Participants were then given the questionnaire.

1.5.4.4 Data Analysis

The data was collected through hardcopy questionnaires as well as softcopies via email. Data collected were processed and statistically analysed by the statistical consultation services of the North-West University (Mahikeng campus). Data from questionnaires were coded and converted into useful outputs such as frequency tables. These tables were used to draw conclusions and make recommendations regarding the development of the entrepreneurial orientation of small businesses in Gauteng Province.

1.6 LIMITATIONS OF THE STUDY

This study attempted to make a contribution to the existing knowledge of corporate entrepreneurship. The following limitations regarding the study are presented:

- The low response rate from some of the SMMEs may also skew the findings towards those SMMEs with a higher response rate.
- The sampling method used to determine the SMMEs study population was a non-probability sample. Furthermore, only SMMEs within the Innovation Hubs database were considered for this study. The findings can therefore not be considered to be representative of all SMMEs in South Africa. Care should therefore be exercised in the interpretation and utilisation of the results and the findings of the study cannot be generalised to all SMMEs. In other words, the typical SMMEs could be underrepresented in the sample.
- In this study the exploratory factor analysis of the measuring instrument assessing the innovation climate and perceived success in SMMEs provides some evidence of construct validity and reliability. Further research is however needed before the measuring instrument can be utilised to diagnose these issues in innovation.
- The list of corporate entrepreneurship characteristics is admittedly incomplete, as new characteristics are continually being added. This study, however, only assessed some of the innovation characteristics and can be regarded as an exploratory study. More comprehensive research is still needed to enhance our understanding of these characteristics.

1.7 LAYOUT OF STUDY

Chapter 1: Introduction and Scope of Study

This chapter provides a background and an introduction to the study. The chapter introduces the reader to corporate entrepreneurship and to the dimensions thereof. It also explains the impact of CE on the South African economy. SMMEs are also defined in the chapter and it is further explained how they relate to the country's GDP. The problem statement with regards to corporate entrepreneurial and

leadership in SMME"s are explained and the objectives of the study are clearly defined. The objectives are divided into the primary objective and secondary objectives and recommendations will be offered in chapter 4 with regards to the objectives identified.

The research method the study used is explained in this chapter and the limitations to the study are discussed with valid reasons and solutions. The chapter finally presents the layout to the document and explains briefly how the other chapters will be dealt with. The scope of the study defines the environment and the field of study identifies the sector under investigation and explains the research methodology. The research for this study was done by means of a literature review and an empirical research method. The empirical research was done by means of a questionnaire co

Chapter 2: Literature Review on corporate entrepreneurship

Chapter 2 covers the literature review on entrepreneurial orientation and further defines the business sector under investigation. The literature review explains firstly what entrepreneurial orientation consists of and the five dimensions are discussed in detail keeping in mind the effect that CE has on SMME"s in South Africa. The objective of the literature study is to identify the relationship that the dimensions of entrepreneurial orientation has on the perceived success of a small or medium-sized business. How entrepreneurial orientation contributes positively to the business environment is yet another discussion in the literature review. The hypothesis model is explained under this chapter and the chapter concludes with a summary.

Chapter 3: Overview of The Innovation Hub

This chapter gives the background of The Innovation Hub, its intentions and how it came to being. Included in this section is the hubs alignment with the regional policy strategies, how it attempts to address the issue of infrastructure and develop skills within enterprises.

Chapter 4: Design of the questionnaire, collecting data, analyzing data

In Chapter 4 the results obtained by the empirical study is presented and discussed. That included the assessment of the dependent and independent variables, determining the reliability of the questionnaire utilized in the study, and testing the relationships between the dependent and independent variables by means of multiple linear regression analyses.

Chapter 5: Conclusions and Recommendations

This chapter presents conclusions based on the results of the study. Recommendations are then be made to ensure that owner-managers of small and medium micro-sized businesses foster an entrepreneurial orientation in their respected businesses and to be ultimately, more successful. Thereafter, the achievement of the objectives of the study are assessed. The chapter concludes with suggestions for further research.

CHAPTER 2: LITERATURE REVIEW OF CORPORATE ENTREPRENEURSHIP

2.1 INTRODUCTION

Corporate entrepreneurship (CE) can be considered to be a beneficial activity to a company, as it enhances the company's ability to innovate, take risks, discover and pursue new ways of doing business (Karimi & Walter 2016:341). With globalisation being characterised by extremely uncertain environments involving strong competition based on innovation, companies are pushed to look for strategies that could assist them to acquire dynamic capacities that enables them to be agile and adapt faster than their competitors. Figure 2.1 gives a synopsis of chapter 2

Figure 2.1 Synopsis of Chapter 2



- INTRODUCTION
- DEFINING TERMINOLOGY
- CORPORATE ENTREPRENUERSHIP
- ENTREPRENEURIAL ORIENTATION
- CONSTRUCTS OF CORPORATE ENTREPRENEURSHIP
- PERCEIVED BUSINESS SUCCESS
- SMALL MICRO AND MEDIUM ENTREPRISES
- SUMMARY

Source: own compilation.

All over the world, small micro and medium enterprises (SMMEs) are regarded as engines of entrepreneurship, innovation, nimble-footed change agents, major employers in terms of absolute numbers and major contributors to the society's economy (Covin & Miller, 2013). For example by the year 2010, it was estimated that medium enterprises in the SME sector of South Africa contributed 51 percent to the GDP, while small businesses contributed 13 percent (Tassiopoulus, 2010). This

highlights the important role SMMEs play in economies across the globe, but especially for developing countries like South Africa where poverty and unemployment are major concerns for government.

Currently the reality is that innovation processes and entrepreneurial climate of organisations are the sources and stimulants of a sustained competitive advantage, where new ideas and opportunities are generated and nurtured into real business opportunities. Therefore, fostering corporate behaviours and practises should be at the forefront in strategies of SMMEs as means of establishing and maintaining competitive advantage. Future success within SMME's is partly determined by its ability to continuously innovate its products and business model. Entrepreneurship and corporate entrepreneurship are, in most cases, the basis of technological innovation and company rejuvenation (Jancenelle, Storrud-Barnes & Javalgi, 2017: 3). In this regard, SMMEs are recognised as major sources of technological innovation and new products.

The rest of this chapter reviews literature on corporate entrepreneurship and small micro and medium enterprises in order to gain more insight into the subject matter. The relevant terminology being entrepreneurship, corporate entrepreneurship, SMMEs and the entrepreneurial climate will be defined. The linkage between these concepts is also presented including the background of corporate entrepreneurship. The terminology being clearly defined and explained has set the foundation, it will then be followed by the various dimensions or essential elements of corporate entrepreneurship being identified and discussed. Further a discussion on thirteen constructs of corporate entrepreneurship followed by the perceived success of the organisation make up the core of this chapter.

2.2 DEFINING THE TERMINOLOGY

The following section will therefore present a number of definitions on the term entrepreneurship.

2.2.1 Entrepreneurship

The term entrepreneur is a French term dating back to the seventeenth century (Hisrich, Peters & Sherperd, 2008:6). The term has evolved over the centuries taking on many definitions which some will be mentioned in Table 2.1 below.

Table 2.1 Definition of entrepreneurship

Schumpeter (1934)	Entrepreneurship is the implementation of a new or significantly improved product (good/service) or process. New process includes: • Introduction of new goods. • New method of production. • New source of supply. • New organisation.			
Kizner (1973)	Entrepreneurship is the ability to identify new opportunities. This recognition and seizing of the opportunity will tend to "correct" the market and bring it back to equilibrium.			
Drucker (1985)	Entrepreneurship is the act of innovation that involves endowing existing resources with new wealth capacity.			
Stevenson, Roberts and Crousbeck (1985)	Entrepreneurship is the pursuit of an opportunity without concern for current resources or capabilities.			
Rumelt (1987)	Entrepreneurship is the creation of a new business: a new implies they do not exactly duplicate an existing business, but have some element of novelty.			
Low & MacMillan (1988)	Entrepreneurship is the creation of a new enterprise			
Gartner (1988)	Entrepreneurship is the creation of new organisations: the process by which new organisations come to into existence.			
Timmons (1997)	Entrepreneurship is a way of thinking, reasoning and acting that is obsessed, holistic in approach and balanced leadership.			
Venkataraman (1997)	Entrepreneurship research seeks to understand how to bring into existence future goods and service which are discovered, created and exploited by whom and what consequences.			
Morris (1998)	Entrepreneurship is the process by which individuals and teams crate value by bringing together unique packages of resource inputs to exploit opportunities. in the environment. It can occur in any organisational context and can result in a variety of possible outcomes including new ventures, products, services, processes, markets and technologies.			
Sharma & Chrisma (1999)	Entrepreneurship encompasses acts of organisational creation, renewal, or innovation that occur within or outside an existing organisation.			
Hisrich <i>et al.</i> , (2008:8)	Entrepreneurship is a process of creating something new with value through devoting the necessary time and effort, assuming the accompanying financial, psychic and social risks and receiving the results monetary, personal and independence.			

Source: Hitt *et al.* (2002:1)

From table 2.1 above, it is evident that there is no generally accepted definition of the term entrepreneurship. According to Burns (2008:6-7) defining entrepreneurship has been problematic as academics and researchers fail to come to a generally accepted term.

2.2.2 Characteristics of entrepreneurs

The following characteristics have been listed as some of the main factors of entrepreneurs. These factors form a basis on which to identify individuals with entrepreneurial traits (Lotz, 2009:22).

Table 2.5 below lists some of the characteristics that are possessed by entrepreneurs (Timmons & Spinelli, 2012:36).

Table 2.2 Characteristics of entrepreneurs

Date	Author	Explanation				
1848	Mill	Risk bearing				
1917	Weber	Source of formal authority				
1934	Schumpeter	Innovation; initiative				
1954	Sutton	Desire for responsibility				
1959	Hartman	Source of formal authority				
1961	McClelland	Risk- taking; need for achievement				
1963	Davids	Ambition; desire for independence, responsibility, self-confidence				
1964	Pickle	Drive/mental; human relations; communication ability; technical knowledge				
1971	Palmer	Risk measurement				
1971	Hornaday	Need for achievement; autonomy; aggression; power; recognition;				
	and Aboud	innovative/ independence				
1973	Winter	Need for power				
1974	Borland	Internal locus of power				
1982	Casson	Risk; innovation; power; authority				
1985	Gatner	Change and ambiguity				
1987	Begley and Boyd	Risk-taking tolerance of ambiguity				
1988	Caird	Drive				
1998	Roper	Power and Authority				
2000	Thomas and Mueller	Risk; power; internal locus of control; innovation				
2001	Lee and Tsang	Internal locus of control				

Source: Adopted from Timmons and Spinelli (2012:36)

2.3. CORPORATE ENTREPRENUERSHIP

The following section defines corporate entrepreneurship.

2.3.1 Defining corporate entrepreneurship

In reviewing the literature on Corporate Entrepreneurship (CE), one can quickly note the ambiguity within the definitions of the CE concept. CE can be described as a set of activities that enhances the businesses ability to innovate, take risks and seize the opportunities that are allocated in the market (Karimri & Walter, 2016:342).

According to Thornberry (2003:330), CE can be described as "a powerful antidote to a large company staleness, lack of innovation, stagnated top-line growth and inertia". On the other hand, McFadzean *et al.* (2005:350) recognised CE as a means of reformation and change for businesses which enables a shift from bureaucracy to innovation. Furthermore, Birkinshaw (1995:729) states that CE is one of the ways of mitigating the risk of not efficiently leveraging on local markets at subsidiary level. From the above descriptions it is clear that CE can take on different forms which are be explained in this section. It is evident that the financial performance of businesses is positively affected by CE, this is turns out to be true in the long term (Zahra & Covin, 1995).

Studies reveal that CE is associated with innovation within business and stated the following:

- Covin and Miles (1999:49) strongly advocate innovation is central to the CE construct stating "without innovation there is no corporate entrepreneurship".
- Sharma and Chrisma (1999:19) also define CE as a process whereby an individual or a group creates or instigates renewal or innovation within the current organisation.

Within these definitions, innovativeness and corporate venture performance are considered the critical components of the term CE (Lassen & Nielsen, 2009). CE utilises the benefits of innovation process to enable businesses to build new sources of competitive advantage and renew their value proposition (Dess *et al.*, 2006:404).

2.3.2 Forms of Corporate Entrepreneurship

Four forms of CE can be identified under Covin and Miles' (1999:50) definition of CE, namely sustained regeneration, business rejuvenation, strategic renewal and domain redefinition.

Table 2.3 Key attributes of the forms of Corporate Entrepreneurship

Forms of CE	Focus of	Typical	Typical	Magnitude of
	CE	basis	frequency of	negative
		competitive	new	impact if new
		advantage	entrepreneurial	entrepreneurial
			activity	activity is not a
				success
Sustained	New	Differentiation	High frequency	Low
regeneration	products or			
	new markets			
Organisational	The	Cost	Moderate	Low to
rejuvenation	organisation	leadership	frequency	moderate
Strategic	Business	Varies with	Less frequency	Moderate to
renewal	strategy	specific form		high
		manifestation		
Domain	Creation and	Quick	Infrequency	Varies with
redefinition	exploitation	response		specific form
	of product			manifestation
	market			and contextual
	arenas			consideration

Source: Covin and Miles (1999:57)

The four forms of CE defined by Covin and Miles (1999:57) identified in table 2.3 will be explained under separate subheadings below.

2.3.2.1 Sustained regeneration

This form of CE is primarily concerned with continuous innovations and is the most recognised form of CE (Dess, *et al.*, 2003:354). Businesses engaging in sustained regeneration usually introduce new products and services or branch out into new markets (Covin & Miles, 1999:51). They also tend to cultures, structures and systems in place to support and encourage this (Dess, *et al.*, 2003:355). In addition, they tend to be learning orientated organisations that embrace change and challenge competitors.

2.3.2.2 Organisational rejuvenation

In the context of CE, business rejuvenation refers to businesses seeking to improve their ability to execute strategies by altering its internal processes, structures and capabilities (Covin & Miles, 1999:52). Business rejuvenation entails changes in value chain activities like internal processes, structures and capabilities (Dess, *et al.*, 2003:355). In other scenarios, business rejuvenation may include single innovations or multiple smaller innovations that collectively contribute in increasing business efficiency and effectiveness at strategy implementation (Dess, *et al.*, 2003:355).

According to Dess *et al.* (2003:355), mostly business rejuvenation orientates around support activities like procurement and human resource compared to primary activities like inbound logistics and operations. Successful organisational rejuvenation efforts are able to renew one or more major aspects of the business functions.

2.3.2.3 Strategic renewal

Strategic renewal entails the idea where the business seeks to redefine its relationship with the industry, market or competitors through changing the way it competes (Dess *et al.*, 2003:355). Therefore, the nature of rivalry with competitors is

changed as the business focuses on renewing the strategies it uses to align itself with its external environment. Entrepreneurial initiatives focus mainly on business strategy, but this does not imply that all businesses adopting new strategies are pursuing strategic renewal. New strategies, in contrast, become strategic renewal when they encompass core repositioning efforts by the business with its competitive environment (Dess *et al.*, 2003:355).

2.3.2.4 Domain redefinition

According to Covin and Miles (1999:54), domain redefinition alludes to the entrepreneurial phenomenon where a business proactively creates a new product market space that others have not recognised or actively sought to exploit. This speaks to the idea of exploring what is possible rather than exploiting what is currently available (Dess *et al.*, 2003:355). Entrepreneurial activities take place in unoccupied competitive spaces and might give rise to entirely new markets (Dess *et al.*, 2003:355). The first mover advantage may establish a business's strategy and re-energise the business by redefining its domain.

According to Dess and Lumpkin (2005:147), CE activities are found in "companies where the strategic leaders and the culture together generate a strong impetus to innovate, take risks and aggressively pursue new venture opportunities". Also, Covin and Miles (1999:50) state that CE activities are mostly targeted at sustained regeneration, organisational rejuvenation, strategic renewal and redefinition of organisations their markets. This relates to the businesses' ability to regularly introduce new products or enter new markets as explained above (Covin & Miles, 1999:50). The fabric in all businesses that could be described as entrepreneurial is the presence of innovation (Covin & Miles, 1999:50). This view is consistent with the thought that firms need to have an entrepreneurial orientation (EO) to engage successfully in CE (Dess and Lumpkin, 2005).

2.4. ENTREPRENEURIAL ORIENTATION

2.4.1 Defining Entrepreneurial Orientation

Entrepreneurial orientation (EO) as a concept originated from Danny Miller (1983). While scholars have noted that definitions and operationalisations of EO differ, a substantial body of research on EO indicates that entrepreneurial firms in general outperform conservatively managed counterparts (Anderson *et al.*, 2014:1579).

According to Lumpkin and Dess (2001:137), EO is defined as the processes, practises and decision making activities that lead to the development and delivery of new and innovative services and products which sets an enterprise apart from others in the market.

Five dimensions - autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness are independent variables influencing business success as the dependent variable (Morris *et al.*, 2008:50). These dimensions define the strategy- making initiatives businesses use to identify and start-up its ventures (Lotz, 2009:46).

In illustrating EO, Morris *et al.* (2008:50) designed a framework that linked the influence to the performance of an organisation. The EO from Morris *et al.* (2008:50) is used in this study to focus on the dimensions of EO. Each dimension is discussed to illustrate their role.

2.4.2.1 Autonomy

Autonomy identifies with freedom of decision making as well as actions that are often needed by members of a business to bring new business ideas forward and execute till completion (Karimi & Walter, 2016:344). It is considered to be the driving force for entrepreneurial value creation and entrepreneurial initiatives enactment (Karimi &

Walter, 2016:344). Within the context of EO, autonomy is important especially in new business ventures that are creating new innovations, using new business models that might disrupt established businesses (Karimi & Walter, 2016:344).

The key dimensions to autonomy relate to resources, process and values for a given growth group rather than geographic separation or ownership structure. In the absence of autonomy it is highly likely that a low priority will be assigned to new ideas or old absolute business models may be force fitted onto the new opportunities (Govindarajan & Trimble, 2010:78). It goes to say that establishing autonomous growth groups is key for CE activities in creating new processes, capabilities or ways of working together with responsibilities to do what needs to be done to ensure the success of new innovative projects (Govindarajan & Trimble, 2010:78).

2.4.2.2 Innovativeness

According to Dess and Lumpkin (2005:150), innovativeness is defined as the tendency and willingness to engage in creative behaviour's, experimentation through the introduction of new products or services or in technological leadership though R&D in new processes. Innovativeness is said to be present when companies pursue active implementation of new ideas, products or processes and is one of the most critical factors in accomplishing CE activities and corporate venture performance (Lassen & Nielsen, 2009:182).

According to Perez-Luno *et al.* (2011:555), innovativeness equally refers to the firm's ability to create to the world products, processes and services and its openness to new ideas and new to the firm product launches. According to Covin and Miles (1999:50), without innovation there is no CE regardless of presence of other CE attributes.

2.4.2.3 Risk Taking

Risk-taking is defined as making decisions and taking actions without certain knowledge of probable outcome, appropriating heavily or devoting resources on operations in uncertain environments (Rauch *et al.*, 2009:766). Without a certain level of risk-taking, businesses delay or restrain from introducing new products or innovations and from activating exploitative CE activities. This can result in poor performance due to missed opportunities and conventional reaction towards changing market conditions (Karimi & Walter, 2016:344).

Studies show that risk-taking can be linked to better business performance and can be associated with strategic decision speed (Karimi & Walter, 2016:344). According to Morris *et al* (2008:62), there is a complex correlation between risk and innovation. The correlation emphasises the point that becoming more innovative requires greater risk taking as is illustrated in Fig 2.

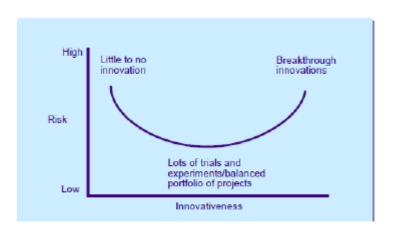


Figure 2.1 Correlation between innovativeness and risk

Source: Morris *et al.* (2008:63)

The relationship between risk and innovativeness in Fig 2.1 above is curvilinear. According Burns (2008:291), no innovation arises as there is little risk in the short term but might lead to more risk in longer events. When the business wants to redefine the industry it will engage in high levels of innovation and high levels of risk taking (Morris *et al.*, 2008:62). Therefore managing the risk is important and a balance is reached between the two points (Lotz, 2009:64).

Taking risks is an essential part of everyday life including in business activity, but caution should be taken as bad decision might lead to business failure especially if the enterprise is in the early stages. Risk taking sounds unfavourable to entrepreneurs, but with risks comes great opportunities. They should be assessed and further be managed or if possible eliminated.

2.4.2.4 Pro-Activeness

Pro-activeness is defined as opportunity seeking, forward looking behaviour for introducing new products, services or technological capabilities ahead of the competition in anticipation of future demand, which can lead to new venture opportunities (Karimi & Walter, 2016:344). Understanding market signals, awareness of customer needs, vigilant tracking and scanning of the environment and extensive feasibility research are often associated with the businesses successful proactive strategy (Karimi & Walter, 2016:344).

By vigorous anticipation and preparation for change and mobilising resources far in advance of rivals, proactive businesses are a step ahead of not so responsive competitors in accomplishing CE activities (Karimi & Walter, 2016:344). It should be noted that first movers are not always successful. Being a first mover should be complemented by careful analysis and feasibility studies of the market and environment as stated above.

According to Rauch *et al.* (2009:778), the dimensions of innovativeness, risk-taking and pro-activeness are of equal importance in determining business success. By being proactive, businesses are able to foresee and predict future expectations.

2.4.2.5 Competitive Aggressiveness

Competitive aggressiveness refers to how the business relates to competitors and how it responds to existing demands in the market. Within the EO context,

competitive aggressiveness is a reaction to competitive trends and demands that already exist in the market place (Lotz, 2009:53). It is therefore interpreted as a response to threats from competitors (Lotz, 2009:53).

Pro-activeness it to respond to opportunities while competitive aggressiveness is to act on threats, for example using market share tactics of cutting prices of certain products or services. Another tactic is product differentiation which speaks to creating a product that is totally different from competitors and having a unique marketing concept.

2.5 CONSTRUCTS OF CORPORATE ENTREPRENUERSHIP

By reviewing current literature, it becomes apparent that there are a number of constructs that describe corporate entrepreneurial climate. Thirteen themes have been identified by Oosthuizen (2006) as constructs that are vital for establishing a corporate entrepreneurial climate. Figure 2.2 below illustrates these constructs.

Figure 2.2: Constructs of an entrepreneurial climate



Source: Oosthuizen (2006)

2.5.1 Entrepreneurial leadership

Successful ventures cannot be characterised by a single leadership pattern(Timmons & Spinelli, 2012:523). The basis of entrepreneurial leadership is expertise and not authority. This implies that an entrepreneurial leader should have a good command of the relationships within teams and develop an approach of consensus building among team members (Timmons & Spinelli, 2012:523).

An entrepreneurial leader must be able to create visionary scenarios that are used to assemble and mobilise a supporting cast of participants who subscribe to the vision in discovery and exploitation of strategic value creation (Cohen, 2006:16). This involves creating spaces, systems, procedures and cultures that are able to free employees at all levels of the organisation to take responsibility, show initiative and mobilise other people in the organisation who share the same responsibility(Cohen 2006:16).

According to Coglisera and Brighamb (2004:778), entrepreneurial leadership should involve three things being idea generation, idea structuring and idea promotion. Of the three, idea generation is critical in the early stage of a venture, whereas idea structuring and promotion become important in later stages. When complimented with creativity, an entrepreneurial mind-set, an entrepreneurial culture, entrepreneurial leadership and the strategic management of resources they become important dimensions for creating value in entrepreneurial ventures (Coglisera & Brighamb, 2004:779).

Further in an organisation, the term entrepreneurial leader can refer to two different groups of people with two distinct roles (Cohen, 2004: 1). The first group of entrepreneurial leaders refers to individuals who hold top positions in the organisation and have broad responsibilities across organisational units or even the entire organisation (Cohen, 2004:1). The major roles of these individuals include creating the organisations vision and then creating a space, systems, procedures and cultures that frees others to take responsible initiative that can achieve the vision (Cohen, 2004:1). Entrepreneurial leadership includes encouraging members within an organisation to cultivate a champion spirit by leading from the front, going beyond the immediate and ensuring structures are not restricted (Cohen, 2004:1).

The second kind of entrepreneurial leader refers to individuals occupying any position in the organisation whose mandate is to uncover and pursue opportunities

for constructive change (Cohen, 2004:1). This could include searching and finding new products, services, processes, markets, organisational approaches and more. In addition they may identify loopholes within the organisation that wastes resources or delays production. They may also identify new processes for building customer loyalty, spot new market segments or figure out ways of implementing new solutions (Cohen, 2004:1).

The construct of **entrepreneurial leadership** will be measured by a five point Likert scale and refers to whether leaders take a long term view; challenge the status quo; instil organisational values; lead by example and seek to maximise opportunities (Jordan, 2008:49).

2.5.2 Management support

According to Bhardwaj *et al.* (2007:51), management support can be defined as the inclination of management to foster entrepreneurial behaviour, which entails the promotion of innovative ideas and availing resources required in taking entrepreneurial actions. It can manifest in different forms, such as sharing a vision for the team, communicating a new concept or approving innovative ideas. This can be enhanced by management ensuring further training for employees (Bhardwaj *et al.*, 2007:51).

Management structures must embolden employees to believe that innovation is part of the fabric embedded in all organisation members (Kuratko & Hodgetts, 2004:63). This may manifest in the speedy adoption of employee ideas as well as the recognition of people who promote small experimental projects and provide backing to get the projects off the ground (Kuratko & Hodgetts, 2004:63).

Management should realise the value of employees in nurturing talents and recognising efforts made where appropriate (Kuratko & Hodgetts, 2004:65). This

speaks to the intangible role of being people orientated that managers should play at all times. For example, if employees' needs are well taken care of by management, it is highly likely that they will utilise their full potential and competencies in uplifting the organisation. The organisations vision will become will become the concern of employees since they are being taken care of.

For the purpose of this study, the constructs of **management support** include whether managers encourage idea development; whether managers are receptive to ideas and suggestions; whether managers encourage employee participation; and whether managers tolerate rule bending in order to keep promising ideas on track (Jordan, 2008:51).

2.5.3 Sponsors and champions

Sponsors are corporate managers occupying high levels in the organisation who are willing to protect entrepreneurs by building safe environments around them (Garvin & Levesque, 2006:109). Corporate sponsors bring integrity and influence to new ventures while operating sponsors contribute to organisational knowledge and encourage recognition (Kuratko & Hodgetts, 2004:63). Sponsors afford entrepreneurs protection if things go wrong or corporate rules are for some reason violated (Morris & Kuratko, 2002:93).

Sponsors within an organisation are of utmost importance, as their presence encourages entrepreneurs to get work done and establishes corporate entrepreneurship within the organisations (Morris & Kuratko, 2002:93). Most projects would be non-existent without project champions gaining access to senior management sponsors to convincing them that the project is important.

Champions are individuals who support projects through the essential stages, guide team members, inform decision makers and sponsors on progress and advocate for the project at all the stages during administration (Peterson & Johnson, 2004:62). In their role, champions recognise potential opportunities, compared to relying on the safety of traditional evaluation process which uses a criteria that is inappropriate for breakthrough innovation (Morris & Kuratko, 2002:93). According to Luchsinger and Bagby (2001:12), sponsors duties in an organisation are to: focus on results and teamwork; reward innovation and risk taking; tolerate and learn from mistakes; remain flexible and change-orientated.

For this research, the construct of **sponsors and champions** refers to whether managers remove obstacles; whether managers support innovators; whether managers provide influential coaches and whether managers poses the skills to champion corporate entrepreneurial initiatives (Jordan, 2008:51).

2.5.4 Tolerance of risk, mistakes and failure

In cultivating an innovative environment, one important aspect that should be cultivated is that employees should not be afraid of losing their jobs should innovative ideas fail (Timmons & Spinelli, 2012:122). However, it is also important to drop unsuccessful projects at a whim (Timmons & Spinelli, 2012:122).

In establishing the drive to innovate, it is critical for organisations to invest in activities that enable new ideas to flourish in environments that are creative (Timmons & Spinelli, 2012:122). Risky alternatives have to be taken in order to be successful with corporate entrepreneurship practices, even if it entails forfeiting methods or products that previously worked (Kuratko & Hornsby, 1998:30).

It is therefore important for leaders to informally encourage employees to innovate and take risks (Morris & Jones, 1999:76). Leaders should emphasise that mistakes will be tolerated within the organisation in the quest for creativity and improved service delivery (Morris & Jones, 1999:76). Furthermore, reassurance to employees

should be given that entrepreneurial behaviour is valued and failure of projects does not involve high personal risk (Morris & Jones, 1999:76).

Organisations should learn from past mistakes as they are unavertable and should exploit them to improve when taking calculated risks in the future (Kuratko & Hornsby, 1998:30). Risk, mistakes and failure go hand in hand with innovation; therefore, turning them into positives requires analysis of commonalities and then designing appropriate future responses and behaviours (Kuratko & Hornsby, 1998:30). The blaming culture is toxic to learning and would ensure that the potential benefits of mistakes are not reaped (Kuratko & Hornsby, 1998:30).

For the purpose of this study, the constructs for **tolerance for risks**, **mistakes and failure** were assessed using a five-point scale and refers to whether calculated risks are taken at record time; whether high risk projects are fully supported even with the possibility of failure and whether failure is forgiven (Jordan, 2008:54).

2.5.5 Innovation and creativity, new ideas encouraged

Innovation can be described as finding better, improved or new ways of doing things (Van Aardt *et al*, 2008:13). This can manifest in improvement in processes, technology and methods which may be evident in products, services or processes. It is also evident in new approaches to marketing, new forms of distribution and new concepts of scope. Innovation is more likely dependent on small increments of insight and advances compared to major technological breakthroughs. It entails ideas that are not new, but those that have never been rigorously pursued and results from organisational learning as much as formal research (Van Aardt *et al*, 2008:13).

Most common types of innovations that result in an increase in competitiveness are (Van Aardt *et al*, 2008:13): developing new products for existing markets; developing

new markets for existing products or market development; developing new products for new markets; and developing existing products for existing markets. At the pulse of the entrepreneurial process is the innovative spirit (Timmons & Spinelli, 2012:65).

According to Nieuwenhuizen, Hough and Neimand (2003:351), there is a difference between creativity and innovation. Creativity entails attaining an idea, whereas innovation relates to implementing the idea (Nieuwenhuizen, Hough & Neimand, 2003:351). Creativity can be described as the invention of ideas that are both original and potentially valuable. Creativeness enables the organisation to think of various alternatives, assists in diversifying approaches and applications of different views.

For the purpose of this study, the construct for **innovation and creativity** is operationalised to whether the organisation quickly implements improvement ideas by employees; whether there is a considerable number of employees that are involved in generating and implementing innovative ideas; whether effective training is provided with regard to the implementation of innovative ideas and whether employees are encouraged to "think-out-of-the-box" (Jordan, 2008:52)

2.5.6 Appropriate rewards and reinforcement

Compensation is vital since it is the most visible indicator of a firm's motivation and reward system (Kuratko, Ireland & Hornsby, 2001:63). Compensation can have an influential effect on outcomes arising from individuals and team efforts, and trickles on to firm performance. Rewards and reinforcement manifests in more than just monetary compensation. They go deeper into psychic or intrinsic compensation like power, status and independence.

In terms of encouraging entrepreneurial behaviour, the type of compensation structure has greater influence compared to the actual amount compensated (Kuratko & Hornsby, 2002:62). It then becomes important that rewards should be

based on the attainment of specific performance objectives (Kuratko & Hornsby, 2002:62). It should be noted that the rewards system can also act as a powerful incentive in retaining and attracting talent within an organisation and a reinforcement tool to cultivate desired behaviour (Kuratko & Hornsby, 2002:62).

For this study, the constructs of appropriate **rewards and reinforcement** were measured by a five-point Likert scale and refers to whether individuals receive additional rewards and compensation; whether recognition rather than criticism is emphasised and whether supervisors give special recognition for outstanding performance (Jordan, 2008:55).

2.5.7 Vision and strategic intent

Strategic thinkers or leaders take a focused, concerted and long-term effort in creating and shaping links to shift from the current to the future state of sustainable competitive advantage and effectiveness (Cohen, 2004:2). A clear entrepreneurial vision which is regularly reinforced is one such action. An organisational vision can be considered the initial phase that shapes and directs entrepreneurial ventures. Prior to strategy development a vision must be in place, then planning can start.

Organisational leaders must be able to articulate an inspiring future, in which the organisation creates a value proposition for customers or community, then utilise that vision consistently to guide decisions, inspire commitment and motivate action (Cohen, 2004:2). Further emphasizing only monetary goals, control or preserving a protected position acts as a stumbling block towards initiatives so does an empty, unused vision statement posted on the wall (Cohen, 2004:2)

In promoting entrepreneurship in the organisation, the organisations culture must be aligned with the innovation vision. To attain this, support and buy-in from senior and functional managers will be critical for successful entrepreneurship. Also, employees

become more effective if they are given a clear vision of the future and direction the organisation is taking.

For the purpose of this study, the constructs of **vision and strategic intent** refers to whether the organisational vision is well communicated and understood; whether the opportunity is created for regular information sharing; whether the vision gives direction and helps with goal setting and whether employees adopt the values of the organisation (Jordan, 2008:56).

2.5.8 Discretionary time and work

Time is a necessary resource, but often overlooked within the organisation (Hornsby *et al.*, 2002:260). It plays an important role since entrepreneurship is usually a secondary activity which could be easily forgotten and not planned for (Hisrich *et al.*, 2005:52). For example, researchers can spend up to fifteen percent of their time working on new ideas without authorisation from supervisors (Fattal, 2003:8). This implies that work time is being taken by experiments. Therefore, leaders should manage employees' workload and evade placing limitations on employee's work. Team work should be encouraged in solving long-term problems so that time can be equally split.

As identified above, time really affects corporate entrepreneurs. Although most corporate entrepreneurs are self-driven, with self-imposed timelines and performance benchmarks, the timeline of moving a project through completion phase is always at odds with the normal performance review cycles of organisations (Morris & Kuratko, 2002:67). Therefore the ability to perform satisfactorily under normal performance measures, maintaining self-imposed goals for project development and making sure that self-imposed goals exceed expectation of management becomes a challenge for corporate entrepreneurs (Morris & Kuratko, 2002:67).

To add, autonomy should be given to corporate entrepreneurs to allow them to define their own work and exercise discretion in their daily activities (Bessant & Tidd, 2008:66). A timeline should also be given to corporate entrepreneurial projects and is estimated at two years (Fattal, 2003:8). According to Fatttal (2003:8), year one is spent learning about all the mistakes in the initial business plan and adapting it to reality, whereas in year two enough processes are in place for the venture to develop momentum and indicate some signs of success.

For this research, the constructs of **discretionary time and work** were assessed by a five item-Likert scale and refers to whether time is provided to develop ideas; whether an ideas generator is allowed to see it through to completion; whether idea generation is forced and whether growth and development opportunities are provided (Jordan, 2008:57).

2.5.9 Empowered teams, multi-disciplinary teamwork and diversity

In the complex business environment diverse teams are formed, which mostly focus on collective entrepreneurship compared to focusing singularly on the firms entrepreneurial abilities (Kuratko *et al.*, 2001:62). Diversity becomes important in an attempt to represent the customer base. A collective effort will always exceed the sum of individual contributions, hence a collective entrepreneurship becomes more efficient when member come from different backgrounds (Kuratko *et al.*,2001:62).

According to Kreitner and Kinicki (2004:455), cooperation, trust and cohesiveness among team members enables effective team work. Further, an empowered team will function efficiently if a multidisciplinary team-approach is encouraged, this requires organisational members to persuade an entrepreneurial climate (Kreitner and Kinicki, 2004:455).

Empowerment should not be confused with giving people authority. Rather it is about giving people knowledge, expertise, opportunity, independence, self-confidence and resources to control themselves and be responsible (Gill, 2003:315). As mentioned above an empowered team will function efficiently.

For the purpose of this study, the construct of empowered teams, multi-disciplined teamwork and diversity is operationalised to whether project team work is encouraged; whether cross functional teams is used effectively; whether projects have a choice in selecting team members and whether cross functional teams are characterised by diversity based on their skills (Jordan, 2008: 57).

2.5.10 Resource availability and accessibility

The creation of corporate entrepreneurship cannot occur in a vacuum, as resources such as talent and potential amongst other things are important in this creation (Menzel *et al.*, 2007:738). Resources in this case can refer to those possessions the organisation utilises to pursue its organisational mandate (Menzel *et al.*, 2007:738).

For example, human resources, money, time and operational assets are essential ingredients or resources in an entrepreneurial venture. An important driver of entrepreneurial activities in established firms is organisational support that manifests in availing resources (Antoncic & Hisrich, 2004: 526).

Entrepreneurial organisations must be able to create, reconfigure and recombine resources to create an innovative value proposition (Hornsby *et al.*, 2002:253). In such cases, availability and accessibility of resources should not be limited to empowering employees or leaders, but should include ensuring that they are used in the correct manner.

Adequate availability of resources is also linked to employee loyalty (Santora, 2007:83). Employees who are creative and open to new ideas and processes expect

organisational support like availing resources otherwise their commitment to innovation and new ideas will decline.

For this research, the construct of **resource availability and accessibility** refers to whether financial support is available for innovative ideas; whether resources are readily available and whether the process to obtain resources is streamline (Jordan, 2008: 58).

2.5.11 Continuous and cross functional learning

Continuous learning and adaptability in organisations in the forever changing world of business is essential. In addition to different functions, it creates the ability for a unique perspective (Cohen, 2004:18). According to Nicholson-Herbert, Mkhize and Schroder (2004:44) corporate entrepreneurship requires that individuals constantly develop and improve themselves. By availing opportunities for personal growth to individuals, it can foster a culture of constant unease with the status quo, cultivating mind-sets that are obsessed with continual improvement in order to stay ahead in the game.

According Cohen (2004:3), broad assignments and education encouraging initiative and experimentation will improve performance. Individuals who are diverse and have exposure across functions, geographies, products and lines of business are likely to be more innovative in comparison to those who spend long stretches of their careers on one post (Cohen, 2004:3).

According to Van Aardt (2008:13), organisational learning can be conceptualised as organisations where individuals frequently develop their ability to produce the results they truly aspire. In these organisations, learning happens, new and expansive models of ideas are nurtured, shared ambition is let loose and individuals are constantly learning how to learn as a team. Organisational learning as a social

structure creates a practice where employees and teams learn how to distribute information among organisational members.

For the purpose of this study, the construct of **continuous learning and cross functional learning** was measured by a five-point Likert scale and refers to whether people are keen to share knowledge within the organisation; whether employees are encouraged to exchange ideas with other department regarding their projects; whether the organisations has open communication channels and whether employees are encouraged to stay abreast of technological developments in their field (Jordan, 2008: 59).

2.5.12 Strong customer orientation

Customer orientation can be described as a belief system that advocates for prioritising customers' needs and satisfaction (Liu, Luo & Schi, 2002: 367). In strategic marketing literature, customer orientation is a core aspect alongside profitability, goal attainment and integrated marketing organisation amongst others.

Needs analysis from customers plays an influential role in the invention and creation of a value proposition by organisations. By being customer-oriented, organisations are able to develop strategic long-term relationships with customers and these relationships are advantageous for the organisation. Understanding what customer's value is key for the innovation process and creating products or services that really matter.

For this research, the construct of **strong customer orientation** includes whether resources are committed to determine customer needs; whether product and service innovation are driven by customer orientation; whether customers are involved in product development; whether customer feedback is requested and whether customers are treated as very important stakeholders (Jordan, 2008:59).

2.5.13 Flat organisational structure

According to Cohen (2004:3), reduced hierarchy, flatter organisations and reduced segmentation in units are contributing factors in increasing employee initiative. By breaking down constraints of hierarchy and artificial boundaries within functions, individuals are able to act more entrepreneurially. While control measures should be in place they should not be overbearing towards innovation (Cohen, 2004:3).

Organisational restriction, both actual and imaginary, hinders employees from looking at problems external to their own job description. Employees should have a broader perspective of the organisation. This enables greater productivity and performance.

According to Morris and Kuratko (2002:173), there should be few hierarchical levels as possible with a fair broad span of control for leaders. Also, communication channels should be opened, responsibility should be conferred by relevant authorities and employees should be held accountable (Morris & Kuratko, 2002:173).

According to Goosen *et al.* (2002:42), communication should be open and frank, not to be territorial as this will enable exchange of ideas and improve efficiency and productivity. From this a simple organisational structure will be more advantageous as it will bring about a sense of community where employees are able to assist each other. In such cases, employees think of communal benefits as compared to promoting their own agenda.

For the purpose of this study, the final construct of **flat organisational structure** was measured by a five-point Likert scale and refers to whether employees are allowed to make decisions without elaborate justification processes; whether employees are given ample opportunity for independence and freedom; whether employees have autonomy to decide how to do their work; whether the degree of

hierarchical control is relatively low and whether employees determine their key performance areas in co-operation with their supervisors (Jordan, 2008: 60).

2.6 PERCEIVED BUSINESS SUCCESS

A shift in management's vision, strategy and behaviour can foster innovation, creativity and is a catalyst for perceived success. According to Lotz and Van der Merwe (2013) perceive that the success of the business could be measured by two variables which are business growth and business development and improvement. In their study, Lotz and Van der Merwe (2013) concluded that the two identified variables for perceived success are reliable and could be used as a measurement.

2.6.1 Financial Measures

In measuring business growth, financial indicators are used. These include growth in turnover, market share, profit and improved competitive position. Financial measures avail constructs from which conclusions can be drawn with regards to the success and effectiveness of the organisation (Lotz & Van de Merwe, 2013:17). Financial measures like sales growth and return on assets are frequently used.

For this research, the variable of **perceived financial success** refers to whether employees perceive the organisation to have experienced growth in market share; and whether employees perceive the organisation to have experienced growth in turnover and whether employees perceive the organisation to have experienced growth in profits.

2.6.2 Customer satisfaction

According to Kotler and Armstrong (2010:29), customer satisfaction is made up of five core concepts which are, customer needs, wants and demands, market offering, value satisfaction, exchange and relationships and markets. As mentioned, able customer orientation can be described as a belief systems that advocates for prioritising customers' needs and satisfaction (Liu, Luo & Schi, 2002: 367).

For the purpose of this research, the variable of **customer satisfaction** was measured by a five-point Likert scale and refers to whether the organisation develops products or services with customers' needs in mind; whether the organisation has a high customer retention rate; whether the customers are loyal to the organisation; and whether customer satisfaction is the organisation's top priority and whether employees understand the needs of their customers.

2.6.3 Process

Organisations should have processes and systems in place to advance its core mandate. Effective measurement and process systems should be in place to assist the organisation to keep track of progress and enable it to make predictive judgements within its market segment.

Process measures are tactical in nature and reflect a predictive element of the results measured. For example, in a market, organisations differ in size and resources. Within a market different organisations can occupy different competitive positions. Some are market leaders, market challengers, market followers and some based on niche marketing (Kotler & Armstrong, 2010:561).

By keeping track of key processes which make up the market, organisations are able to gain insight into what timely actions are required to provide outcomes required when results are tallied (Seshadi & Tripathy, 2006:17). In such a case, process measures enable a predictive capacity informing the organisations game plan and strategy to use.

In this research, the variable of **process** refers to whether employees believe that the competitive position of their organisation has improved; whether efficiency has improved and whether effectiveness has improved.

2.6.4 People development

In contrast to business growth, business people development is measured using nonfinancial measures. Nonfinancial measures comprise of growth in new product, services, process, employment, operational measures and customer satisfaction (Lotz & Van der Merwe, 2013:17). For example, Lotz (2009:19) states that business development alludes to highly committed employees that are regarded as valuable assets of the business. Committed employees are able to affect performance of the organisation in terms of contributing to growth. General satisfaction with work, benefits, remuneration, organisational culture and employee loyalty are elements that are essential for business growth. Satisfied and committed employees may also have a positive effect on the entrepreneurial orientation of the business as they are willing to invest their own knowledge and skills (Lotz & Van der Merwe, 2013:18).

People development also relates to continuous improvement in efficiency and effectiveness. For example, product features that enhance customer satisfaction and defect free products that elevate the level of customer satisfaction (Lotz & Van der Merwe, 2013:18).

For the purpose of this study, the variable of **people development** was measured by a five item-scale and refers to whether employees are highly committed to the

organisation; whether employees are viewed as the most valuable asset to the organisation and whether the morale (job satisfaction) has improved recently.

2.6.5 Future success

The basis of future success is a combination of managerial effectiveness and factors on the outside of the organisation (Bulut & Alpkan, 2006:61). Focus is therefore placed on internal performance criteria that are assumed to be controllable indicators of future financial success. Currently, technological innovation has an extensive impact on business, society and daily operations. Organisations should be able to keep up with new innovation and also be able to continuously improve its products and business model (Menzel, 2007:732).

For this research, the variable for **future success** includes whether during difficult economic periods, investments in innovative projects continue and whether the image of the organisation, relative to its competitors, has grown over the past few years.

2.7 SMALL MICRO AND MEDIUM ENTREPRISES (SMME's)

The following section defines Small Micro Medium Enterprises (SMME).

2.7.1 Defining Small Micro and Medium Enterprises (SMMEs)

In South Africa, SMMEs are classified according to the National Small Business Act of 1996 in terms of number of employees, total annual turnover and total gross asset value (NSB Act 29/2004:2). Small businesses are described as "a separate and distinct business entity, including co-operative enterprises and non-governmental organisations, managed by one owner or more, which include its branches or subsidiaries, if any, predominantly carried on in any sector or sub sector of the economy mentioned in Column I of the Schedule." This definition classifies

businesses that employ the equivalent of less than 200 employees as micro, small and medium-sized enterprises (SMME's).

SMMEs encompass a broad range of firms, from survivalist self-employed from the poorest layers of the population to traditional family businesses that employ over a hundred people (Wentzel, Smallwood & Emuze, 2016:1481). There are different views of what a small business is comprised of, but there is no standard definition (Nieman, 2006:4). The lack of uniformity is exacerbated by the fact that the small business definition differs worldwide and even between industries. For example, the definition of small businesses in the United Kingdom is not necessarily the same as the South African definition especially in terms of size.

However, small businesses are usually defined using a qualitative or quantitative criteria (Nieman, 2006:4). The qualitative criteria relate to the ownership structure of the small business and Nieman (2006) uses the following qualitative criteria:

- A small business must be a separate and distinct business entity.
- A small business cannot be part of a group of companies.
- A small business must include subsidiaries and branches, if applicable when measuring the size and should be managed by its owners.

The qualitative criteria can be defined by the National Small Business Amendment Act of 2003 and 2004 which defines small businesses as separate distinct business entities, including co-operative enterprises and non-governmental organisations managed by one or more owners. According to Nieman (2006:8), these can be classified into micro, very small or medium enterprises. Nieman (2006) defines the classification as follows:

Table 2.4 Definitions of enterprises

Micro-enterprises	Amongst the grouping they are the smallest in the small business sector, often		
	involving only the owner, some family members and at the most one or two		
	paid employees. In this sector there is a lack formality with regards to business		
	licences, VAT registration, formal business premises and accounting		
	procedures. In addition, most of them have limited capital and rudimentary		
	business skills. Within this class fall the "survivalist" enterprises as described		
	above. It is generally referred to as the "informal sector". These enterprises		
	generate income that is less than the minimum income standard and include		
	hawkers, vendors and subsistence farmers.		
Very small	These are enterprises with less than ten paid employees and operate within		
enterprises	the formal economy.		
Small enterprises	This sector constitute a large number of the established businesses and are		
	defined as employing between 11 and 50 employees. The business is owner		
	managed and usually complies with formal registration and labour legislation.		

Source: Nieman (2006)

2.7.2 The importance of the SMMEs in the economy

The existence of a vibrant small business sector often indicates the presence of an entrepreneurial spirit and an economically healthy society (Wentzel, Smallwood & Emuze, 2016:1486). According to Shakantu (2012), SMMEs are the potential engines of wealth creation, value reorientation, job creation and poverty eradication. This in South Africa is particularly crucial since the country is characterised by the legacy of big business dominance and huge unequal distribution of wealth. The small business sector is endowed with a higher capacity of labour absorption compared to big business. In terms of technical innovation, small business all over the world play a vital role as they provide great opportunities for innovators. Some of the small businesses are able to compete with large established organisations in terms of innovation. SMMEs also form a crucial component of a government's strategies to create employment opportunities and foster economic growth and national development (Shakantu, 2012). SMMEs also provide a medium through which most

of the under privileged who lacked financial resources and skills are able to gain access to opportunities.

According to the Department of Trade and Industry (2003), small businesses represent 98% of the total number of firms in South Africa. They employ approximately 55% of the labour force and contribute 35% towards the GDP of South Africa (Wentzel, Smallwood & Emuze, 2016:1487). In the four of the eight major economic sectors, small businesses contribute more than 40% of the GDP. This highlights the important involvement of SMMEs within the economy of South Africa.

2.7.3 Constraints faced by small businesses in South Africa

Although the SMME sector is facing many structural difficulties, it has proven to be a significant contributor in the South African economy. The challenges facing SMMEs are many and varied, these has a significant impact on their sustainability and development (Wentzel, Smallwood & Emuze, 2016:1487). These challenges are the contributing factors to the high levels of small business failure rate within the first years of operation. The Department of Trade and industry (DTI) identified the following as some of the constraints facing SMMEs: access to markets, financing and affordable business premises; access to appropriate technology; access to quality infrastructure in poor areas; acquisition of skills and management expertise; legal and regulatory environment.

Further, the Small Enterprise Development Agency (SEDA) in its 2012 annual report identified the following as some of the challenges hampering SMMEs growth: Lack of business planning in the initial stages; Difficulty accessing finance; difficulty in accessing markets or meeting requirements or standards; lack of experience among owners and managers; lack of sector specific expertise; inconsistence in cash flow; lack of experience among owners and managers; lack of entrepreneurial skills and mind sets; lack of capacity to undertake market research, resulting in a lack of

understanding the market needs and characteristics; skills shortage, particularly with respect to technical skills and business management skills; difficulty in accessing land or securing operating premises; red tape and cumbersome regulatory processes and procedures; fragmented and uncoordinated support from entities tasked with providing assistance.

2.8 SUMMARY

This chapter introduced literature regarding corporate entrepreneurship and small micro and medium enterprises. Various definitions of corporate entrepreneurship were highlighted. The purpose of this chapter was to define corporate entrepreneurship and its thirteen themes.

Research has postulated different forms and types of corporate entrepreneurship, which are: sustained regeneration, organisational rejuvenation, strategic renewal and domain redefinition amongst others.

Oosthuizen (2006) identified thirteen constructs that are vital for establishing an entrepreneurial climate and are the basis for this research. These constructs are:

- entrepreneurial leadership;
- management support;
- the presence sponsors;
- tolerance of risk;
- innovation and creativity;
- appropriate reward and reinforcement;
- vision and strategic intent;
- discretionary time and work;
- empowered teams;
- resource availability and accessibility;
- continuous and cross-functional learning;

- stronger customer orientation; and
- and flat organisational structures with open communication.

SMMEs are vehicles of wealth creation for owners or entrepreneurs. They are also the driving force of economic growth and job creation.

The main aim of the research was to assess the corporate entrepreneurship in SMMEs at The Innovation Hub in Tshwane. The following chapter deals with the introduction of The Innovation Hub and the methodology used to measure the research question.

CHAPTER 3: AN OVERVIEW OF THE INNOVATION HUB

3.1 INTRODUCTION

The area that served as the case study in the empirical analysis is The Innovation Hub (TIH) in Tshwane. It is a science and technology park that aims to promote socio-economic development and competitiveness of the Gauteng Province through fostering innovation and entrepreneurship. TIH offers incubation programmes in the Bioeconomy (agro processing and pharmaceutical), Smart Industries (ICT and advanced manufacturing) and Green Economy (Water purification, waste management and renewable energy). TIH operates a range of enterprise development, skills development and innovation enabling programmes both in the science park and throughout the Gauteng region.

TIH in South Africa is possibly one of the longest running of such initiatives in Africa and is the first IASP accredited Science and Technology Park in the continent (Comins & Kraemer-Mbula, 2016:38). Figure 3.1 below shows the synopsis of chapter 3.

Figure 3.1: Synopsis of Chapter 3



- INTRODUCTION
- BACKGROUND OF THE INNOVATION HUB
- ALLIGMENT WITH REGIONAL POLICY STRATEGIES
- SKILLS & ENTERPRISE DEVELOPMENT
- SUMMARY

Source: own compilation

3.2 BACKGROUND TO THE INNOVATION HUB

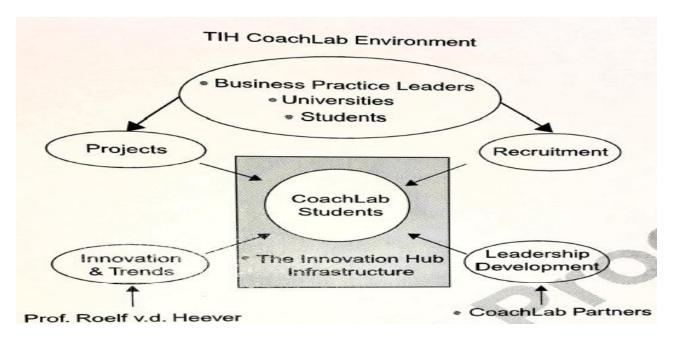
After the transition into a new dispensation in 1997, Gauteng the smallest province in the industrial powerhouse of South Africa mapped its Trade and Industry Strategy (TIH website, accessed 2 May 2017). It decided to focus on three main areas as its strategy. These areas were industrial performance, trade performance and FDI to Gauteng (TIH website, accessed 2 May 2017). During the planning, different facets advocated the need for the province to focus on higher value manufacturing like the cost structure in Gauteng, added by its landlocked position affecting the export of bulk items and the presence of the skills base that exceeds the national average (TIH website, accessed 2 May 2017). In this instance, substantial opportunities were identified for increasing contributions to the economy from the services sector, with information and communication technology (ICT) playing an important role (TIH website, accessed 2 May 2017).

Of the eleven proposed strategic projects, one strategic option included a 'High-tech Smart Park' envisaged to incorporate high-speed state-of-the art ICT to support the companies in these fields and a business incubator network, for newly established firms in the high-tech zone of Gauteng (Comins & Kraemer-Mbula, 2016:37).

This concept was further developed into 'The Innovation Hub' as a single location where all elements should reside to leverage and develop an indigenous high-tech sector (Comins & Kraemer-Mbula, 2016:57). A proposal by the CSIR and the University of Pretoria (UP) suggested the ideal site for such a project was on land (60 ha) between the UP and CSIR, the project was accepted by Gauteng Provincial Government and launched in 2000.

By 2001, the science park had attracted residency from ICT companies and went on to launch CouchLab a programme that would instil business principles and the value of innovative and entrepreneurial thinking amongst participating postgraduates through mentorship and project sponsors (Comins & Kraemer-Mbula, 2016:59).

Figure 3.2: The CoachLab Environment



Source: Courtesy of The Innovation Hub

CoachLab as an incubator managed to create activity in the hub, but TIH needed to expand its influence to a much wider community (Comins & Kraemer-Mbula, 2016:59). Although progress was steady at hub by the end of 2002, the number of resident companies had grown to 11 employing about 51 people (Comins & Kraemer-Mbula, 2016:60). By 2004 there we 13 companies with 57 staff resident and by 2005 the hub had 30 companies and 80% had reached sustainability.

Over the years, TIH has grown and has received numerous international visitors, including delegations from Botswana, Mozambique and NEPAD among others. It also has linkages to other countries like Finland through its IASP membership.

Over the years it has also gone through troubled times and has managed to bounce back by realigning with its original mandate. One of its key goals was to be a key driver of innovation in the region (Comins & Kraemer-Mbula, 2016:60). To do this it was required to act of three levels: (1) Aligning its goals to regional policy strategies;

(2) addressing the limitations of physical and virtual infrastructures; and (3) improving value added services.

3.2.1 Alignment with Regional Policy Strategies

In becoming contextual, TIH revised its role in the provincial and national spheres. Its revised strategy included aligning its goals with provincial goals as stated in three regional strategies: (a) Gauteng Growth and Development Strategy; (b) Gauteng Green Economy Strategy; and (c) Gauteng Innovation and Knowledge Economy Strategy (Comins & Kraemer-Mbula, 2016:61). This prompted a sectorial shift from dominantly ICTs to now also include biotechnology, green industries and advanced manufacturing.

3.2.2 Addressing Issues of Infrastructure

An important aspect of Science and Technology Parks is the buildings and quality of facilities in order to attract business and support the development clusters. By virtue of no infrastructure development since 2005, TIH became constrained, this affected its ability to expand its tenant base and affected its revenue generating function. With new focus on biotechnology and green industries, there were large demands for space (Comins & Kraemer-Mbula, 2016:61). Also, virtual infrastructure is a critical service for tenants in a science park. As technology develops, the park needs to keep up with trends and upgrade its technology facilities regularly (Comins & Kraemer-Mbula, 2016:61).

3.2.3 Skills and Enterprise Development

In becoming a promoter of innovation in the region, existing value added services structure and new ones were launched. Services had evolved over the years with great influence from the provincial strategies (Comins & Kraemer-Mbula, 2016:60).

The value added services that were kept at TIH include: The Maxum Business Incubator; Innov8 and The CoachLab. The new value-added services include: Intellectual Property Management; Market Intelligence; Maxum Mondays and eKasiLabs.

Exit Main Incubation Connect/ Pipeline Pre-Incubation Alumni TIHMC artnerships Innovation Network Maxum Core Technology Factory Annual dinner. Transfer Offices automatic invitation to Fast-Track TIHMC Enterprise 3 mnths -> - 3 mnths
Maximum of 2 tast tracks per company Development events. CIC mLab mentorship club/ 2-3 years 6-9 months link to Pre-Incubation. Maxum Mentoring Monthly Milestone review Market Access Maxum Mentoring Maxum Incubation offices 3 hours per month GAP Monthly Milestone review Bioscience **Maxum Training** Market High Focus areas: Medical Graduation from program: Growth and sustainable Commercialisation 0 Graduation from Program: Maxum Core Graduation to Alumni Termination from program Pitching Sessions Network 3 months cooling off (Monthly pitching to Maxum Panel) **Maxum Training** Value Added Services

Figure 3.3: The Maxum Business Incubator.

Source: Courtesy of The Innovation Hub.

From the above, it can be noted that TIH takes the role of an accelerator, by creating a network which connects experts from different fields, researchers, SMMEs and government with relevant R&D problems across Gauteng province.

3.4 Summary

This chapter introduced The Innovation Hub, its vision, mission and a background of such an initiative.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 INTRODUCTION

The primary objective of the study is to assess the corporate entrepreneurial and innovation climate within SMMEs at The Innovation Hub. The attempt is to generate recommendations that will incite and promote a conducive climate for corporate entrepreneurship within SMMEs. Figure 4.1 below gives a synopsis of chapter 4.

Figure 4.1: Synopsis of Chapter 4



- INTRODUCTION
- GATHERING OF DATA
- DEMOGRAPHIC INFORMATION
- RELIABILITY OF QUESTIONNAIRE
- ASSESSMENT OF ENTREPRENEURIAL CLIMATE
- •RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES & ENTREPRENEURIAL CONSTRUCTS
- •RELATIONSHIP BETWEEN ENTREPRENEURIAL CONSTRUCTS & DEMOGRAPHIC VARIABLES
- RELATIONSHIP BETWEEN & PERCEIVED SUCCESS FACTORS OF AN ORGANISATION

Source: own compilation

The chapter focuses on how the current project was approached methodologically and what specific methods were used in the course of the research. Research methodology describes the proposed approach and intended method that is used when planning, collecting and analysing the data for research. Various approaches and collection methods can be used to gather data. This chapter provides insight into the methods used in gathering the information for the empirical research for this study, gathering of data, determining the study population, questionnaire compilation, sampling method and size, demographic compilation of the sample group, presentation and discussion of the research results.

There are two levels at which scientific research operates, theoretical level and empirical level. Empirical level is concerned with testing theoretical concepts and relationships to see how well they reflect observations of reality with the goal of ultimately building better theories (Bhattachajee, 2012:3).

The empirical study was conducted by a combination of telephonic, face to face interview and self-completion online questionnaire administered to SMMEs residing at The Innovation Hub. The entrepreneurial climate questionnaire (Annexure A) was constructed by Oosthuizen (2006) and adapted by Jordan (2008) it consists of a section capturing the demographics of the participants and sections measuring entrepreneurial climate and perceived success.

SPSS and Statistica were used to calculate the Cronbach Alpha coefficients, mean values and standard deviations. The following sections examine on data gathering process in detail.

4.2 GATHERING OF DATA

4.2.1 Construction and development of the questionnaire

The questionnaire was distributed via email detailing the specific instructions on completing and returning the questionnaire. The results were coded and then stored. Therefore, this study can be repeated with the expectation of similar results. According to de Vos *et al.* (2011:186), a questionnaire is defined as a document containing questions and other types of items designed to solicit information appropriate for analysis. Although the term questionnaire suggests a collection of questions, a standard questionnaire will most likely contain as many statements as questions, especially if the researcher is interested in determining the extent to which respondents hold a particular attitude or perspective (de Vos *et al.*, 2011:186).

The questionnaire is partitioned into four sections namely:

Section A: This section records the respondent's demographical information. In this section respondents indicate their age group, gender, race and highest academic qualification. The intention of the section is to statistically analyse and compare various groups.

Section B: This section is made up of 65 statements which were rated based on a five point Likert scale. These statements measure the thirteen constructs that should be apparent in an organisation perceived to have a corporate entrepreneurial climate. This section was developed to measure the corporate entrepreneurial climate of SMME's at the Innovation Hub.

Likert (1903-1981) introduced the Likert scale as a measure of attitude and has become a popular attitude scale in social sciences. The scale maybe used in measuring multidimensional attitudes. In this section the scale consists of a collection of statements regarding attitudinal objects, within each statement subjects indicate the degree to which they agree or disagree with the particular issue, which is based on a five-point scale.

Section C: This section evaluates the success of the business in which the respondents operate. The section is made up of 17 statements, with the aim of measuring the dependent variable of business growth and development. Also a five point Likert scale was used for this section, which ranges from "strongly agree" to "strongly disagree".

Section D: This section measures the business structure and financial information of the SMMEs. Some of the questions included are the number of employees in the business, the industry in which the entity operates and legal status of the entity.

4.2.2. Confidentiality

The confidentiality of all respondents was assured, even though names were known as almost all of the questionnaires were sent back through email. The name on the reply emails were only used to keep track of the response rate. At no stage during or after this study was the individual's results be made available.

4.2.3 Study population

The target population for this study was SMMEs that have residency in the Innovation Hub. This list was obtained via the website of the Innovation Hub. These SMMEs have been operational for at least two years and more, as previous studies indicate that a great portion of SMMEs are unsuccessful in the initial five years of commencing operation.

A total of 100 questionnaires were distributed to the SMME's at the Innovation Hub, 85 were collected but only 82 were used in the survey. The SMMEs owner and representatives were tasked with completing the questionnaire, because of the sensitivity of the questions. The study population includes different industries operating within the Innovation Hub in Gauteng.

Table 4.1: Response to survey

Response Type	Frequency	Percentage
Questionnaires distributed	100	100 %
Questionnaires returned	85	85 %
Questionnaires discarded	3	3%
Questionnaires analysed	88	82%

4.2.4 Statistical analysis of data

For assistance in the analysis of the collected data the Statistical Consultancy Services of the North-West University, Mahikeng campus, was approached. The data was analysed using Statistica and SPSS. By calculating Cronbach Alpha coefficients, the validity of the questionnaire was assessed. The results are discussed in this chapter.

4.3 DEMOGRAPHIC INFORMATION OF RESPONDENTS

The demographic information of the respondents was captured in Section A of the questionnaire captured the, where the participants specified their age group, gender, race classification and their level of education. In this section the frequency and distribution results are discussed.

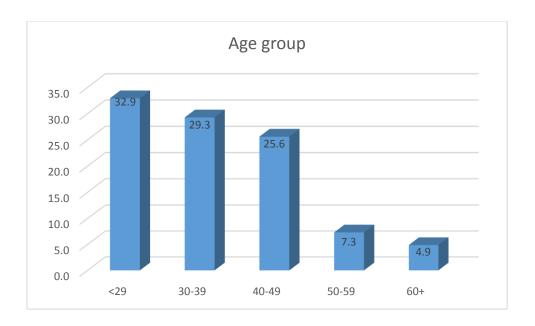
4.3.1 Age group classification of respondents

Rationale of the question

The purpose of this section in the questionnaire was to determine the age category of participants.

The participants were requested to indicate their age group. The groups were divided into: 29 years and younger; 30-39 years, 30-39 years, and 50-59 years and older than 60. Table 4.2 indicates the frequency and percentages of the age groups.

Figure 4.2: Age interval distribution by respondents



Results obtained

The age group classification of the respondents is presented in figure 4.2

Results analysed

The majority of the respondents are in the age group <29, with 27 respondents which represent 32.9% of responses. This is followed by 30-39 age group representing 29,3 % of responses. The third largest group is 40-49 representing 25.6% of total responses. The smallest age group is 60+ with only four participants representing 4,9 % of the total responses. This clearly shows that the age group of less than 29 year dominated the age category.

4.3.2 Gender of respondents

• Rational of the question

The aim of Question 2 within Section A of the questionnaire is to determine and differentiate between the number of male and female respondents.

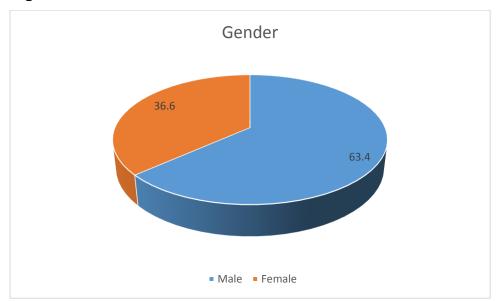


Figure 4.3: Gender distribution

Results obtained

Figure 4.3 describes the gender of the participating candidates.

Results analysed

In the pool of respondents 36.6 % of this study are women while 63.4 % are males. There is no even balance between female and male within SMMEs at The Innovation Hub, which does not fall in line with the Government's mandate to increase woman participation numbers within the business sector.

4.3.3 Classification of respondents by race

The aim of Question A3 within Section A of the questionnaire was to determine the race group of the respondents.

Results obtained

The race group classification of the respondents is presented in Figure 4.

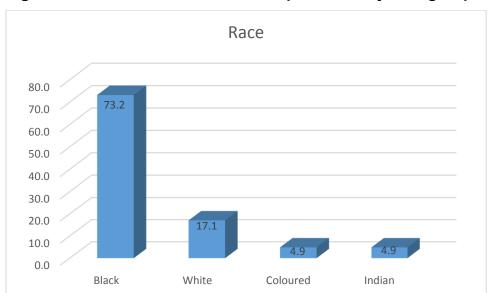


Figure 4.4: Race Classification of respondent's by race group

Results analysed

The majority of the respondents are black (73.2%), while 17.1 % respondents are white. The small proportions of the respondents were Coloured and Indian with 4.9% respectively who participated in this study. All the respondent's races were profiled.

4.3.4 Highest academic qualifications of respondents

Rationale of the question

The aim of Question A3 within Section A of the questionnaire was to determine the highest academic qualifications of the respondents.

Results obtained

The highest academic qualifications of the respondents are presented in Figure 4.5.

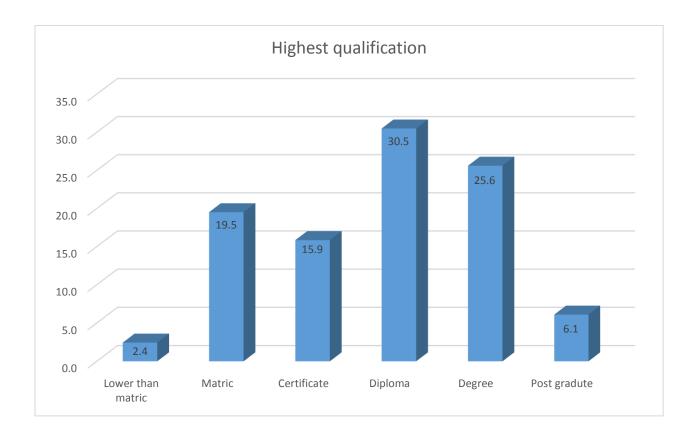


Figure 4.5: Highest academic qualifications of respondents

Results analysed

The figure above depicts that majority (30.5%) of the respondents have a Diploma followed by Degree with 25.6%. The small proportion (2.4%) of the respondents holds lower than matric as their highest qualification. This means that Diploma dominated the highest qualification category.

4.4 RELIABILITY OF THE MEASURING INSTRUMENT

Cronbach Alpha coefficients were calculated for assessing the internal consistency between the statements of the measuring instrument. The Cronbach Alpha coefficient indicates of the internal consistency of a measure or test (Lotz & Van der Merwe, 2013:23). By computing the average of all split-half reliabilities for a multiple

item scale, the Cronbach Alpha is able to measure internal consistency (Struwig & Stead, 2003:132).

The bases of the Cronbach Alpha is on the average correlation variables within a test (Struwig & Stead, 2003:132). In order for it to be acceptable, the Cronbach Alpha coefficient should be equal or greater than 0.7 (Nunnally and Bernstein, 1993:265). In theory the Cronbach Alpha varies from zero to one and a greater value for the coefficient indicates that consistency and improved reliability of higher values of Cronbach Alpha are more desirable.

Table 4.2 indicates the Cronbach Alpha coefficients of the constructs measuring Entrepreneurial Climate and perceived success of SMMEs.

Table 4.2: Cronbach Alpha coefficients of variables

	SECTION B: CORPORATE ENTREPRENEURIAL CLIMATE	CRONBACH ALPHA
1	Entrepreneurial leadership	0.734
2	Management support	0.735

3	Sponsors and champions	0.789
4	Tolerance for risk, mistakes and failure	0.737
5	Innovation and creativity / New idea encouraged	0.748
6	Appropriate awards and reinforcement	0.759
7	Vision and strategic intent	0.705
8	Discretionary time and work	0.773
9	Empowered teams	0.703
10	Resource availability and accessibility	0.246
11	Continuous and cross-functional learning	0.700
12	Strong customer orientation	0.799
13	Flat organization structure	0.091
	SECTION C: PERCEIVED SUCCESS OF THE ORGANISATION	CRONBACH ALPHA
1	Financial measures	0.732
2	Customer/market measures	0.706
3	Process measures	0.791
4	People development	0.729
5	Future (long term) success	0.752

The reliability results presented in table 4.2 for Section B revealed that the research instrument used in the study to access the corporate entrepreneurial climate is reliable since most of the Cronbach's alpha for the constructs are at least 0.7 except for "resource availability and accessibility" (0.246) and "flat organisation structure" (0.091). Therefore, it is concluded that the two constructs with a Cronbach's Alpha of less than 0.7 will not be included in the further analysis because of the extremely low Cronbach's Alpha coefficient.

The reliability analysis for Section C revealed that all the constructs in the section has an acceptable reliability values. The next section discusses the demographic information of the respondents.

4.5 ASSESSMENT OF ENTREPRENEURAL CLIMATE

4.5.1 Variables measuring entrepreneurial climate

Section B consisted of 65 statements with the intention of determining the entrepreneurship climate of the respondents. Thirteen constructs were used namely: Entrepreneurial leadership; Management support; Sponsors and champions; Tolerance of risks, mistakes and failure; Innovation and creativity/new ideas encouraged; Appropriate rewards and reinforcement; Vision and strategic intent; Discretionary time and work; Empowered teams; Resource availability and accessibility; Continuous and cross-functional learning; Customer climate; Flat organisational structure.

The questionnaire measured each statement on the following numbering scale.

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly Agree

Using a five point Likert Scale respondents were able to articulate to what extent they agreed or disagreed with the statements measuring the variables. The value on the scale ranged from 1, where respondent strongly disagreed, up to 5, where the respondent strongly with a specific statement.

Table 4.3 below shows the dimensions of entrepreneurial climate with the mean measured levels of application and recognition. The standard deviation indicates how the recorded data is distributed. It provides the number to add to, or subtract from the mean value to obtain the highest or lowest accurate perspective without being concerned about the effect of outliers.

Table 4.3: The dimensions of entrepreneurial climate

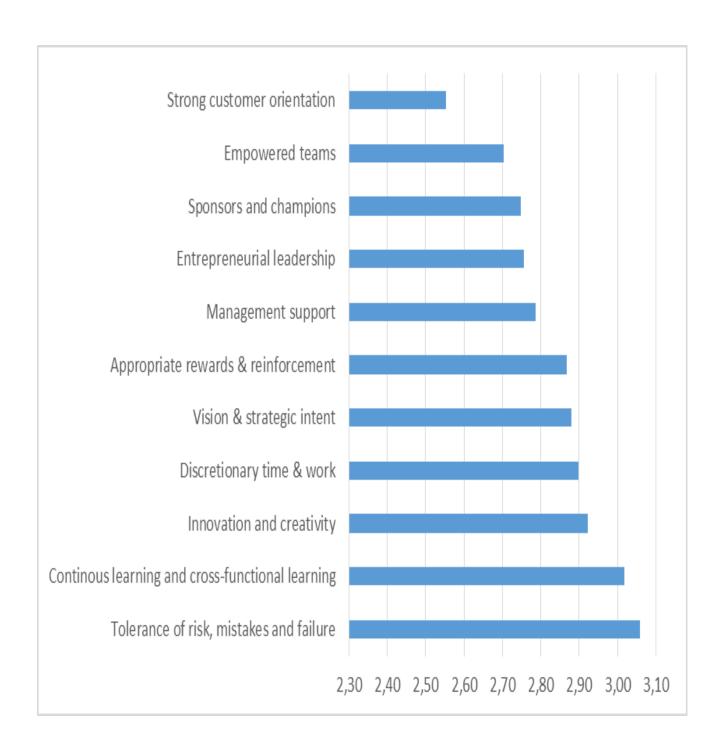
CONSTRUCTS	N	\overline{X}	S

1	Entrepreneurial leadership	82	2.76	1.03
2	Management support	82	2.79	1.04
3	Sponsors and champions	82	2.75	1.00
4	Tolerance for risk, mistakes and failure	82	3.06	0.98
5	Innovation and creativity / New idea encouraged	82	2.92	0.96
6	Appropriate awards and reinforcement	82	2.87	0.98
7	Vision and strategic intent	82	2.88	0.87
8	Discretionary time and work	82	2.90	0.96
9	Empowered teams	82	2.70	0.84
10	Continuous and cross-functional learning	82	3.02	0.99
11	Strong customer orientation	82	2.55	0.97
	Total	82	2.84	0.96

The results in Table 4.3 indicate that an average mean of 2.84 was recorded when considering all 11 constructs measuring an entrepreneurial climate with an average standard deviation of 0.96. The constructs which scored the highest (strongly agree) are tolerance for risk, mistakes and failure, and continuous cross-functional learning with an average of 3.06 and 3.02 respectively.

The constructs that scored the lowest and indicated a negative response were empowered teams with a recorded mean value of 2.70 and strong customer orientation with a mean value of 2.55. The result of the study is graphically represented in a clustered bar chart in Figure 4.4 and compares the mean values of the constructs ranked from the lowest to the highest.

Figure 4.6: Cluster bar graph of corporate entrepreneurial climate analysis



In figure 4.5, the mean values across the constructs are compared and ranked from the lowest to the highest. As there are no norms in interpreting a Likert scale, it is assumed that a score of greater than three out of five is an indication of an agreement towards the statement.

From the above mentioned assumption, it is evident that the respondents from Gauteng Innovation Hub had a positive sentiment to two of the eleven constructs

measuring a corporate entrepreneurial climate. Those sentiments are tolerance for risk, mistakes and failure, and continuous and cross-functional learning. The mean values of nine constructs scored below three out of five on the Likert scale which indicates a negative response from the participants. The constructs are entrepreneurial leadership, management support, sponsors and champions, innovation and creativity / new idea encouraged, appropriate awards and reinforcement, vision and strategic intent, discretionary time and work, empowered teams and strong customer orientation.

4.5.2 Variables measuring the perceived success of the organisation

Table 4.4 presents the results of the mean analysis of the variables determining the perceived business success

Table 4.4 Results for business success

	CONSTRUCTS	N	\overline{X}	S
1	Financial measures	82	2.93	1.11
2	Customer/market measures	82	3.19	0.83
3	Process measures	81	2.49	0.96
4	People development	82	2.96	1.02
5	Future (long term) success	82	3.32	1.39
	Total	82	2.98	1.06

The findings of Perceived organisational success survey revealed an average mean of 2.98 was recorded when considering all five constructs perceived success of the business with an average standard deviation of 1.06. Only two constructs namely, **customer/market measures** and **future (long term) success**, scored the highest (strongly agree) average of 3.19 and 3.32 respectively.

The construct that scored the lowest and indicated a negative response was process measures with a recorded mean value of 249 and a standard deviation of 0.96. The result of the study was further presented graphically in a clustered bar chart in Figure 4.6 to compares the mean values of the constructs ranked from the lowest to the highest.



Figure 4.7: Cluster bar graph of perceived business success

It is evident from the Figure 4.6 that **customer/market measures** and **future (long term) success** recorded the highest mean value of 3.19 and 3.32 respectively while **process measure** recorded the least mean value.

Only two constructs recorded the mean value higher than three as presented in the figure. This means that respondents in The Innovation Hub perceived that the business takes care of their customers' needs and their customers are satisfied with

their service. This may lead to high customer retention. The results further depicts that businesses have future success in mind.

The financial measures and people development variables can be regarded as a neutral perception in the business since they scored a mean value of 2,93 and 2,96. The variable that recorded the lowest score was process measure.

4.6 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND ENTREPRENEURIAL CONTRUCTS

An empirical analysis is done to determine the effect of demographical variables on the entrepreneurial constructs measured by the questionnaire. Quantitative tests need to be performed to assess whether any observed influence of demographical variables is significant enough to be discussed further. In order to test for statistical significance, the two sample *t*-test was used. The results of the tests are *p*- values and *d*- values.

In this study, the simple conservative approach was applied and the t-test that does not assume equal variance was used. A small p-value (<0.05) indicates significance (Ellis & Steyn, 2003:51). However, caution should be taken against the drawback of using p-value. The reason is that a larger sample size tends to result in smaller p-values without necessarily indicating statistical significance (Ellis & Steyn, 2003:51).

Overcoming the effect of the sample size on the p-value, the d value was calculated. The d-value is used to test the practical significance of a standardised difference between the two means of two populations according to Cohen's guidelines. The effect sizes which will be held signify practical significance are presented in Table 3.11

Table 4.5: Classification of d-values

<i>d</i> -value	Interpretation
0.8	Large effect
0.5 to 0.8	Medium effect
0.2 to 0.5	Small effect

Source: Cohen (1992:155)

The *d*-values are thus interpreted as follows: small effect (d = 0.2), medium (d = 0.5) and large effect (d = 0.8).

4.6.1 Relationship between gender and the entrepreneurial constructs

Demographical information was captured on section A of the questionnaire and it is analysed in this section. This analysis was done to determine if there is a significant difference between the evaluations based on the mean scores of male and female respondents with regard to a specific construct. Table 4.6 below indicates the relationship between the thirteen constructs measuring entrepreneurial climate and the demographic variable gender, with mean (\tilde{x}), standard deviation (s), t-test (p), and effect sizes (d).

Table 4.6: Comparison between gender and entrepreneurial climate constructs

Constructs	Male			Fem	ale		t-value	p- value	d- value
	n	\bar{X}	S	n	\overline{X}	S			
Entrepreneurial leadership	52	2,75	1,03	30	2,77	1,06	-0,07	0,944	0,02
Management support	52	2,79	1,03	30	2,78	1,07	0,08	0,939	0,02
Sponsors and champions	52	2,73	0,99	30	2,78	1,02	-0,21	0,831	0,05
Tolerance for risk, mistakes and failure	52	3,04	1,08	30	3,09	0,77	-0,20	0,844	0,04
Innovation and creativity / New idea encouraged	52	2,98	0,99	30	2,83	0,93	0,68	0,500	0,15
Appropriate awards and reinforcement	52	2,89	1,06	30	2,83	0,84	0,24	0,808	0,06
Vision and strategic intent	52	2,86	0,92	30	2,91	0,78	-0,24	0,807	0,05
Discretionary time and work	52	2,87	1,03	30	2,94	0,84	-0,33	0,743	0,07
Empowered teams	52	2,75	0,86	30	2,63	0,81	0,62	0,538	0,12
Continuous and cross- functional learning	52	2,99	1,10	30	3,07	0,79	-0,33	0,740	0,08
Strong customer orientation	52	2,55	0,97	30	2,56	0,99	-0,04	0,964	0,01

The results presented in Table 4.6 revealed that there are no significant differences between males and females with respect to eleven constructs relating to their attitude towards entrepreneurial climate constructs. The gender of the respondents has no bearing on how they responded to the constructs.

Table 4.7 presents the analysis of the relationship between the eleven constructs on corporate entrepreneurial climate and age group of the respondents

Table 4.7 Comparison between age group and entrepreneurial climate constructs

Constructs	Young	g		Old			t-	p	d-
	n	\overline{X}	S	n	\overline{X}	S	value	value	value
Entrepreneurial leadership	51	3,03	0,98	31	2,31	0,97	3,26	0,002	0,72
Management support	51	3,06	0,98	31	2,34	0,98	3,23	0,002	0,72
Sponsors and champions	51	3,02	0,95	31	2,30	0,91	3,35	0,001	0,72
Tolerance for risk, mistakes and failure	51	3,24	0,83	31	2,77	1,13	2,15	0,035	0,47
Innovation and creativity / New idea encouraged	51	3,10	0,87	31	2,63	1,05	2,21	0,030	0,47
Appropriate awards and reinforcement	51	3,13	0,91	31	2,45	0,97	3,21	0,002	0,68
Vision and strategic intent	51	3,07	0,77	31	2,57	0,94	2,61	0,011	0,50
Discretionary time and work	51	3,14	0,86	31	2,50	0,99	3,09	0,003	0,64
Empowered teams	51	2,92	0,83	31	2,34	0,71	3,26	0,002	0,59
Continuous and cross- functional learning	51	3,21	0,84	31	2,71	1,15	2,25	0,027	0,50
Strong customer orientation	51	2,85	0,94	31	2,07	0,81	3,80	0,000	0,78

The results in Table 4.7 revealed that there is a significant difference between age group of the respondents and all the eleven constructs. When taking the d-values into account, there is no practical significant difference (d>0.8) in the mean values between the perceptions of young compared to old respondents with regard to the eleven constructs measuring the corporate entrepreneurial climate.

The analysis in Table 4.8 presents the relationship between the eleven constructs on corporate entrepreneurial climate and race of the respondents

Table 4.8 Comparison between race and entrepreneurial climate constructs

Constructs	Black		Whit	White			Coloured			Indian			P- value	
	n	\overline{X}	S	n	\overline{X}	S	n	\overline{X}	S	n	\overline{X}	S		
Entrepreneurial leadership	60	2,49	1,04	14	3,5 2	0,5 8	4	3,38	0,60	4	3,44	0,4 3	5,8 1	0,001
Management support	60	2,52	1,05	14	3,5 7	0,6 0	4	3,38	0,60	4	3,44	0,4 3	5,8 4	0,001
Sponsors and champions	60	2,50	1,00	14	3,5 0	0,6 4	4	3,35	0,77	4	3,20	0,5 4	5,3 9	0,002
Tolerance for risk, mistakes and failure	60	2,85	1,00	14	3,5 7	0,6 0	4	3,80	0,71	4	3,70	0,7 0	3,9 7	0,011
Innovation and creativity/New idea encouraged	60	2,64	0,92	14	3,7 3	0,5 6	4	3,50	0,91	4	3,79	0,2 8	8,3 5	0,000
Appropriate awards and reinforcement	60	2,62	0,99	14	3,5 0	0,5 9	4	3,70	0,26	4	3,60	0,5 2	5,8 3	0,001
Vision and strategic intent	60	2,70	0,92	14	3,3 1	0,4 3	4	3,42	0,48	4	3,54	0,4 8	3,6 1	0,017
Discretionary time and work	60	2,66	0,99	14	3,5 0	0,4 0	4	3,67	0,45	4	3,63	0,3 9	5,5 1	0,002
Empowered teams	60	2,52	0,85	14	3,2 9	0,6 8	4	3,08	0,35	4	3,08	0,1 7	4,2 8	0,008
Continuous and cross-functional learning	60	2,80	1,02	14	3,4 8	0,5 6	4	3,81	0,69	4	3,88	0,6 0	4,3 0	0,007
Strong	60	2,30	0,96	14	3,2	0,6	4	3,20	0,28	4	3,25	0,4	5,8	0,001
customer orientation					4	9						1	9	

The results presented in Table 4.8 revealed that there are statistically significant differences found in the mean scores of the race of the respondents and the eleven constructs measuring corporate entrepreneurial climate. The race of the respondent has a bearing on how they respondent to the eleven constructs.

Table 4.9 presents the analysis on the relationship between the eleven constructs on corporate entrepreneurial climate and qualification of the respondents

Table 4.9 Comparison between highest qualification and entrepreneurial climate constructs

Constructs	Matric and less				ificate/ oma		Degree Postg	ee/ raduat	е	F- value	P- value
	n	\overline{X}	S	n	\overline{X}	S	N	\overline{X}	S		
Entrepreneurial leadership	18	1,75	0,47	38	2,78	1,00	26	3,42	0,78	20,94 8	0
Management support	18	1,78	0,45	38	2,79	1,01	26	3,48	0,77	21,74 2	0
Sponsors and champions	18	1,76	0,40	38	2,78	0,97	26	3,38	0,75	21,54 7	0
Tolerance for risk, mistakes and failure	18	2,06	0,81	38	3,25	0,82	26	3,48	0,82	17,84 8	0
Innovation and creativity/New idea encouraged	18	2,08	0,81	38	3,00	0,90	26	3,39	0,77	13,04 7	0
Appropriate awards and reinforcement	18	1,80	0,46	38	2,94	0,89	26	3,50	0,76	26,21 8	0
Vision and strategic intent	18	1,94	0,63	38	2,99	0,74	26	3,37	0,67	23,10 4	0
Discretionary time and work	18	1,81	0,52	38	3,03	0,85	26	3,46	0,73	26,74 0	0
Empowered teams	18	2,00	0,43	38	2,69	0,85	26	3,21	0,66	15,06 1	0
Continuous and cross- functional learning	18	1,94	0,80	38	3,22	0,85	26	3,47	0,76	20,85 5	0
Strong customer orientation	18	1,58	0,20	38	2,58	0,97	26	3,19	0,71	22,80 9	0

With regard to highest qualification, there is a statistically significant difference recorded in all the eleven constructs presented in Table 4.9.

4.7 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND ENTREPRENEURIAL CONTRUCTS

Also in this section, the demographic information was used to determine where there is a significant relationship between the demographics and the constructs that

measures the business success. Table 4.9 presents the relationship between five constructs and gender of the respondents.

Table 4.10 Comparison between gender and business success constructs

Constructs	Male	Male			ale		t-	p-	d-
	n	\overline{X}	S	n	\overline{X}	S	value	value	value
Financial measures	51	3,24	1,04	31	2,42	1,05	3,46	0,001	0,82
Customer/market measures	51	3,45	0,69	31	2,75	0,86	4,04	0,000	0,70
Process measures	51	2,71	0,89	31	2,12	0,97	2,83	0,006	0.60
People development	51	3,27	0,84	31	2,44	1,10	3,86	0,000	0.83
Future (long term) success	51	3,72	1,27	31	2,68	1,35	3,51	0,001	1,04

The results presented in Table 4.9 revealed that there are significant differences between males and females with respect to five constructs measuring business success. The gender of the respondents has a bearing on how they responded to the constructs. Male participants rated financial measures, people development and future (long term) success constructs more positively than their female counterparts with the differences that are practical significant and a large effect (d >0.8).

Table 4.10 presents the analysis of the relationship between the five constructs on business success and age group of the respondents.

Table 4.11 Comparison between age group and business success constructs

Constructs	You	ng		Old			t-	p-	d-
	n	\overline{X}	S	n	\overline{X}	S	value	value	value
Financial measures	52	2,90	1,13	30	2,99	1,11	-0,36	0,722	0.09
Customer/market measures	52	3,13	0,89	30	3,28	0,71	-0,75	0,454	0.14
Process measures	52	2,49	0,95	29	2,47	0,99	0,10	0,921	0.02
People development	52	2,94	1,12	30	2,99	0,83	-0,23	0,822	0.05
Future (long term) success	52	3,28	1,44	30	3,40	1,31	-0,38	0,706	0.12

The results in Table 4.10 revealed that there is no significant difference between age group of the respondents and all the five constructs measuring business success. When taking the d-values into account, there is no practical significant difference

(d>0.8) in the mean values between the perceptions of young compared to old respondents with regard to the five constructs.

The analysis in Table 4.11 presents the relationship between the five constructs on business success and race of the respondents

Table 4.12 Comparison between race and business success constructs

Constructs	Black			White			Coloured			Indian			F- value	P- valu
	n	\overline{X}	S	n	\overline{X}	S	7	\overline{X}	S	n	\overline{X}	S	value	e
Financial measures	60	2,60	1,11	14	3,83	0,41	4	3,92	0,50	4	3,75	0,32	8,41	0.0
Customer/ma rket measures	60	2,92	0,80	14	3,94	0,31	4	3,75	0,17	4	4,00	0,24	10,68	0.0
Process measures	60	2,11	0,82	14	3,45	0,38	4	3,50	0,19	4	3,67	0,72	18,93	0.00
People development	60	2,58	0,91	14	3,95	0,39	4	4,00	0,47	4	4,08	0,50	15,89	0.0
Future (long term) success	60	2,95	1,43	14	4,36	0,46	4	4,38	0,25	4	4,25	0,29	6,51	0.0

The results presented in Table 4.12 revealed that there are statistically significant differences found in the mean scores of the race of the respondents and the five constructs measuring business success. The race of the respondent has a bearing on how they respondent to the five constructs.

Table 4.13 presents the analysis on the relationship between the five constructs on business success and qualification of the respondents:

Table 4.13 Comparison between highest qualification and business success constructs

Constructs	Matric and less			Cert Diple	ificate/ oma		Deg	ree/ :gradua	ate	F- value	P- value
	n	\overline{X}	S	n	\overline{X}	S	N	\overline{X}	S		
Financial measures	18	1,81	0,49	38	3,03	1,17	26	3,56	0,70	19,51	0.000
Customer/market measures	18	2,22	0,31	38	3,30	0,73	26	3,69	0,65	29,83	0.000
Process measures	18	1,52	0,17	37	2,60	0,98	26	2,99	0,76	18,76	0.000
People development	18	1,74	0,48	38	3,21	0,85	26	3,42	0,87	27,73	0.000
Future (long term) success	18	1,89	0,87	38	3,45	1,40	26	4,13	0,79	21,42	0.000

The results presented in Table 4.12 revealed that there is a statistically significant difference recorded between highest qualification and all the five constructs measuring business success.

4.8 STRUCTURE OF THE BUSINESS

The following figures present the structure of the business:

4.8.1 Number of employees

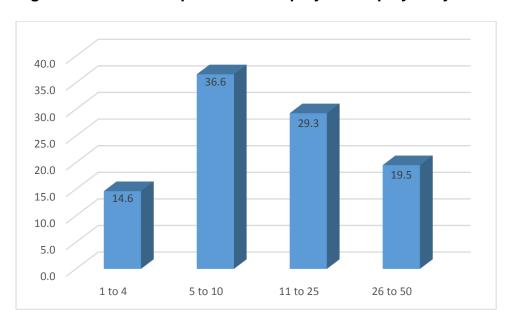


Figure 4.8 Number of permanent employees employed by the business

Figure 4.7 above depicts that majority (36.6%) of the businesses employed 5-10 permanent employees followed by 11-25 permanent employees with the proportion of 29.3%. The least (14.6%) of the businesses employed 1-4 permanent employees.

4.8.2 Industry of business

The purpose of this question D5 in section D of the questionnaire is to gather information with regards to the industry in which the respondents are operating.

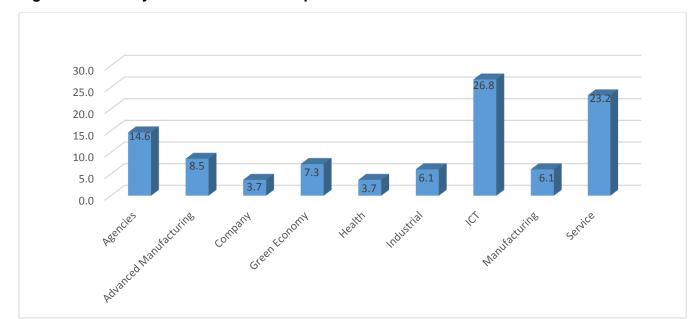


Figure 4.9 Industry where the business operates

Figure 4.8 shows that majority (26.8%) of the businesses are in ICT, followed by 23.2% of businesses who are operating as service. The small proportion (3.7%) of businesses operate as company/health.

4.8.3 Duration of business operations

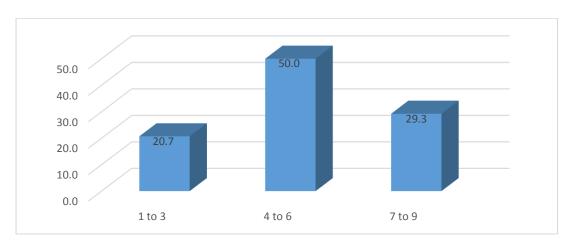


Figure 4.10 The age of the business

Figure 4.9 depicts that majority (50.0%) of the businesses have been operating for 4 - 6 years followed by those that have been operating for 7 - 9 years with 29.3% and the least are those that have been operating for 1 - 3 years with 20.7%.

4.8.4 Legal status of the business

Figure 4.11 The legal status of the business

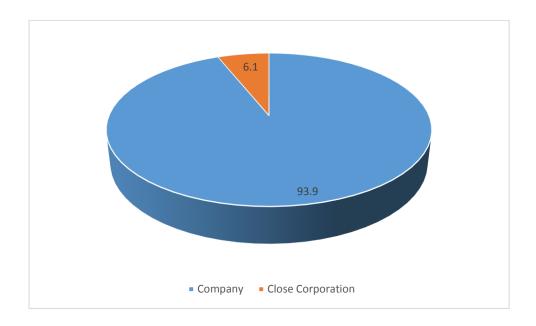


Figure 4.10 is the graphical presentation of the legal status of the business. In Figure 4.8, majority (93.9%) are registered as company while 6.1% are registered as close corporation. This means that most of the sampled businesses are registered as company.

4.9 SUMMARY

The current chapter presented empirical data analysis results of the study. The data was analysed in order to answer the research questions presented in chapter 1. The questionnaire was used to measure the corporate entrepreneurial climate that comprises of thirteen constructs and the business success with five constructs. The demographic information of the respondents and the nature of the business were also analysed. The raw data had been processed through the SPSS (Statistical Packaging for Social Science) system and the SPSS output was input into the graphs and tables. The next chapter discusses the results, conclusion and the recommendations.

CHAPTER 5 : DISCUSSIONS OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 5 presents and discusses findings of the study. The discussion is based on the results obtained on each of the research objectives presented in chapter 1. Conclusions and recommendations are made based on the discussions. Finally, areas for further research are proposed.

This chapter concludes the research study on the assessment of corporate entrepreneurial climate in SMMEs having residency at The Innovation Hub. The chapter is made up of two sections, the first draws conclusions informed by the literature study and findings from the empirical research. This section also takes into consideration the primary and secondary objectives stated in chapter 1.

SMMEs are constantly facing competitive pressure in an external environment that is turbulent, volatile and dynamic. This then requires SMMEs to be agile, be able to develop value propositions demanded by the market. Some of the challenges from the external environment can be overcome by efficiently implementing a corporate entrepreneurial climate within SMMEs. Corporate entrepreneurship within organisations is the responsibility of all individuals involved, from top management to entry level members of the organisation. The second section of this chapter puts forward recommendations in fostering an entrepreneurial climate within SMMEs. Figure 5.1 gives a synopsis of chapter 5.

Figure 5.1 Synopsis of Chapter 5



- INTRODUCTION
- CONCLUSIONS
- RECOMMENDATIONS
- ACTION PLAN
- ACHIEVEMENT OF OBJECTIVES
- SUGGESTIONS FOR FURTHER RESEARCH
- SUMMARY

Source: own compilation

5.2 CONCLUSIONS

Conclusions are drawn based on results presented in Chapter four. Conclusions related to demographic information of the respondents are discussed, followed by evaluating the reliability of the questionnaire. Different variables of entrepreneurial orientation and perceived success are assessed and conclusions regarding the combined results are discussed.

5.2.1 Demographic Information

From the demographic information, the following conclusions were drawn:

5.2.1.1 Conclusions on age group information

The respondents were represented by: majority of the respondents are in the age group <29, with 27 respondents which represent 32.9 %of responses. This is

followed by 30-39 age group representing 29,3 % of responses. The third largest group is 40-49 representing 25.6% of total responses. The smallest age group is 60+ with only 4 participants representing 4,9 % of the total responses. This clearly shows that the age group of less than 29 year dominated the age category. This makes more sense since the younger generation is encouraged to start own companies and be more innovative and hub is appeal to the younger generation.

5.2.1.2 Conclusions on gender information

From a total of 82 respondents 36.6 % of this study are women while 63.4 % are males. The lower female participation can be attributed to lack of inclusion and patriarchy with the South African business environment. Greater participation is needed from females in the targeted sectors by the hub together with government.

5.2.1.3 Conclusions on race group information

The majority of the respondents were black (73.2%), while 17.1 % respondents are white. The small proportions of the respondents were Coloured and Indian with 4.9% respectively who participated in this study. There are no extraordinary effects recognised from the race of respondents.

5.2.1.4 Conclusions on qualification information

The majority (30.5%) of the respondents are having Diploma followed by Degree with 25.6%. The small proportion (2.4%) of the respondents are holding lower than matric as their highest qualification. This means that Diploma dominated the highest qualification category. This impacts positively on SMMEs as they will translate the knowledge gained academically to the success of the business.

5.2.2 Conclusions on reliability of the corporate entrepreneurship questionnaire

All 82 participants' responses were used to determine the reliability of the items.

The Cronbach Alpha coefficient ranges from 0 to 1 and the greater the value, the higher the internal consistency and the more reliable the scale used in the study. A Cronbach Alpha coefficient greater than 0.7 is regarded as reliable (Nunnally & Bernstein, 1994: 265).

The questionnaire used in the study was tested for reliability using Cronbach's Alpha test statistic. The reliability analysis results for Section B revealed that the research instrument used in the study to access the corporate entrepreneurial climate is reliable since most of the Cronbach's alpha for the constructs are at least 0.7 except for "resource availability and accessibility" (0.246) and "flat organisation structure" (0.091). The two constructs with a Cronbach's Alpha of less than 0.7 were not considered in the further analysis because of their extremely low Cronbach's Alpha coefficient.

The reliability analysis for Section C revealed that all the constructs in the section have acceptable Cronbach alpha coefficients.

5.2.3 Conclusions on corporate entrepreneurial climate

Section B of the questionnaire measured entrepreneurial climate in the SMMEs at The Innovation Hub. Sixty five statements were presented to respondents, measuring the thirteen constructs of corporate entrepreneurship. Responses from the respondents were measured on a five point Likert scale, with 1 indicating that the respondent strongly disagrees with the statement, 3 indicating uncertainty, and 5 indicating that the respondent strongly agrees with a statement. The closer the

values to the extremes (1 or 5), the stronger the disagreement or agreement is respectively.

The results of the study found an average mean of 2.84 recorded when considering all eleven constructs measuring an entrepreneurial climate with an average standard deviation of 0.96. The constructs which scored the highest (strongly agree) are tolerance for risk, mistakes and failure, and continuous and cross-functional learning with an average of 3.06 and 3.02 respectively. The respondents from SMMEs at the Innovation Hub have a positive sentiment to two of the eleven constructs measuring a corporate entrepreneurial climate. The respondents are in disagreement with empowered teams and strong customer orientation constructs.

Conclusions from each individual construct are:

5.2.3.1 Entrepreneurial leadership

An entrepreneurial leader must be able to create visionary scenarios that are used to assemble and mobilise a supporting cast of participants who subscribe to the vision in discovery and exploitation of strategic value creation (Cohen, 2006:16). This involves creating spaces, systems, procedures and cultures that are able to free employees at all levels of the organisation to take responsibility, show initiative and mobilise other people in the organisation who share the same responsibility (Cohen 2006:16).

The construct, **entrepreneurial leadership**, received the fourth lowest score with x = 2.76 meaning that the respondents in general do not agree with the statements measuring this construct. It seems that respondents feel that leaders in SMMEs might not take a long term view when determining the strategy of the organisation. It is also the perception of the respondents that leaders in the SMMEs might have not

performed well in instilling the organisational values, challenging the status quo and leading by example to seek to maximise opportunities.

5.2.3.2 Management support

Management structures must embolden employees to believe that innovation is part of the fabric embedded in all organisation members (Kuratko & Hodgetts, 2004:63). This may manifest in the speedy adoption of employee ideas, the recognition of people who promote small experimental projects and provide backing to get the projects off the ground (Kuratko & Hodgetts, 2004:63).

The construct management support obtained a score of x = 2.79, meaning just more than "Neither agree nor disagree" and is reported as the seventh highest score, slightly less than the average mean score of all thirteen entrepreneurial constructs (x = 2.84). The respondents are of the perception that management does not make a significant effort to encourage employees to develop ideas that would improve the SMMEs. They also agree that there is a fair amount of bureaucracy to confront in order for the employees to motivate their ideas, but once noticed, top management is fairly receptive to the employees' ideas and suggestions. Those employees who come forward with innovative ideas on their own receive management's encouragement for their activities.

5.2.3.3 Sponsors for projects

Sponsors within organisation are of utmost importance as their presence encourages entrepreneurs to get work done and establishes corporate entrepreneurship within the organisations (Morris & Kuratko, 2002:93). Most projects would be non-existent without project champions gaining access to senior management sponsors to convincing them that the project is important.

The construct sponsors for projects obtained the third lowest score (x = 2.75), indicating that respondents perceive this construct as negative. This might be attributed to the fact that most SMMEs lack funds to support ideas or projects.

5.2.3.4 Tolerance for risks, mistakes and failure

In cultivating an innovative environment, one important aspect that should be cultivated is that employees should not be afraid of losing their jobs should innovative ideas fail (Timmons & Spinelli, 2012). However, it is also important to drop unsuccessful projects at a whim (Timmons & Spinelli, 2012).

The construct **tolerance for risks, mistakes and failure** obtained the highest score (x = 3.06). Respondents edged towards agreeing that the business has been built up by taking calculated risks at the right times and that the organisation occasionally take big risks to keep ahead of its competitors.

Respondents were positive in their assessment of the value placed on projects involving calculated risk, even when things do not always turn out according to plan. They were positive about the fact that if they make a mistake in this organisation, they will be forgiven. Support for small, experimental projects is available. This makes sense since the innovation hub acts as an incubator for businesses operating in industries that are game changing like ICT.

5.2.3.5 Innovation and creativity new ideas encouraged

Innovation can be described as finding, better, improved or new ways of doing things (Van Aardt *et al.*, 2008:13). This can manifest in improvement in processes, technology and methods which may be evident in products, services or processes. It is also evident in new approaches to marketing, new forms of distribution and new concepts of scope.

The construct, innovation and creativity, was ranked third and obtained a mean score of x = 2.92. This suggests: that respondents agree that the organisation quickly implements improvement ideas by employees; that there is a considerable number of employees that are involved in generating and implementing innovative ideas; and that effective training is provided with regard to the implementation of innovative ideas and that employees are encouraged to "think-out-of-the-box".

The only way for survival for SMMEs is to become more innovative and creative, although they might not have funds to support most of their ideas the good thing is that SMMEs are able to do more with less.

5.2.3.6 Appropriate rewards and reinforcement

Compensation is vital since it is the most visible indicator of a firm's motivation and reward system (Kuratko, Ireland and Hornsby, 2001:63). Compensation can have an influential effect on outcomes arising from individuals and team efforts, and trickles on to firm performance. Rewards and reinforcement manifest in more than just monetary compensation, it goes deeper into psychic or intrinsic compensation like power, status and independence.

Given that **appropriate rewards and reinforcements** are one of the best ways in which to shape the desired behaviour of employees, it is concerning that this construct with a mean score of x = 2.87.

The positive side to this is that although this is the sixth strongest construct, it was still rated as to be slightly above average in comparison with the Likert scale rating definitions. Individuals implementing successful innovative projects do not regularly receive additional rewards and compensation, nor are effective intrapreneurs generally rewarded. This might be attributed to merger resources that SMMEs have.

5.2.3.7 Vision and strategic intent

Strategic thinkers or leaders take a focused, concerted and long-term effort in creating and shaping links to shift from the current to the future state of sustainable competitive advantage and effectiveness (Cohen, 2004:2). A clear entrepreneurial vision which is regularly reinforced is one such action. An organisational vision can be considered the initial phase that shapes and directs entrepreneurial ventures. Prior to strategy development a vision must be in place, then planning can start.

The construct **vision and strategic intent** obtained the fifth highest score with a mean of x = 2.88. than "Neither agree nor disagree" slightly less than the average mean score of all thirteen entrepreneurial constructs (x = 2.84).

5.2.3.8 Discretionary time and work

Time is a necessary resource but often overlooked within the organisation (Hornsby *et al.*, 2002:260). It plays an important role since entrepreneurship is usually a secondary activity which could be easily forgotten and not planned for (Hisrich *et al.*, 2005:52).

With a mean score of x = 2.90 the construct discretionary time and work is ranked fourth. Although no-one in the SMMEs is forced to come up with new ideas, an employee with a good idea is often given time to develop that idea within working hours. Some members in the innovation have initiated a new project/process are allowed to carry it through to completion/implementation. The creativity of these employees in the organisation is being enhanced by allowing employees time at work to explore new ideas and by providing ample opportunities for learning and growth.

5.2.3.9 Empowered teams/ Multi-disciplined teamwork and diversity

According to Kreitner and Kinicki (2004:455), cooperation, trust and cohesiveness among team members enables effective team work. Further, an empowered team will function efficiently if a multidisciplinary team-approach is encouraged. This requires organisational members to persuade an entrepreneurial climate (Kreitner and Kinicki, 2004:455).

The construct relating to empowerment of teams and the presence of multidiscipline teamwork and diversity was ranked tenth and received a mean score of x = 2.7, which means that respondents disagreement with the statement that cross-functional or cross-business unit teams are used effectively.

5.2.3.10 Continuous and cross-functional learning

Availing opportunities for personal growth to individuals can foster a culture of constant unease with the status quo, cultivating mind-sets that are obsessed with continual improvement in order to stay ahead in the game.

Continuous learning is rated the second strongest construct and with mean score of x = 3.02. Respondents were positive with the statement that people are keen to share knowledge within the organisations. They were also convinced that members are encouraged to talk to their colleagues in other departments of the organisation about ideas for new projects.

5.2.3.11 Strong customer orientation

Needs analysis from customers plays an influential role in the invention and creation of a value proposition by organisations. By being customer-oriented, organisations are able to develop strategic long-term relationships with customers and these

relationships are advantageous for the organisation. Understanding what customers value is key for the innovation process and creating products or services that really matter.

The construct relating to strong customer orientation was ranked eleventh and received a mean score of x = 2.55, respondents are disagreement with the statement that the organisation is customer oriented. This could be attributed to the differences in approach between employees and managers. Where employees are in constant communication with clients compared to directors.

5.2.4 Assessment of the perceived success of the organisation

The 5 point Likert scale was also used to assess how middle managers perceive the success of the organisation. Initially, five factors indicative of organisational success were tested in order to serve as dependent variables being influenced by a climate of corporate entrepreneurship.

The average mean score of all five variables is x = 2.98

5.2.4.1 Financial measures

With an average mean score of x = 2.93, this variable was rated below the average of x = 2.98. This variable consisted of only three statements. Respondents disagreed that the organisation has experienced growth in turnover; growth in profits and growth in market share over the past few years.

5.2.4.2 Customer/market measures

This variable of **customer/market** consisted of six statements and was rated the second highest of all the organisational success variables with x = 3.19.

Respondents therefore strongly agreed that taking care of customers is one of the organisation's top priority; the organisation will therefore develop product/services with customers' needs in mind which results in the customers being satisfied with the organisation's product/service offerings.

5.2.4.3 Process measures

With a mean score of x = 2.49, this variable was ranked lowest of the five perceived organisational success variables evaluated. Respondents agreed with the statements that the competitive position, the effectiveness (doing the right things) and the efficiency (doing things right) of the organisation has improved over the past few years.

5.2.4.4 People development

The mean score of the variable **people development** (x = 2.96) is ranked as the second lowest of the five perceived organisational success variables. The respondents slightly feel that employees are viewed not as a relative important asset of the organisation.

5.2.4.5 Future Success

With a mean score of x = 3.32, this variable was ranked highest of the five perceived organisational success variables evaluated. Respondents agreed with the statements that during difficult economic periods, investments in innovative projects continue and whether the image of the organisation, relative to its competitors, has grown over the past few years.

5.3 RECOMMENDATIONS & ACTION PLAN

Bearing the above conclusions the following should be considered to foster a climate of corporate entrepreneurship in SMMEs at The Innovation Hub:

- Vision and strategic intent. The vision and strategic intent is clear to all levels and departmental objectives are aligned with organisational objectives. It is important though to ensure that employees take ownership of the announced visions and strategies and that they embrace it. The next step needed might be to take the current innovation activities and combine them in a formal strategy for entrepreneurship. It is therefore recommended that all the current loose standing entrepreneurial activities are developed into a focused strategy. Entrepreneurial training needs should be identified and communication and training strategy developed to roll out the entrepreneurial strategy.
- Entrepreneurial leadership. Employees are involved with innovative initiatives, by making them responsible for programmes and initiatives such as business process framework process, including idea generation. Entrepreneurial leadership can be improved by developing the entrepreneurial competencies of all employees on a supervisory level and by establishing entrepreneurship as a dominant logic to improve business. A training company can be sourced that will be able to do the required training and arrange the training. The training and competency matrixes should be updated with relevant information after completion of the training.
- Innovation and creativity/ new ideas encouraged. The organisational structure was adopted to make specific persons available to assist with the idea generation process and to track progress and contributions from ideas generated. The leadership development programme should, however, include innovation as a central topic. The organisation should develop a system that will enable managers to share their experiences and give training to employees.
- Strong customer orientation. Due to customer involvement being limited, strong focus should be put on internal customer service. For example the

- production sections should be as customers to different support service departments.
- Sponsors / Champions. should have sponsors who champion, coach, protect and marshal resources for corporate entrepreneurial endeavours. The presence of sponsors/champions needs to be developed more as they are the individuals needed to encourage and support the employees to be more entrepreneurial. Burgelman (1983:1353) stresses the importance of the middle-level "manager champion" in addition to the more familiar operational-level "product champion" role in implementing a new business idea. Supervisors' fear of losing control over employees who are entrepreneurial should be put to rest. A support structure is very important, especially because corporate entrepreneurship is unlikely to be the primary activity and focus area. If proper support is in place, the entrepreneurial endeavour will continue to grow in the organisation. A mentorship and talent management program would be complementary in building the proper support structure. Ultimately, managers displaying high levels of entrepreneurial leadership need to utilise their skills and influence and support employees.
- Management support. management support did not necessarily reflect the strong leadership that was evident within the hub. A support structure is very important, especially since corporate entrepreneurship is not the primary activity and focus area. If proper support is not in place, the entrepreneurial effort is more likely to fail. Managers must create a supportive environment in the workplace which stimulates entrepreneurial thinking and which creates a support base for employees with new ideas. A systems needs to be created where new ideas reach management and do not go by unnoticed. A proper mentorship program should be implemented to form part of the management support system. Recognition and publicity should be given to improve employee/group efforts. Internal leadership should provide direct access and guidance to executive management. More attention should be given to middle managers in terms of compensation and support as they could set the tone for building coalitions amongst peers and championing ideas, which is an area that needs more attention within the organisation. Management should

- provide the necessary support on a day-to-day basis in order for employees to care about the organisations' goals.
- Innovation and creativity/new ideas encouraged. Innovation and creativity is regarded as the soul of entrepreneurship, and it is not as prevalent as it could be. This is a reason for concern as innovativeness is seen as a source of competitive advantage in an organisation. Leaders should provide support for small experimental projects and innovation should be included in leadership development programmes (Van derMerwe & Oosthuizen, 2008:17). The generation of ideas should be encouraged, for instance by means of suggestion boxes and brainstorming sessions Employees who came up with innovative ideas that are implemented should be given recognition. There are usually many ideas floating around in organisations, but ideas are useless unless they are put to use. Rules and procedures within should be flexible, allowing for innovative practices, but should not compromise on productivity and efficiency.
- Continuous and cross-functional learning In establishing a corporate entrepreneurial orientation, managers should acquire the skills in following the leveraging resources (resources should be leveraged to achieve seemingly unreachable goals) approach. For managers who have not yet translated a strategic intent into work-group action, this may also entail learning a new skill (Higgins 1996:31). Leaders should continue to encourage employees to undertake educational programmes and courses to increase their experience and knowledge base.
- Appropriate rewards and reinforcement Respondents also feel that appropriate rewards and reinforcement are not always up to standard and need to be developed more extensively. The organisation will have to look at more adequate compensation structures that will encourage entrepreneurial behaviour. Rewards can be of a monetary nature or in the for of recognition. Employees should be appropriately recognised and rewarded in relation to their job performance and the value added to the organisation (Van der Merwe & Oosthuizen, 2008:17). The evaluation system used to measure performance should reinforce corporate entrepreneurial behaviour (Jacobs & Kruger, 2001:5). Rewards should be a function of the level of individual

performances and the attainment of performance objectives. A remuneration

system comprising of a mixture of fixed salary and incentives is proposed

(Kuratko et al., 2001:62). Although this is implemented by some Reward

systems, both positive and negative, can be especially useful as ways of

reinforcing the values and behaviours for an organisation to be successful in

implementing the chosen strategy. A key step in any reward system is the

evaluation system used to measure an individual's performance (Thompson,

Fulmer & Strickland, 1992:446).

5.4 ACHIEVEMENT OF OBJECTIVES

The measurement of success of this study is based upon the achievement of the

primary and secondary objectives, as presented in section 1.3 of this study.

5.4.1 Primary objective

The primary objective of this study was to assess the level of entrepreneurial climate

within SME's located at The Innovation Hub in Tshwane. This study further aimed to

make suggestions on improving the entrepreneurial climate and thus, not only

promoting innovative cost cutting ideas but also to generate new income streams.

The primary objective was achieved by realising the secondary objectives of the

study.

5.4.2 Secondary objectives

The secondary objectives, which support the primary objectives, are listed below

together with an evaluation of whether they were achieved:

• To define corporate entrepreneurship.

Evaluation: Achieved in section 2.2 (Definition of concepts)

• To conduct a literature review to gain insight into corporate entrepreneurship.

95

Evaluation: Achieved, a literature review on corporate entrepreneurship was done in chapter 2.

• To measure the current entrepreneurial climate in SMMEs at The Innovation Hub with the use of a questionnaire.

Evaluation: Achieved, the corporate entrepreneurial climate was evaluated by means of the questionnaire as discussed in chapter four.

 To determine the reliability of the questionnaire by means of statistical analysis.

Evaluation: Achieved as presented in section 4.5 of this study.

• To examine the relationship between the demographic variables and the entrepreneurial climate constructs.

Evaluation: Achieved as presented in the empirical results in section 4.7 of this study.

• To suggest practical recommendations to ensure and enhance corporate entrepreneurship in SMMEs.

Evaluation: Achieved by combining findings of the empirical study with information gathered in the literature study. The recommendations are presented in section 5.3, followed by an action plan in section 5.4.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

The focus of the study was to measure the climate conducive to corporate entrepreneurship within SMMEs at The Innovation Hub. It is recommended that the items measuring the following constructs of entrepreneurial climate are further researched to further explore respondents rating of resource availability and accessibility, flat organisation structure, entrepreneurial leadership, management support, sponsors and champions, appropriate awards and reinforcement, vision and strategic intent, discretionary time and work, empowered teams and strong customer orientation.

Based on the findings of the study, the following suggestions are put forward for consideration pertaining future research on corporate entrepreneurship in SMMEs:

The scope of the study was limited to SMMEs that have residency at The Innovation Hub in Tshwane. The views of other SMMEs should be taken into consideration as the sample is a fraction of SMMEs within the Gauteng province.

Future studies to include SMMEs in South Africa as a population group could be beneficial to align business policy and assistance with a corporate entrepreneurial climate. A study to determine the relationship between SMME turnover and corporate entrepreneurial climate could be beneficial to all policy related structures.

5.6 SUMMARY

This chapter concludes the study on the assessment of corporate entrepreneurship In SMME at The Innovation Hub. The conclusions drawn from the empirical research results, as presented in chapter four, were discussed.

The Cronbach alpha coefficient established the reliability of the items testing each construct, after which the demographics of age, gender, race, highest academic qualification, managerial level and department was discussed. Thereafter, each of the 13 constructs measuring an entrepreneurial climate was discussed in relation to the results of the empirical study.

The SMMEs felt the most positive regarding tolerance for risk, mistakes and failure, (x = 3.06) and continuous and cross-functional learning (x = 3.02). The constructs that scored the lowest and indicated a negative response from SMMEs were **empowered teams** with a recorded mean value of 2.70 and **strong customer orientation** with a mean value of 2.55

Of the variables measuring the perceived success of the organisations, only two constructs namely, **customer/market measures** and **future (long term) success**, scored the highest (strongly agree) average of **3.19** and **3.32** respectively. The construct that scored the lowest and indicated a negative response was **process measures** with a recorded mean value of 2,49. It might be that SMMEs are not well resourced to implement certain processes within their organisations to implement corporate entrepreneurship.

Various demographical variables were found to influence perceptions regarding the presence of the items of a climate of corporate entrepreneurship as well as the success of the organisation. These variables were tested for statistical significant variances in perceptions, and there was no notable difference in perception found. Section 5.3 dealt with recommendations and practical ways in which a corporate entrepreneurial climate could be enhanced and maintained in SMMEs at The Innovation Hub.

Systems and processes should be revisited and adapted to ensure adherence to the requirements of a corporate entrepreneurial climate. Procedures must be simplified to facilitate the rapid implementation of new processes. An action plan is also presented to facilitate the recommendations made.

The chapter concludes by addressing the achievement of all of the objectives, and makes recommendations on possible future research that could be undertaken based on this study.

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ANNEXURE 1: ENTREPRENEURIAL CLIMATE QUESTIONNAIRE

Dear Respondent:

The following questionnaire is set out to aid in the study to investigate: Corporate Entrepreneurship at The Innovation Hub- this survey is conducted to determine the entrepreneurial orientation of a company.

This study was done in partial completion of my MBA studies at the North-West University in Potchefstroom. The results of the studies will be published after the completion of the study.

This form is filled in anonymously and information supplied via this questionnaire will be standardised and kept confidential. The results of this survey are purely for academicals purposes and will in no way affect anyone's working environment.

This questionnaire is dived into four sections.

Section A: is to provide geographical and demographical data.

Section B: is statements that are designed to evaluate the corporate entrepreneursip of the company.

Section C: consists of statements designed to evaluate perceived business success.

Section D: consists of structure of the business

This completed questionnaires can be returned via email to:

OP Maselwanyane: omaselwanyane@gmail.com

Your honest opinion and response regarding all the various statements will be values.

I would like to thank you for your assistance in conducting the study and filling out the questionnaires. Should you require any further information or want to contact the researcher about any aspect of this study, please contact Dr Henry Lotz at henry.lotz@nwu.ac.za. Thank you for taking time to read this information sheet and for considering participation in this study.

Outlwile Maselwanyane MBA student

General Instructions.

All questions or statements can be answered by marking the relevant block with an X Where a space is given to state your post please fill in with either pen or via MS Word.

Please answer every statement and question to ensure the validity and reliability of the study.

SECTION A: BIOGRAPHICAL INFORMATION

The following information is needed to help us with the statistical analysis of the data for comparisons among different interest groups. We appreciate your help in providing this important information.

Mark the applicable block with a cross (X). Complete the applicable information.

A1	Indicate your age group	≤ 29	30 - 3	9 40 -	49	50 - 59	60+
A2	Indicate your gender?	Male			F	emale	
			1	1			
A3	Indicate your race group clas	ssification.	Black	White	Co	oloured	Indian
A4	Indicate your highest acade	mic qualifica	ition.				
	Lower than matric						
	Matric						
	Certificate						
	Diploma (Technical College	or Technico	n)				
	University degree		-				
	Post graduate degree						

SECTION B: CORPORATE ENTREPRENEURIAL CLIMATE

The following statements concern your attitude towards the entrepreneurial orientation of the business.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly	al 4 = Agree 5 = Strongly agree	aree	agree	1 = Strongly disagree
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	STATEMENT	90	ALE			
	STATEMENT	1	2	3	4	5
B1	Our leaders take a long-term view of our organisation.	•	+-	_	<u> </u>	
B2	Management encourages us to develop ideas that would					
DZ	improve the organisation.					
В3	My manager helps me to get my work done by removing					
	obstacles in my way.					
B4	Development at our organisation is based on taking calculated					
	risks at the right time.					
B5	Our organisation quickly implements improved work methods					
	that are developed by employees.					
B6	Individuals implementing successful innovative projects receive					
	additional rewards and compensation.					
B7	I am well informed about our organisational vision and					
	strategies.					<u> </u>
B8	An employee with a good idea is often given time to develop					
	that idea within working hours.	1				
B9	Working together in project teams is encouraged at the					
D 4 0	organisation.	1				<u> </u>
B10	There are several options within the organisation for individuals					
D44	to get financial support for their innovative projects and ideas.	-				
B11	People are keen to share knowledge within the organisation,					
D40	even over departmental or functional boundaries.					
B12	A great deal of resources is spent in determining customer needs and satisfaction.					
B13	People are allowed to make decisions about their work					-
ыз	processes without going through elaborate justification and					
	approval procedures.					
B14	Our leaders challenge the status quo and they inspire us to think					
רום	and act in innovative ways.					
B15	Top management is receptive to my ideas and suggestions.					
B16	Originators of new ideas find it easy to implement because of					
J	the support rendered by influential people at the organisation.					
B17	Projects involving calculated risk are highly valued, even when					

things do not always turn out according to plan.			

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

		1	2	3	4	5
B18	There is considerable number of employees at the organisation that are involved in generating and implementing innovative ideas.					
B19	In this organisation recognition rather than criticism is emphasised.					
B20	I have regular meetings with my manager where information is shared between us					
B21	A staff member who has initiated a new project/process is allowed to carry it through to completion/implementation.					
B22	We use cross-functional teams effectively at the organisation to develop and implement new ideas.					
B23	Money is often available to get new project ideas off the ground.					
B24	Employees are encouraged to talk to their colleagues in other departments of the organisation about ideas for new projects.					
B25	Product and service innovation are driven by a strong customer orientation.					
B26	Employees are given ample opportunity for independence and freedom in how they do their work.					
B27	This organisation has a specific value system which we all know and live up to.					
B28	Those employees who come up with innovative ideas on their own receive management's encouragement for their activities.					
B29	Our organisation has people with influence that support, coach, protect, and find resources for an intrapreneurial project and its team.					
B30	We occasionally take big risks to keep ahead of our competitors.					
B31	This organisation provides me with the chance to be creative and try out new methods of doing my job.					
B32	My supervisor will give me special recognition if my work performance is outstanding.					
B33	Great effort has been made to clarify what the vision and strategy of the organisation mean to us in our own department.					
B34	Nobody at the organisation is forced to develop new ideas.					
B35	Top management encourages the establishment of teams from various departments whenever needed for a project.					
B36	Resources are readily accessible in pursuance of new ideas and opportunities.					
B37	Our organisation has open communication channels in which all employees participate.					

B38	Our organisation involves customers in service and product			
	development.			
B39	I have autonomy to decide how to do my work.			

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

	STATEMENT	SCALE				
		1	2	3	4	5
B40	Our leaders lead by example and people are eager to voluntarily follow them.					
B41	The creation of innovative ideas is a regular occurrence in our organisation.					
B42	Our organisation's managers have the skills, commitment and courage to be effective champions of intrapreneurial initiatives.					
B43	This organisation supports many small and experimental projects realising that some will undoubtedly fail.					
B44	Training is provided to ensure that innovative new processes are implemented effectively.					
B45	In this organisation effective intrapreneurs are generally rewarded.					
B46	The vision and strategies of the organisation often help me in setting priorities in my work.					
B47	I am allowed time at work to explore new ideas I believe have potential.					
B48	Project teams have choices in recruiting and selecting new team members.					
B49	The process for accessing and acquiring resources to pursue new opportunities is streamlined so that approval is quickly granted.					
B50	Employees are encouraged to stay abreast of developments in their functional fields and to share their knowledge with others.					
B51	We regularly ask our customers to give their opinions of our service and product offerings.					
B52	The degree of hierarchical control is relatively low in our organisation.					
B53	Our leaders seek to maximise value from opportunities.					
B54	Senior managers allow innovators to bend rules and rigid procedures in order to keep promising ideas on track.					
B55	In this organisation it is easy to build coalitions of sponsors to help projects succeed.					
B56	If you make a mistake in this organisation you will be forgiven.					
B57	Employees are inspired to push their boundaries and to think "out-of-the-box."					
B58	Employees are rewarded in relation to their job performance.					
B59	There is considerable buy-in from employees into the value system of the Organisation.					

B60	Our organisation provides ample opportunities for learning and			
	growth			

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

	STATEMENT	SCALE				
		1	2	3	4	5
B61	Cross-functional teams are characterised by diversity based on					
	the skills required by the project.					
B62	Attracting resource commitment for entrepreneurial ventures in					
	this organisation is relatively easy					
B63	Employees are willing to assist others and share knowledge and					
	skills even if it is not required from them.					
B64	Customers are treated as very important stakeholders.					
B65	Employees determine their key performance areas in cooperation					
	with their supervisors.					

SECTION C: BUSINESS SUCCESS

The following statements concern your attitude towards the success of the business.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
			3	

	STATEMENT	SC	CALE	<u> </u>		
		1	2	3	4	5
C1	Our organisation develops product/services with customers' needs in mind.					
C2	The competitive position of our organisation has improved over the past few years.					
C3	Our organisation has experienced growth in market share over the past few years.					
C4	Our employees are highly committed to our organisation.					
C5	During difficult economic periods, investments in research and development/ innovative projects continue and no significant financial cuts are made.					
C6	Our organisation has a high customer retention rate.					
C7	Our customers are loyal to our organisation.					
C8	In our organisation, employees are viewed as the most valuable asset of the organisation.					
C9	Taking care of customers is our organisation' top priority.					
C10	The morale (job satisfaction) of our employees has improved over the past few years.					
C11	Our customers are satisfied with our organisation's product/service offerings.					
C12	The image (stature) of our organisation, relative to our competitors, has grown over the past few years.					
C13	Our organisation has experienced growth in turnover over the past few years.					
C14	The effectiveness (doing the right things) of our organisation has improved over the past few years.					
C15	Employees in our organisation understand the needs of our customers.					
C16	Our organisation has experienced growth in profits over the past few years.					
C17	The efficiency (doing things right) of our organisation has improved over the past few years.					

SECTION D: STRUCTURE OF THE BUSINESS

Mark the applicable block with a cross (X). Complete the applicable information.

D1	How many permanent employees are employed by the b	usiness?
	1-4 5-10 11-25 26-50 51-100 101-200	201-500 500+
!		
Do	M/h at in the attempt of the housing as many car?	
D2	What is the turnover of the business per year? < R 1 m R 1 – R 2.5 m R 2.5 – R 10 – R 50 –	D D 400 m
	< R 1 m R 1 – R 2.5 m R 2.5 – R 10 – R 50 – R 10 m R 50 m R 50 m	
D3	In which industry does the business operate?	
	ICT	
	Advanced Manufacturing	
	Health	
	Industrial	
	Consultancy	
	Agencies	
	Green Economy	
	Wholesale	
	Manufacturing	
	Services	
	Other: (Specify)	
D4	What is the age of the business (years)?	
	Triat is the age of the sames (years).	
ļ		
		1
D5	What is the legal status of the business?	
	Proprietorship	
	Partnership	
	Company (private)	
	Company (public)	
	Close Corporation	
	Co-operative	
	Business Trust	
	Franchise	
	Other or combination (specify):	

THANK YOU FOR YOUR TIME



Department of Academic Literacy

20th October 2017

Private Bag X2046

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CERTIFICATE OF EDITING A DISSERTATION

TO WHOM IT MAY CONCERN

This serves to confirm that I have read and edited Mr. Outlwile P. Maselwanyane's dissertation titled: An assessment of corporate entrepreneurship at a selected innovation hub. The candidate corrected the language errors identified. The document is of an acceptable linguistic standard.

Thank you

Yours Faithfully

.....

J.R. Moletsane (Subject Head Academic Literacy)

Accr. No. 1002708

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