



A health audit for corporate entrepreneurship in an agribusiness

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PREFACE

Acknowledgements:

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ABSTRACT

The ever changing global economy creates a challenging environment for business. These constant changes, challenge businesses to thoroughly examine their strategies to increase their probability of being successful and deliver the commitments towards their stakeholders

For business to be sustainable, with a competitive advantages, they must be able to be flexible, aggressive, adaptable, innovative and quick, these actions can be summarised in the term, entrepreneurship. Businesses find it near impossible to integrate the entrepreneurial spirit in a well-structured or a bureaucratically organisation. Businesses that do not adapted with the right attitude towards innovation and create new ventures, will likely not survive the increasingly, aggressive, competitive and dynamic market. Corporate entrepreneurship is generally recognized as a possible solution for promoting a sustainable, competitive and transformed business that can harvest on value adding opportunities in the market.

For business to invest in corporate entrepreneurial thinking, they must first audit their current position, to use the information to steer the business and their employees on the path of success. The search for sustainable competitive advantage requires that the organisation and management within themselves, be filled with an attitude of continuously reinventing themselves. Corporate entrepreneurship creates an atmosphere within the organisation to embrace creativity and innovation to benefit all the stakeholders.

The study focuses on the ever changing and highly competitive agri-retail business, the role that the corporate entrepreneurial orientation and climate play by helping to nurture and develop the entrepreneurial activities in their employees.

The primary objective of this study is to conduct a health audit for entrepreneurship in an agribusiness. By means of the audit, information is gathered from middle management in regarding the corporate entrepreneurial orientation, the corporate entrepreneurial climate and the demographic of middle management.

KEYTERMS

Corporate entrepreneurship, Intrapreneurship, Agri-business, Competitive advantages, Corporate culture, Entrepreneurial intensity, Entrepreneurial diversity, Corporate entrepreneurial strategy, Middle management.

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CHAPTER 1 NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

The ever changing global economy creates a challenging environment for business (Groenewald, 2010:1). These constant changes, challenge businesses to thoroughly examine their strategies, to increase their probability of being successful and deliver the commitments towards their stakeholders.

According to Burns (2008:10), businesses react differently to these external challenges, by means of downsizing, unbundling, focusing on core business, reengineering, decentralisation, centralisation, outsourcing, restructuring, brainstorming and even specific task teams. Morris, Kuratko and Colin (2008:7) are in the opinion that sustainable competitive advantages lies in being able to be flexible, aggressive, adaptable, innovative and quick, which can be summarised in the term, entrepreneurship. Christensen (2004:302) reported that many large businesses find it near impossible to integrate the entrepreneurial spirit in a well-structured or a bureaucratically organisation. Johnson (2001:35) mentioned that businesses that do not adapted with the right attitude towards innovation and create new ventures, will likely not survive the increasingly, aggressive, competitive and dynamic market. Therefore more businesses are turning towards corporate entrepreneurship to generating innovative value-creating to stimulate growth in their organisation (Thomberry, 2001:1). Corporate entrepreneurship is generally recognized as a possible solution for promoting a sustainable, competitive and transformed business that can harvest on value adding opportunities in the market (Aloulou & Fayolle, 2005:24).

Ireland, Kuratko and Morris (2006:10) stated that, in this century knowledge (and the ideas born from this knowledge) will be one of the most important sources of competitive advantage. According to Morris, Kuratko and Covin (2008:20), to remain competitive is very different from achieving a sustainable competitive advantage. The search for sustainable competitive advantage requires that the organisation and management within themselves, be filled with an attitude of continuously reinventing themselves.

Corporate entrepreneurship creates an atmosphere within the organisation to embrace creativity and innovation to benefit all the stakeholders. Businesses need to be gearing themselves to achieve a sustainable competitive advantage to stay competitive in their environment (Groenewald, 2010:3).

1.2 PROBLEM STATEMENT

South Africa agri-businesses face challenges such as international competition; a changing social environment based on equity principals an increasing of complex customer requirements (Doyer *et al.*, 2007:495). Some of the agri co-operatives converted to investor orientated firms, with the view to obtain external capital from various sources. These conversions were done to be able to align the interest of the shareholders with those of their customers. The entrepreneurial flair was missing in some of these conventional co-operatives (Ortmann & King, 2007:47). In spite of the potential to create value by contributing and improving an organisation's performance through employee's entrepreneurial behaviour, many organisations do not encourage entrepreneurial behaviour and often have structural impediments in place to prevent these behaviour of occurring (Ireland *et al.*, 2006:11). Therefor it's important to determine: What is the condition of corporate entrepreneurship in an agri-business in Central South Africa?

1.3 OBJECTIVES OF STUDY

The following primary and secondary objectives were set for the study:

1.3.1 Primary objective

The primary objective of this study is to **conduct a health audit for entrepreneurship in an agribusiness**. The audit will determine: to what degree the internal environment (corporate entrepreneurial climate) of agri-business fosters and inspires middle management' interest in entrepreneurial orientation. The audit will also determine to what degree there is a commitment towards creative and innovative sanctions.

1.3.2 Secondary objectives

In order to achieve the primary objective the following secondary objective were formulated:

- Identify the internal factors (corporate entrepreneurial climate) considered when designing a corporate entrepreneurship strategy in agri-business.
- Describe the internal organisational environment that supports corporate entrepreneurship in an agri-business.
- Determine the role and contribution middle management in agri-business has towards facilitating corporate entrepreneurship.
- Determine the Companies' entrepreneurial orientation through an audit.
- Determine the Corporate entrepreneurial climate through an audit questionnaire.

- Determine the Companies demographic of middle management.
- To make recommendation to the agri-business, to promote a corporate entrepreneurial climate and orientation.

The study will by accomplishing the primary and secondary objectives determine the entrepreneurial orientation and the corporate entrepreneurial climate of the agri-business. Through the audit that will be conducted on middle management, the entrepreneurial orientation and climate of the organisation could be indicated and recommendations will be made.

1.4 SCOPE OF THE STUDY

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

1.4.1 Field of study

The field of study falls in the subject of entrepreneurship in a well establish agricultural retail business with specific reference to corporate entrepreneurship.

1.4.2 Industry demarcation

The industry that is selected is agri-businesses in South Africa that started as Agricultural Co-operatives. Agricultural Co-operatives that operated separately in different regions (that was indicated in their Co-operative names) to provide agriculture products to their stakeholders. Through the years business was conducted and some changes occurred due to mergers and acquisitions of each other, for example the start of Hinterland that is the result of a merger between AFGRI Town and Country and Senwes Village. Other examples of agri co-operative business are: TWK, VKB, NTK, NWK, GWK, OVK, MGK (Obaro), Suidwes, Kaap agri to name a few.

The focus of the study is on the role middle management has in the success of these agri-businesses. The questionnaire is directed towards middle management and their views on corporate entrepreneurship. The role of middle management includes the profitability of the branch and the expansion of the branch's footprint in its market penetration. These agri-businesses have a head office structures with branches in rural areas with the access to clients with primary agriculture activity. Middle management includes branch-managers, assistant-branch managers and branch-administrative managers. Middle management is responsible for the day-to-day management of the branch. These responsibilities include the financial

management, stock management, personal management, risk management, administrative actions and the direct contact with the agri-business clients.

1.4.3 Geographical demarcation

The study was limited to an agri-retail business in the centre of South Africa with branches in the following provinces: Gauteng, Mpumalanga, Kwazulu-Natal, Free State, Northwest and Northern Cape. Due to an indemnity clause the agri-business could not be identified. The agri-business focus on the provision of retail and production inputs primary to grain and livestock producers as well as market access to agriculture and consumable products to the general public.

1.5 RESEARCH METHODOLOGY

The study consists of two phases, namely a literature review and empirical research.

1.5.1 Literature review

The literature review for this study focused on the various aspects of the nature of corporate entrepreneurship and middle management.

More specifically it focuses on:

- The literature review that consist on an analysis of secondary sources as books, journal articles, unpublished thesis and dissertations, papers and internet sources as websites.
- The literature review aided in acquiring a thorough understanding of the problem that is being investigated, assisted in preparing a suitable empirical research methodology and the use of a questionnaire (Welman, Kruger & Mitchell, 2012).

1.5.2 Empirical research

Empirical research primary deals with the means of data collection and the use of data (Riley *et al.*, 2007:18). The empirical research, of this study, consisted of the research design, sample design, the research instrument and method of data collection and the procedures of data analysis.

1.5.2.1 Research design

The empirical study focuses on the assessment of corporate entrepreneurial orientation and corporate entrepreneurial climate on middle management of agriculture retail business. A

quantitative research design was following in this study and more specifically descriptive research was used as the basis for the research design. The descriptive research consisted of a cross-sectional analysis which was conducted by means of a sample survey that made use of questionnaires as a research measuring instrument to gather the required quantitative data. Welman *et al.* (2012:23) indicated that descriptive research is to explain the phenomena and predicting behaviour in the business and administrative science by indicating how variables are related to one another and in what manner one variable affects another. Therefore the possibility of explaining and predicating human behaviour may enable us to change or control it.

In the study an attempt was made to determine the extent to which the views of middle management of their specific agri-businesses is capable of fostering sustainable corporate entrepreneurial behaviour as a path that is conducive to compliance to key success factors in agri-retail environment. The assessment will be done through the **Entrepreneurial Health Audit** as developed by Ireland, Kuratko and Morris (2006). The assessment audit through the questionnaire will be done in the following steps:

- Step one, assessing the business' entrepreneurial intensity in Part A (corporate entrepreneurial orientation).
- Step two, assessing the corporate entrepreneurship climate in Part B. The result of these two steps is to create an understanding of the corporate entrepreneurial environment to be analyses and to develop a corporate entrepreneurial framework of an agri-retail business.
- Step three, through the assessment and analyses of the questionnaire by the middle management of the agri-business, key constructs were identified and correlations could be made. These data is used to do recommendations that will benefit corporate entrepreneurial behaviour in the agri-retail business.

1.5.2.2 The study population and sample

The sample of internal participants, will involve middle management of an agri-retail business. The middle management consist of branch managers, assistant-branch managers/floor managers and administrative managers.

The study population was selected by means of a non-probability sampling technique, convenience sampling, where the human resources department assist in random sample selection of the population of 110 (Welman *et al.*, 2012:69).

1.5.2.3 Constructing the research instrument

The research instrument that was selected for this study is a well-structured questionnaire that was adapted by Ireland, Kuratko and Morris (2006) from the original article by Hornsby, Kuratko and Zahara (2002), (see Annexure A).

The questionnaire, named **Corporate Entrepreneurial Questionnaire**, consisted of:

- A front page.
- A cover letter which included the instructions of the questionnaire.
- The questionnaire.

The questionnaire was divided into three parts namely:

- **PART A: COMPANY ENTREPRENEURIAL ORIENTATION.**
- **(Intensity of entrepreneurship)(Table1.1).**

The two sections are:

- The Degree of entrepreneurship, with two constructs:
 - Company Characteristics (six statements)
 - Top level decision making (six statements)
- The Frequency of entrepreneurship, with three constructs:
 - New product introduction (four statements)
 - New service introduction (four statements)
 - New process introduction (one statement)

Table 1-1: Part A: Company Entrepreneurial Orientation

Part A Company Entrepreneurial Orientation <i>Intensity of entrepreneurship</i>	Statement Numbers	Number of statements
Degree of entrepreneurship (70%)	A1-A12	
Company characteristics	A1-A6	6
Top level Decision making	A7-A12	6
Frequency of entrepreneurship (30%)	A13-A21	
New products introduction	A13-A16	4
New Service introduction	A17-A20	4
New Process introduction	A21	1
TOTAL		21

▪ **PART B: CORPORATE ENTREPRENEURIAL CLIMATE** (Table1.2)

There are six constructs:

- **Management Support (nineteen statements)**
- **Work Discretion/Autonomy (ten statements)**
- **Rewards/reinforcement (six statements)**
- **Time Availability (six statements)**
- **Organisational Boundaries (seven statements)**
- **Specific Climate Variables (thirty statements)**

Table 1-2: PART B: Corporate Entrepreneurial Climate

Part B Corporate Entrepreneurial Climate Instrument	Statement Numbers	Number of statements
Management Support	B1-B19	19
Work Discretion/Autonomy	B20-B29	10
Rewards/reinforcement	B30-B35	6
Time Availability	B36-B41	6
Organisational Boundaries	B42-B48	7
Specific Climate Variables	B49-B78	30
TOTAL		78

▪ **PART C: BIOGRAPHICAL AND GEOGRAPHIC INFORMATION**

There are six constructs:

- **Age group (C1)**
- **Gender (C2)**
- **Race (C3)**
- **Highest Academic Qualification (C4)**
- **Division (C5)**
- **Province of agri-retail business (C6).**

1.5.2.4 Collection of data

The actual gathering of data was done by means of the following procedure:

- A meeting with the managing director of the agri-retail business, explaining the purpose of the study and requesting permission to distribute the questionnaire through the Human Resources department to middle management.
- The indemnity and protection of information clause (provided by the Agri-business), was signed off.
- The questionnaire link was done by the Statistical Consultation Services of the North-West University: Potchefstroom Campus.
- The email from Human Resources was sent to each of the anonymous participants of the sample of 30, (population of 110) explaining the research and the link to the questionnaire.
- It simplified the data gathering process, since the questionnaire was answered electronically via Google survey.
- A total of 29 questionnaires was capture directly on the website.

1.5.2.5 Data analysis

- The data that was collected by the Statistical Consultation Services of the North-West University: Potchefstroom Campus, and analysis.
- Frequencies and percentages were calculated for the demographic variable age, gender, race, highest qualification obtained and functional level in which the respondents worked in according predetermined categories.
- The result of the corporate entrepreneurial survey was presented showing the arithmetic mean and standard deviation for each construct.

1.6 LIMITATIONS OF THE STUDY

The study attempts to make a contribution to the existing knowledge of corporate entrepreneurship in agri-retail. The following limitations regarding the study are presented:

- Corporate entrepreneurship consists of two main antecedents. One pertains to the internal environment of the business and the other to the external environment. The study is limited to the internal business environment.
- The study only focus on the agriculture retail environment within one business operating in six provinces in South Africa, and therefore not be applicable to any other country, industry or agriculture business.
- The sample size in gathering the questionnaires may not be representative of the situation in the entire agri-business.
- The limited time to conduct the survey for the study, might have excluded some middle management from the study.

- The list of determinants of corporate entrepreneurship and agri-retail is admittedly incomplete, as new determinants are continually being added. The study only assessed some of the corporate entrepreneurial determinants. More comprehensive research is still needed to enhance our understanding of these determinants.

1.7 OUTLINE OF THE STUDY

A brief description of the main elements and focus of the study is set out below. A schematic representation of the chapters outlays are show in Figure 1-1.

Chapter 1: Introduction

This chapter will provide the Problem statement, Primary and Secondary objectives. This chapter will also provide the Scope of the study, Research Methodology, Limitations of the study as well as an outline of the study.

Chapter 2: Overview of Agri-Business

This chapter will give a broad introduction into agri-business. Provide an overview of agriculture sector in South Africa. This chapter discuss the agri-business sector, and look a bit at the history and what were the game changers.

Chapter 3: Corporate entrepreneurship and Middle management

The chapter has a look at the literature review of corporate entrepreneurship and the role middle management can have on entrepreneurial orientation. Discuss the internal and external environment that influences corporate entrepreneurship.

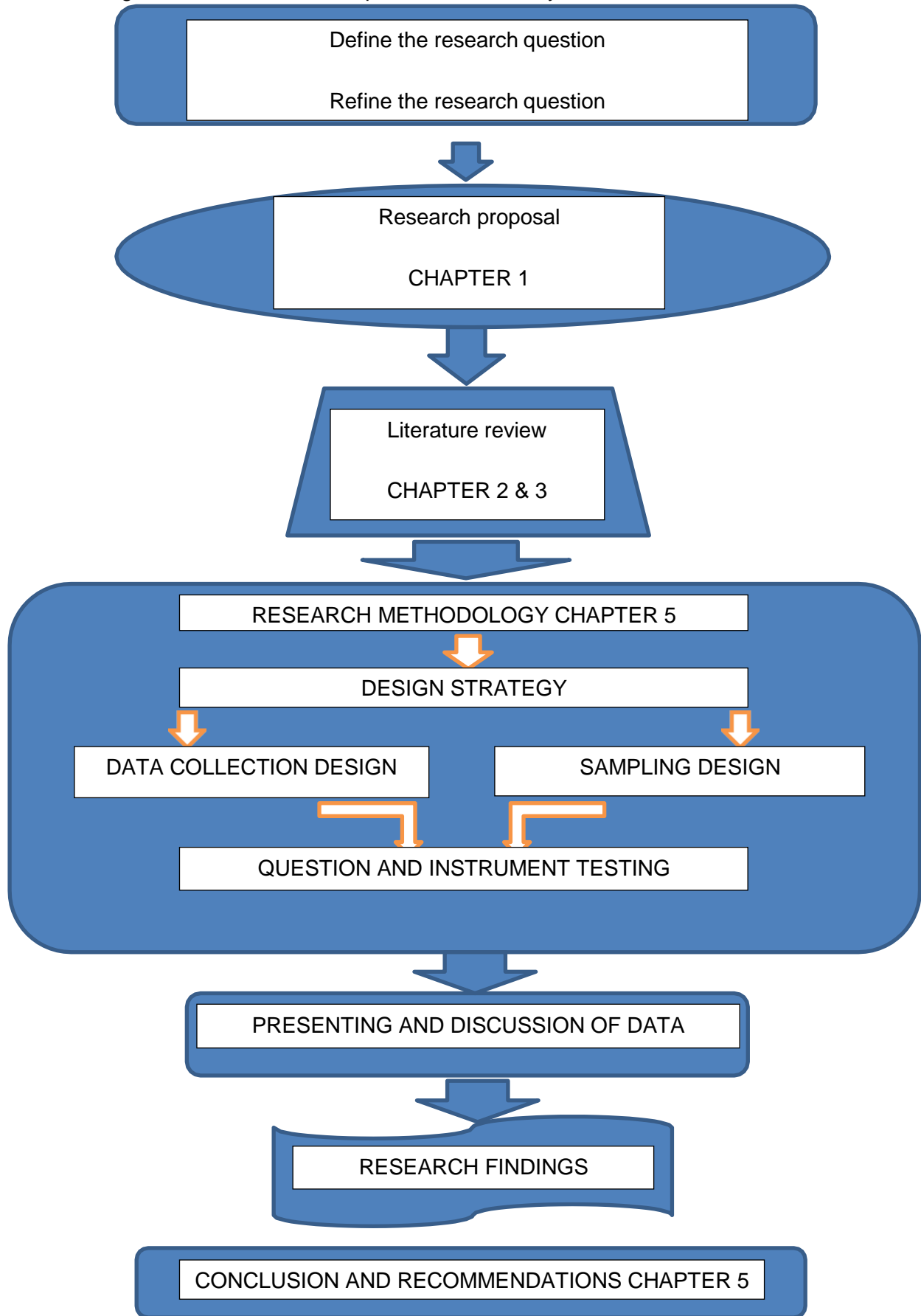
Chapter 4: Results and discussion of the empirical study

The chapter does an analysis of the corporate entrepreneurial health audit questionnaire. The chapter discuss the data gathering, response to the survey and the demographic information of the respondents. The reliability of the questionnaire was analysing in a Cronbach Alpha coefficient. An assessment of the questionnaire was done. Demographic variables' relationship with corporate entrepreneurial orientation and corporate entrepreneurial climate was analysis with a t-test. The correlation between the constructs was discussed

Chapter 5: Conclusion and recommendations was discuss

The final chapter of this study of Health Audit of Corporate Entrepreneurship in an agri-business will provide a conclusion and indicate recommendations. The conclusion will be drawn on the results of the literature findings and the findings of the empirical study. This section will also examine the reliability study based on the Cronbach alpha coefficient of the respondents on the assessment of the questionnaire on the *Health Audit of Corporate Entrepreneurship in an Agri-business*. Recommendations will be drafted on the findings of the assessment and based on the literature study that was done.

Figure 1-1: The research process of the study



CHAPTER 2 OVERVIEW OF AGRI-BUSINESSES

2.1 INTRODUCTION

South Africa has a well-developed agriculture sector with a diverse network of agri-business that started in the early 1900 with the farmer's co-operatives as the farmer's support system. The evolution of agri-business from 1900 till today resulted in changes in business models, service areas and client profiles. Agriculture co-operatives moved from strictly regulated into the deregulated of the agriculture marketing of produced products.

The purpose of the chapter is to give a broad background of the agri-business sector that originally were formed as far as 116 years ago. Due to the indemnity clause of an agri-business that was researched, no specific agri-business could be singled out.

2.2 OVERVIEW OF AGRICULTURE IN SOUTH AFRICA

South Africa in 2015 went through the worst drought since 1904 (South Africa, 2015:30). South Africa was reminded that it has not ideal conditions for agriculture with the confirmation of less than 12% of the land is arable, and only 22% of that can be regarded as high potential arable land (South Africa, 2009). South Africa's uneven spread of rainfall, and with only 1.5% of agriculture land (1.3 million hectares) under irrigation, shows the land's dependants on rain for sustainable agriculture activities.

In South Africa, factors such as:

- the drought,
- the decrease in agriculture production of commodities of up to 27%,
- the daily variance in commodities,
- variance of the exchange rate,
- rising of input cost and a decrease of stock levels,

have a major impact on agriculture and on value adding of agri-business (South Africa, 2015:14).

South Africa's agriculture sector lost R16 Billion due to the drought of 2015. The total of 189707 Livestock farmers were affected by the decrease of 3.6 million livestock units and 3.8 million tons of maize are expected to be imported (South Africa, 2015:6-8). Poverty in South African of citizens is in such a crucial state, with 14 million citizens having insufficient access to food (South Africa, 2015:8).

The agriculture sector contributes 2.5% towards the South African GDP, with another 12% GDP on value adding, through manufacturing and processing sectors (South Africa, 2015:14). Alarming is that over the last 20 years the GDP contribution from the agriculture sector is decreasing with 3% per annum since 1993 (South Africa, 2015:30).

South Africa export other groups of agriculture products such as wine, citrus, grapes, maize, fruit juice, wool and fruits such as apples, pears, peaches, prunes and apricots. Other products that are also exported includes dairy products, hides and skins, meat, flowers, food preparations, pineapples, preserved fruits, nuts and even non-alcoholic beverages. Furthermore South Africa is part of the top exporters of avocados, tangerines, ostrich products, grapefruit, plums, pears and table grapes (South Africa, 2015).

Unemployment in the agriculture sector is increasing due the fact that the numbers of farmers are decreasing from 120000 farmers in 1950 to a mere 37000 in 2014 according to the Agriculture survey of 2014. The remaining farmers continuously transform their mechanical farming practises with the technology of precision farming, which results in an increase of unemployment. The increase of input cost, the constraints that the drought has on the agriculture sector and increase in labour cost have an effect on the farmer's ability to contribute towards employment in the agriculture sector (South Africa, 2015:31).

Paige and Shimeles (2015:6-7) showed in three separate surveys in South Africa, that there is a decreasing trend of employment by the agriculture sector from 22.2% in 2000, 17.82% in 2003 and 11.42% in 2006. With these decreasing employment trends in mind, the agriculture sector in 2007, with an estimated op 10 million South Africans dependent directly or indirectly on the agricultural activities for an income (Anon, 2007:73).

2.3 AGRI-BUSINESS SECTOR IN SOUTH AFRICA

South Africa's agriculture co-operative movement started in the early 1900's to provide commercial farmers the opportunity of collective buying, supplying and marketing their products and organisational power. These co-operations became a powerful lobby for agriculture, holding a virtual monopoly in the key agriculture sectors, with the backup finance of Land Bank, and with effective controls on the marketing boards (Competition Commission, 2007:27). According to Bosman (1927:301), co-operatives became very powerful with these holding on the marketing boards. Marketing Boards (Marketing Act 26 of 1927) regulated product prices until 1994 and used the co-operatives as the single marketing channel for maize.

Serfontein (1970:3) is of the opinion that this result of the regulating bodies and the single marketing system, contribute and add on to the actual activities of the co-operatives to span all

the functions to produce the agriculture products and then to bring the producers products to the market. The activities included financing, storage, processing, packaging, distribution, sales and even exports. The agriculture producers had to be members of the co-operatives.

According to Ortmann and King (2007:42) these co-operatives have unique characteristics:

- Co-operatives are owned and democratically controlled by their members.
- Co-operatives return surplus income in retrospect to the members' usage of the co-operatives and not according to the members' investment or membership share.
- Co-operatives were not motivated by profit but by service provided to their members.
- Co-operatives exist solely to serve their members.
- Co-operatives did pay taxes on income retained for investment and for reserves.

Ortmann and King (2007:46) stated that the high cost of supporting commercial farmers through subsidies, price support, tax concessions, and the allocation of resources were not sustainable. In the 1980 a series of reform changes happened, that started with political changes that included the removal of subsidies and tax concessions, deregulation of agriculture financing and agriculture marketing. These actions resulted in the reducing of the roles agriculture co-operatives played and made the co-operatives less dependent on government support.

The marketing board that was the result of the Marketing Act of 1937 that was investigated by Committee of Enquiry (Sexton & Iskow, 1993:15), led to the recommendations of Marketing of Agriculture Products Act, (No 47 of 1996) that led to the demise of the marketing board (Philip, 2003:18). The implication on the co-operatives led to losing the privilege of being the delegated agents of various marketing boards. Despite losing their monopoly power, and losing the privilege of their involvement of distributing government subsidies, co-operatives still provide short and medium credit to farmers (Vink & Kirsten, 2000:13). The result was that several co-operatives converted to investor-oriented firms and event listed on the Johannesburg Securities Exchange (JSE) (Piesse, *et al.*, 2003:197).

According to the Organisation for Economic Co-operation and Development (2008:3), the following was the most important effects of the deregulations of the agriculture sector:

- Increase in exports which a result of growth in revenues
- The shifting of marginal areas from grain production to livestock and also the intensifying of farming in high potential production areas.
- Farmer's involvement in risk management by means of their involvement in storage, forward contracts of their production products and by diversification of their production mix.

- Strengthening of the role of community markets and producers responsiveness to national and international price signals.
- Establishment of new enterprises in agriculture and downstream food processing sector.

According to the Competition Commission (2007:32), that indicated that some co-operatives change to investor-oriented firms after the deregulation of the agriculture sector. The result for agri-business was the availability of external funds that resulted in expanding their business products and services. The agri-business expand their financial business with the involvement in crop insurance, hedging input cost and personal finance planning for farmers. The agri-business also expand and diversified with their involvement with assisting farmers in precision farming techniques and with their access to edge cutting feed, planting and seed technologies.

The result for agri-business sector was that they had to quickly adapted and position themselves as business driven competitors in an open free national market and had to compete in a global trading environment (Van Rooyen, Esterhuizen & Doyer, 2000:12).

Consequently after the tiring droughts in the eighties and the democratisation of South Africa in 1994 the focus moved to the agriculture sector for land distribution and land issues greater visibility of the population of South Africa in the agriculture sector made agri-business consider their position in the South African economy (Van Eeden, 2009:85).

The transection in 1995 through deregulation of the agriculture sector, took the sector from regulated economy to a free market that was operational globally.

2.4 CONCLUSION

The agri-business that is part of the research is one of the leading agricultural businesses in South Africa, that focusing on the provision of inputs for agricultural production (van Antwerpen, 2012:63). The agri-business activities are predominantly in the following provinces: Gauteng, Mpumalanga, Kwazulu-Natal, Free State, Northern Cape and North-West. The core of the business is agri-retail-business and the business structures are aimed to provide agriculture producers with an exclusive and competitive value package. The agri-retail supplies a variety hardware and consumer products to agriculture producers and to the general public. The agri-retail business was the result of a merger of two major agri-retail businesses in 2013 that consist of 63 branches (Anon, 2016:1).

Middle management is decentralised at the different retail stores and has the entrepreneurial responsibility for his/her store and for the service and products on offer to their agriculture

producers and customers. The head office structure is to negotiate deals with suppliers and to provide support where needed (Van Antwerpen, 2012:63).

More agri-businesses are turning towards corporate entrepreneurship to generating innovative value-creating to stimulate growth in their organisation. Corporate entrepreneurship is seen as the solution for promoting a sustainable, competitive and transforming agri-business too harvest on value adding opportunities in the market.

Corporate entrepreneurship creates an atmosphere within the organisations to embrace creativity and innovation to benefit all the stakeholders. In the following chapter corporate entrepreneurship and the role of middle management, are explored in the literature study.

CHAPTER 3 CORPORATE ENTREPRENEURSHIP AND MIDDLE MANAGEMENT

3.1 INTRODUCTION

The importance of corporate entrepreneurship was stated by researchers as a growth strategy to achieve competitive advantage in the quest for success in an organisation (Hornsby *et al.*, 2002:254). Zahra (1991:260) announced that there are a correlation between corporate entrepreneurship and an organisations performance. Zahra (1991:260) also stated that there is little known of the substance and the process of corporate entrepreneurship.

Ireland *et al.* (2006:10) revealed that most of an organisation's knowledge is embedded within their employees. They emphasized that the knowledge of these employees in an organisation who engage in an entrepreneurial behaviour, are the foundation for organisational innovation. According to Eeswaran and Kannan (2012), organisations and their employees, are required to be more "entrepreneuristic", thus they have to be more flexible to change, for them to be able to maintain their competitive advantage.

Ireland *et al.* (2006:16) stated that the internal and external environment plays a major role in creating an environment that embraces corporate entrepreneurial behaviour, which can lead on having a competitive advantage.

The challenge is to create the entrepreneurial mind-set that will harvest entrepreneurial opportunities from within the organisation and from the external environment. Coulter (2003:15) states that: just identifying an opportunity is not enough, the entrepreneurial process also involve pinpointing a possible competitive advantage. Competitive advantage is what sets an organisation apart; it gives an organisation a competitive edge (Stols, 2013:32).

3.2 CORPORATE ENTREPRENEURSHIP

Morris *et al.* (2008:11) indicated that the term "corporate entrepreneurship" is used to describe entrepreneurial behaviour that is present in medium and large businesses. Ireland *et al.* (2006:10) also shared this approach by stating that corporate entrepreneurship is a process through which individuals in established businesses pursue entrepreneurial opportunities to innovate without regard to the level and nature of current resources. Therefore entrepreneurial opportunities are situations in which new products (goods and services) can be sold at profit, a price exceeding their cost of development, distribution and support.

Groenewald (2010:55) states that the concept of corporate entrepreneurship was formally defined and both theoretically and empirically developed in the works of Burgelman and Miller (1983). Groenewald (2010:55) argues that corporate entrepreneurship is still a concept in search of a clear definition, that the concept corporate entrepreneurship within existing business is known under many different labels, examples of these labels are: corporate entrepreneurship, internal corporate entrepreneurship, intrapreneurship, corporate venturing, entrepreneurial management, strategic renewal and strategic entrepreneurship.

Hornsby *et al.* (2002:254) set out that corporate entrepreneurship is also known as corporate venturing or intrapreneurship. Scholhammer (1982) identified corporate entrepreneurial activities in five groups: “administrative, opportunistic, imitative, acquisitive and incubative”. As early as 1984 Vesper showed that there are in his opinion three views to define corporate entrepreneurship. These definitions of Corporate Entrepreneurship could be categorized as follow:

- A new strategic direction (from management),
- A initiative from below (from employees) and
- Autonomous business creation (new business venturing)
- And any possible combinations of the above three.

3.2.1 Definition of Corporate Entrepreneurship

Corporate entrepreneurship was in its early stages defined as the process of constant renewal (Hornsby *et al.*, 2002:254). Early corporate entrepreneurial researchers viewed corporate entrepreneurship as the “embodied entrepreneurial efforts that required organizational sanctions and resource commitments for the purpose of carrying out innovative activities in the form of product, process, and organizational innovations“, as quoted by Hornsby *et al.* (2002:255). Ireland *et al.* (2006:10) stated that innovations come in the forms of new products, services and even new processes to apply or create products and new administrative applications that enhance efficiency and effectively in an organisation. By increasing efficiency and effectiveness, the organisation can enhance its competitiveness and therefore increase their profitability.

Simsek *et al.* (2009) stated that although corporate entrepreneurship consists of variety of activities, the fundamental activities for an organisation are:

- *Business venturing.* Creation of new business units or acquisitions of new business.

- *New product development.* The transformation of new ideas to value adding products, services and organisational processes.
- *Self-renewal.* The redefinition and reconstruction of the business model.

Ireland *et al.* (2006:11) define corporate entrepreneurship strategically as “a vision-directed, organization-wide reliance on entrepreneurial behaviour that purposefully and continuously rejuvenates the organization and shapes the scope of its operations by recognizing and exploiting entrepreneurial opportunities that are oriented to innovation”.

Durkan (2005:6) concluded with a definition of corporate entrepreneurship within a business. “Corporate entrepreneurship can be defined as a process that goes on inside an existing business and that may lead to new business ventures, the development of new products, services or processes, and the renewal of strategies and competitive postures.” In other words it could be seen as a **skill** in practice for business development, revenue growth, profitability enhancement and the pioneering of the development of new processes, products and services.

3.2.2 Reasons for Corporate Entrepreneurship

Corporate entrepreneurship has been introduced and set up in established businesses or organisations for several reasons:

- To generate strategic renewal in an organisation.
- To promote an innovative culture in an organisation.
- To identify and to gain knowledge of profitable opportunities.
- To seek international prospects.
- To increase profitability in an organisation (Zahra, 1991:260).

Corporate entrepreneurship goal can be summaries in Zahra’s statement (1991) to increase profitability. Chen *et al.* (2015:643) stated that an organisation that associates themselves with corporate entrepreneurial activities must make sure they have timely and relevant information.

3.2.3 Corporate Entrepreneurial Strategy

The importance of a corporate entrepreneurial strategy is that it gives the context in which corporate entrepreneurship is designed. Strategy is drafted by top management and through the strategic plan the vision, mission and goals are communicated for implementation in the organisation. Ireland *et al.* (2006:12) indicate some of the important guidelines for the design of corporate entrepreneurial strategy. These guidelines to form the strategic plan are:

- Know the desired level of entrepreneurial intensity that it wants to achieve.
- Know the growth the organisation wants to achieve and what role entrepreneurial activities will play in the design of the portfolio.
- Know the areas and sectors in which the organisation wants to be innovative leaders and in which the followers.
- Know the level of involvement of managers with their entrepreneurial activities.
- Know the guidelines that focus on product innovation versus process innovation.
- Know the level of employees of which involvement are expected for the innovation stimuli (top management, middle management or supervisors).

Corporate entrepreneurship strategy is vision-directed that purposely and continuously harbouring a culture of improvement through innovation that is based in entrepreneurial opportunities which is supported by the organisations operations (Ireland *et al.*, 2006:11). They also describe corporate entrepreneurship as a process, in the organisation, that can be used to seek and harvest new innovative entrepreneurial opportunities. Corporate entrepreneurship does not only create new products, processes and markets but it can also foster strategic renewal (Ireland *et al.*, 2006:11). Organisations can be caught up in strategic bureaucratic routines that outlived its usefulness, for the organisation and its employees (Ireland *et al.*, 2006:11).

Ireland *et al.* (2006:13) stated that a corporate entrepreneurship strategy helps to guide the recognition and response to the factors of the internal and external environment. These factors also have numerous potential implications on the corporate entrepreneurial strategy and the stimulation on entrepreneurial behaviour.

Turner *et al.* (2015:448) conclude that scholars usually focus on the factors that are necessary to foster corporate entrepreneurship and innovation within the organisation, it is important to know through with mechanism the innovation is developed, captured and distributed in the organisation for it to be translated in to a successfully entrepreneurial activity.

Chen *et al.* (2015:644) stated that for an organisation to be more effective in corporate entrepreneurship, it must have access to reliable means of communication to be able to have an integrated view of the organisation. Strategically to be a successful organisation, employees must be able to communicate effectively, to have the competitive advantages, to have the competitive edge.

3.2.4 Corporate Entrepreneurial Orientation

Wiklund and Shepherd (2005:74-75) describe corporate entrepreneurial orientation as a strategic orientation that direct specific entrepreneurial aspects of decision-making, methods and practices. Corporate entrepreneurial orientation shows how an organisation operates rather what it does. The characteristics of entrepreneurial orientated organisation is one that engage in new product innovation, undertakers somewhat risky ventures, proactive innovations before competitors. Summaries the characteristics are innovativeness, pro-activeness and risk taking.

- **Innovativeness**

Mcfadezean, O' Louglin and Shaw (2005:353) argue that **Innovativeness** reflects a business' tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new product and services. Damanpour (1991:556) stated that innovation would include "the generation, development and implementation of new ideas or behaviours. An innovation can be a new product or service, an administrative system, or a new plan or program pertaining to organizational members." Damanpour (1991:556) showed that innovation is not only reserved for innovation of product and processes, but services are also included, innovation is sometimes seen as "out of the box thinking".

According to Morris *et al.* (2008:53), business find that they must innovate more than in the past due to external forces, including the emergence of new and improved technologies, the globalisation of markets (resulting in intensified competitive pressures), the fragmentation of markets (resulting in intensified customer pressures), government deregulation and dramatic social change. Drejer (2006:143) stated that there is a growing recognition that innovation has become the only sustainable source of growth and competitive advantage.

Morris *et al.* (2008:6) indicate that the challenge to managers is one of creating an internal marketplace for ideas within their businesses and encouraging employees to act on these ideas. Chen *et al.* (2015:643) defined product innovation as "new product and/or services that are introduced to meet the needs of external users or market needs, is key to a firm's competitiveness, especially in a dynamic business environment that is characterized by rapid technological change, shortened product life cycle, and globalization".

According to Hornsby *et al.* (2002:255), corporate entrepreneurship focuses on re-energizing and enhancing the ability of a firm to attract innovative skills and talent. They also stated that for an organisation to promote entrepreneurship inside the organisation it must understand the internal conditions and challenges that can play a role in the promotion and growth of corporate

entrepreneurship. By knowing what these conditions and challenges are, it can be managed for the enhancement of corporate entrepreneurial behaviour, to be profitable for the organisation.

Ireland *et al.* (2006:10) stated that the simultaneous development and the nurturing of the present and the future competitive advantage will be the grounds for greater innovation. They also stated that corporate entrepreneurship activities can create the environment for innovation and creativity in the organisations.

- **Risk-taking**

The second dimension of corporate entrepreneurial intensity is **Risk-taking**. Jong, Parker, Wennekers and Wu (2011:7) state that as early as 1755, Cantillon argued that the first element to characterize an entrepreneur as, a person who bears risk to make a profit or loss, **Risk-taking** is considered a fundamental element of an entrepreneur. Lumpkin and Dess (2001:431) define **Risk-taking** as a tendency to take bold actions such as venturing into unknown new markets, committing a large portion of resources to ventures with uncertain outcomes and or borrowing heavily. Jong *et al.* (2011:7) argue that entrepreneurs prefer moderate rather than high risks, and try to manage or reduce risks as much as possible. Burns (2005:16) agrees that **Risk-taking** involves a willingness to pursue opportunities that have calculated likelihood of producing losses of significant performance discrepancies, or the likelihood to produce profits. The emphasis is not on extreme, uncontrollable risks, but instead of risks that are moderate and calculated. Therefore, it could be seen that there are a direct correlation between **Innovation** and **Risk-taking** but in reality, it is a more complex relationship. Morris *et al.*, (2008:63) indicated that risk is high when a business ignores new product and service opportunities and engage in no or little innovations. Risk is also high when business takes the opposite trait and come up with breakthrough innovations to create new markets. The rewards for innovation and risk-taking are the increase in market share and/or increase in profitability.

- **Pro-activeness**

Pro-activeness is seen in corporate entrepreneurship as an opportunity-seeking, forward-looking perspective characterised by high awareness of external trends and events and acting in anticipation thereof (Rauch, Wiklund, Lumpkin & Frese, 2009:761). Jong *et al.* (2011:6) argue that **Pro-activeness** has been associated with pioneering behaviour and initiative taking to pursue new opportunities and refers to the extent in which organisations attempt to lead rather than follow in key business areas. Morris *et al.* (2008:64) associates **Pro-activeness** with assertiveness as a dimension of strategy making and measures in the following three items:

following versus leading competitors in innovation, favouring the tried and true versus emphasising growth, innovation and development, and trying to cooperate with competitors.

Therefore **Pro-activeness** could be seen as taking responsibility to implement whatever is necessary to bring an entrepreneurial concept to fruition (Morris & Kuratko, 2002:44). Oosthuizen (2006:83) stated that **Pro-activeness** is especially effective at creating competitive advantages because it puts competitors in the position of having to respond to successful initiatives. This is called first mover advantage.

Organisations in different environments can differ in levels of entrepreneurial orientation, which will be referred to as the entrepreneurial intensity in an organisation (Ireland *et al.*, 2006:11).

Entrepreneurial Intensity is determined by jointly looking at the following two factors:

- *Frequency of entrepreneurship.* “How many entrepreneurial initiatives is the company pursuing?” Chen *et al.* (2015:643) stated that a firm that has the ability to deliver a higher frequency of new products across diverse market has the key to the firm’s competitiveness in the industry.
- *Degree of entrepreneurship.* “To what extent do those initiatives represent incremental or modest steps versus bold breakthroughs”? To what extent is the entrepreneurial efforts risky, innovative and proactive (Ireland *et al.*, 2006:12).

Organisations differ on the level of entrepreneurial intensity that is determined by their own level of frequency and their own degree of entrepreneurship. These combinations are unique and measured by an entrepreneurial health audit (Ireland *et al.*, 2006:12).

3.2.5 Corporate Entrepreneurial Climate

Corporate Entrepreneurial Climate as define by Ireland *et al.* (2006:28), is the internal environment that indicate an organisation readiness for harvesting entrepreneurial behaviour and for the implementation of the corporate entrepreneurial strategy. In an entrepreneurial climate the organisation would engage in new business venturing, would also be innovative and pro-active and would continually renew itself (Antoncic & Hisrich, 2001: 496). Bhardwaj and Momaya (2006: 39) state that for a company to be successful in entrepreneurship activities, the internal environment must be open and supportive and allow employees to be entrepreneurial at all levels. An organisation’s climate depends much on the perception of the employees and how things are done at the company. According to Bhardwaj, Agrawal and Mamoya (2007a: 48), empirical studies conducted by many researchers suggest that internal organisational factors play a major role in encouraging corporate entrepreneurship. Entrepreneurial behaviour has

been emphasised as an important path to competitive advantage and improved performance in firms of all types and sizes. People would be regarded as probably the most valuable resource and their creativity would be utilised as much as possible (De Villiers, 2012: 76). According to Oosthuizen (2006: 125), an employee's perception of management's attitude towards entrepreneurship could be a reflection of how management exercises corporate entrepreneurship.

Corporate Entrepreneurial Climate can also be defined as, an entrepreneurial organisations that constantly monitor and review their competitive environment, apply available resources and adapt their strategic plan to the changing circumstances (Minarcine, 2007: 30). They also need to be constantly aware of their competitors' strengths and weaknesses, technological advances and new opportunities (Sull, 2004: 75). Developing a corporate entrepreneurial culture provides a number of advantages that firstly includes an atmosphere that leads to the development of new products and services that help the organisation to expand and grow. Secondly it creates a workforce that can help the organisation to maintain its competitive advantage and finally it promotes a climate conducive to high achievers and assists the organisation in motivating and keeping its successful employees (Kuratko & Hodgetts, 2007: 60- 61).

The corporate entrepreneurial climate can be measured with the Health Audit of Corporate Entrepreneurship Climate Instrument as it was been developed by Ireland *et al.* (2006:25-27). The Corporate Entrepreneurial Climate Instrument is a diagnostic tool to measure the internal work environment, to guide the organisation in way that support the entrepreneurial behaviour and for the formulation of a corporate entrepreneurship strategy. The internal work environment elements that can be measured are:

- Management support for Corporate Entrepreneurship.
- Work Discretion.
- Reward and Reinforcement.
- Time Availability.
- Organisational Boundaries.
- Specific Climate Variables.

3.3 MIDDELE MANAGEMENT IN CORPORATE ENTREPRENEURSHIP

In 1970 J.L. Bower was one of the first scholars that point out the important role of middle management as change agents in an organisation (Hornsby *et al.*, 2002:256). Through strategic management studies, it became known that middle management can play a vital role with their contributions in the key factors of a process of strategic change and renewal in an organisation

by fostering entrepreneurial activities. Strategic change and renewal can also be two factors that can limit middle managers contributions and impact on an organisation.

JB Quinn in 1985 was one of the first to recognize the important role middle management play on the innovation process in an organisation (Hornsby *et al.*, 2002:256). Middle management's role is of inevitable importance for the communication of the organisation's vision, mission, goals, objectives, values and priorities to other employees.

Kuratko *et al.* (1990) stated that organisation's internal conditions play an extensive role in shaping middle managements views and their participation in corporate entrepreneurship. The internal corporate environment in congesion with middle management can play a significant role in the success of corporate entrepreneurial activities in an organisation (Hornsby *et al.*, 2002:255). Internal organisational factors can encourage middle management to participate in corporate entrepreneurial thinking, and with the interaction with the external environment challenges, middle management can be stimulated for creative and innovative solutions.

Middle managers play a key role to provide an internal environment that encourages an entrepreneurial behaviour that motivate and stimulate a creative and innovative behaviour with employees for the benefits of corporate entrepreneurial activities for the organisation. According to Hornsby *et al.* (2002:255), there is a growing recognition of the role middle managers play in promoting corporate entrepreneurship but little is known on what are the specific factors that influence middle managers to reach this objective. Ireland *et al.* (2006) and Hornsby *et al.* (2002) developed the corporate entrepreneurial health audit, to harvest this information of the entrepreneurial orientation and climate, to be of benefit to the organisation. Ireland *et al.* (2006:10) emphasise that the effective use of corporate entrepreneurship as a source for competitive advantages can result in a positive contributing financial and non-financial performance of the organisation.

Middle management is the spokesperson to senior management, to inform them of his own and employee's innovative ideas. They can stimulate creativity in the work environment, where these innovative ideas can be evaluated and considered for implementation, if it is allayed with the organisation's strategy (Hornsby *et al.*, 2002:257). Through a reward scheme, middle management and their employee's corporate entrepreneurial activities can be intensified. These incentive schemes can help promote an organisation's strategic goals (Hornsby *et al.*, 2002:258). The reward scheme can stimulate employees in gathering alternative, innovative ideas from inside and outside the organisation. Middle management works in an organisational environment with diverse interest groups from employees, vendors, clients, competitors, micro and macro-economic environment. Middle management can by observing and analysing the

market, make innovating decisions that can promote corporate entrepreneurial activities (Hornsby *et al.*, 2002:258).

According to Hornsby *et al.* (2002:258) some factors can create resistance in middle management's willingness to embrace corporate entrepreneurial activities. Factors that generate resistance in middle management are:

- Demanding work schedule that result in little time for innovation or creative ideas or activities.
- Limited resources available for innovated activities.
- Lack of interest of senior management.
- The constraints the innovate ideas of employees, can place on an organisation's and its department's resources.

Hornsby *et al.* (2002:258) concluded that middle management can have a ubiquitous impact on corporate entrepreneurial activities and that can determine the viability or survival of an organisation or acquisition that the organisation made. They also pointed out that by the views of middle management, their intensity of corporate entrepreneurial activities can be measure by their perception and support on various activities they perform in the organisation.

3.4 FACTORS OF CORPORATE ENTREPRENEURSHIP

Ireland *et al.* (2006:13) showed that corporate entrepreneurship in an organisation is influence not only by the organisation or individual characteristics but also the internal and external work environment.

The organisation's corporate entrepreneurship activities are influence by factors within the organisation (internal factors) and from outside the organisation (external factors).

3.4.1 Internal factors in an organisation (Climate)

An organisations performance through corporate entrepreneurial activities can be positively and negatively influenced by internal organisational factors. Organisational factors have a direct influence on the internal environment that determines the level, support and interest of corporate entrepreneurial activities of middle management in an organisation (Hornsby *et al.*, 2002:259).

Burgelman (1983) stated that internal organisational factors have an influence on the types of entrepreneurial activities that an organisation cherish and pursue. Pierce *et al.* (1997)

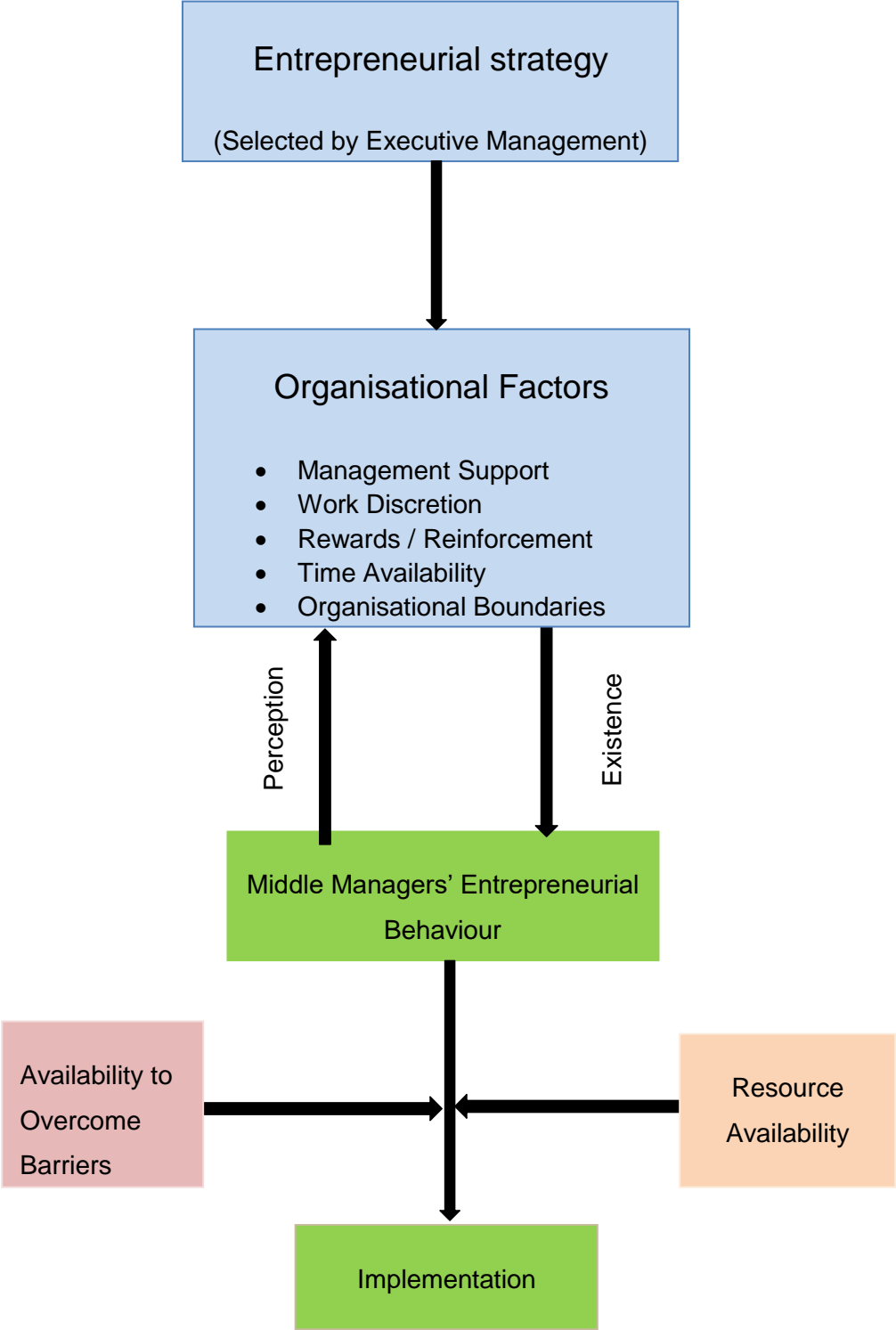
acknowledge the role middle management play in development of corporate entrepreneurship through encouraging and promoting behaviour.

Hornsby *et al.* (2002:259) and Ireland *et al.* (2006:13) identified five groups of internal factors that influence corporate entrepreneurship in middle management:

- The first factor is the use of rewards in enhancing corporate entrepreneurial activities through goals, feedback, individual responsibility outcome based rewards. Hornsby *et al.* (2002:259) point out that the right reward can encourage middle management to be willing to take entrepreneurial risks.
- The second factor is the presence of management support of middle management innovative ideas, allocating sufficient resources and even aligning the organisations process to enhance entrepreneurial activities.
- The third factor is the availability of resources in pursuing innovative, entrepreneurial activities. Hornsby *et al.* (2002:260) indicated that the absent of resources can lead to unnecessary experimentation and risk-taking by employees.
- The fourth factor is the presence of a supportive organisational structure that can administrate the evaluation of ideas, chose and implement those feasible ideas.
- The fifth factor is the willingness of risk-taking by middle management and their reaction in failure by the organisation.
- The cutting or conflict in an organisation between two conflicting sets of interest, or the conflict between quality and cost control (Ireland *et al.*, 2006:13)

Figure 3.1 shows middle management interaction with the five internal organisational factors in corporate entrepreneurial activities within the framework of the organisations' entrepreneurial strategy.

Figure 3-1: Middle management’s perception of internal environment for corporate entrepreneurship.



Source: Hornsby *et al.* (2002:261)

According to Ireland *et al.* (2006:14) the following two characteristics of the internal organisational environment support corporate entrepreneurship:

- Who takes the entrepreneurial role? The natural born entrepreneurial or the “step on the plate” employees that have the potential to be entrepreneurial.
- The entrepreneurial environment that is been created by management for all employees to willingly harvest into entrepreneurial behaviour.

3.4.2 External factors on an organisation

The corporate entrepreneurship activities in an organisation are also influenced from outside the organisation's internal environment and these are reference to as external factors. Ireland *et al.* (2006:13) showed that the greatest opportunities for entrepreneurial behaviour that can stimulate entrepreneurship in usually from changes in the external environment. Ireland *et al.* (2006:13) also pointed out that the external environment hosts these opportunities to harvest an organisations own competitive advantages but also the challenges to gain new competitive advantages and market segments. Ireland *et al.* (2006:13) and Lotz (2009) gave a few examples of the external factors of change that can influence corporate entrepreneurial development:

- Fading external opportunities in markets
- Changes in technologies
- Labour shortages and strikes
- Competition and competitor behaviours
- Changes in the industry or markets
- Changes in regulations and political arena.

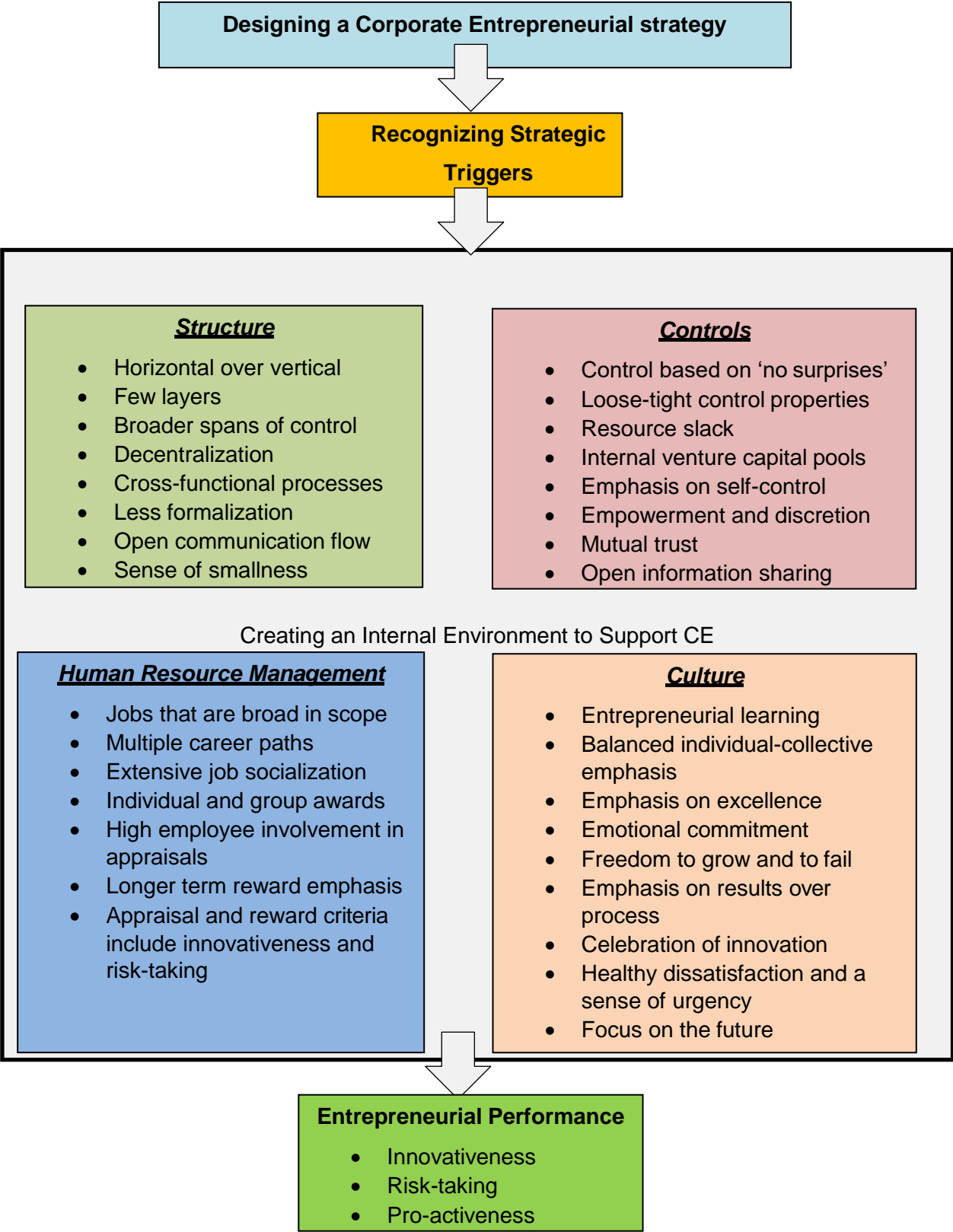
According to Kearney *et al.* (2013:S351), stated that organisations need to nurture their corporate entrepreneurial activities to fit the opportunities that may present them in the external environment. They stated that the challenge is to match their entrepreneurial activities with these opportunities that they want to explore. The challenge is to choose the right opportunities that will result in successful business segments, keeping in mind their own entrepreneurial abilities. The challenges that the organisation is operating in a continuously changing environment and business must be aware of the impact of these changes on their own corporate entrepreneurial activities.

3.5 SUSTAINABLE CORPORATE ENTREPRENEURSHIP

Tuner *et al.* (2015:452) stated that large organisation must not only focus on the sharing of information for a competitive advantages, but also on the mechanism that is used in gathering of knowledge in the innovation capturing, development, adjustment, implementation and distribution through the organisation. The organisation must focus on the continuous improvement in the organisation, for its maximum benefit.

Corporate entrepreneurial strategy is creating a sustainable corporate entrepreneurial mind set for friendly organisational environment (Ireland *et al.*, 2006:14) that is designed to benefit employees to contribute knowledge and information for composing competitive advantage information, consist of the following critical elements as show in figure 3.2:

Figure 3-2: Framework for sustainable corporate entrepreneurship.



Source: Ireland et al. (2006:14)

Corporate entrepreneurial strategy is creating a sustainable corporate entrepreneurial friendly internal environment (Ireland *et al.*, 2006:14). These internal environment roles on corporate entrepreneurship are shortly:

- Structure

Corporate entrepreneurship can expand in an internal environment that embrace open communication up and down the organisation structure and allow employees with authority and responsibility to act on innovative ideas by communicate these ideas to fellow employees that can brainstorm to competitive advantages for the organisation (Ireland *et al.*, 2006:14).

- Controls

Organisational controls can give stability to explore and expand competitive advantages. Stifling controls can prevent entrepreneurial efforts and employees tend to avoid the negative experience. Balanced controls can provide the freedom with in budgetary flexibility that they can explore on the available resources. Balanced controls can provide a framework for measurements, accountability, responsibility and room for experimentation (Ireland *et al.*, 2006:14).

- Human resource management

The key is effective employee management that provide the learning opportunity to explore creative, innovative, reasonable risk-taking and responsible behaviour that enhance corporate entrepreneurial behaviour in an organisation. Provide the opportunity to encourage and guidance in tolerance and focussing on their goals. The human resource management sets for development, recruitment and reward of personal with a corporate entrepreneurial view that will benefit growth in the organisation through value creating innovations (Ireland *et al.*, 2006:14).

- Culture

“Organisational culture is the social energy that drives or fails a firm”. The organisational culture is often easier felt or experienced, than described. Entrepreneurial-intense cultures place a high intensity on change, empowering employees, improving innovation, developing and the transfer of knowledge, future driven, create opportunities, creative and fulfilment of employee’s potential.

The goal of organisational culture is to create a corporate entrepreneurial environment, which contribute financially and non-financially towards the organisation (Ireland *et al.*, 2006:14).

3.6 CONCLUSION

In the words of Ireland *et al.* (2006:16) success is more achievable with an entrepreneurial mind-set, by a way of thinking about the opportunities inside and outside an organisation and “the commitments, decisions, and actions necessary to pursue them, especially under the conditions of uncertainty that commonly accompany rapid and significant environmental changes”.

Corporate entrepreneurial strategy provide the guidelines within the development and harvesting on corporate entrepreneurial activities of employees to set a platform in which communication on creativity and innovation can result in building an organisations competitive advantages that is based within its employees.

The level of corporate entrepreneurship can be calculated through the Entrepreneurial health audit that measure the organisation entrepreneurial intensity, degree of entrepreneurship as well as the corporate entrepreneurial climate in an organisation (Ireland *et al.* 2006:17).

The Corporate Health Audit components were analysed, in chapter. In the following chapter the study gathered information are analysed, the results of the research will be discussed and compared.

CHAPTER 4 RESULTS AND DISCUSSION OF THE EMPERICAL STUDY

4.1 INTRODUCTION

The primary objective of this study is to conduct a health audit for entrepreneurship in an agribusiness. The audit will determine:

- to what degree the internal environment of agri-business fosters and inspires middle management' interest in entrepreneurial behaviour,
- and to what degree of commitment there is towards creative and innovative sanctions by middle management in the agri-business.

The chapter will merge chapter two (background of agri-businesses) with chapter three literature review of corporate entrepreneurship. The empirical research that was done by the assessment with the entrepreneurial health audit questionnaire (Ireland *et al.* 2006) in an agri-retail business in the central part of South Africa (Annexure A). This chapter will cover the data gathering process, population, sample, survey response. A detail discussion will follow on the correlation between the constructs of the health audit questionnaire for an agri-business.

4.2 GATHERING OF DATA

The electronic questionnaire was sent out by an email from the Human Resource department of the Agri-retail business, with a hyperlink to Google survey questionnaire that was constructed by Statistical Consultancy Services of the North-West University: Potchefstroom.

The survey email (Annexure B) consists of the detail of the study with specific instructions on completing of the survey. SPSS Inc. (2015). IBM SPSS Statistics Version 23, Release 23.0.0, Copyright© IBM Corporation and its licensors.

The sampling method that was used for the study was non-probability; the followings sub sections will discuss the data gathering process in detail.

4.2.1 Study population

The target population of the study is middle management that consists of managers and branch administrative managers with a database consisting of 110 employees with the specific responsibility of managing the retail duties at the branches.

Permission was obtained in a meeting with the Managing Director of the Agri-retail business to conduct the study in the business segment and for the distributing of the electronically questionnaire via the Human Resources department. Management of the agri-business required that an indemnity clause was signed off before the study was conducted. The sample of 30 employees was randomly selected by Human resources and all received the email with the Google survey hyperlink.

4.2.2 Questionnaire of the study

The survey instrument is the Health Audit of corporate entrepreneurship that was developed by Ireland *et al.* (2006). The purpose of the questionnaire is to do a health audit of corporate entrepreneurship on an agri-business.

The questionnaire uses a five point Likert scale measurement tool and respondents have to indicate the degree of agreement or disagreement with the specific statement. The following scale was used to measure the respondents' agreement or disagreement with the under study statement:

- 1 = Strongly agree
- 2 = Slightly agree
- 3 = Neither agree nor disagree
- 4 = Slightly disagree
- 5 = Strongly disagree.

The questionnaire was divided in the following three parts:

- Part A: Company entrepreneurial orientation: This section gathers information on the entrepreneurial intensity of the organisation. This part of the questionnaire covers three constructs: innovativeness (creativity), risk-taking and pro-activeness (includes exploring of opportunities as source of innovation, competitive advantages and first movers benefits).
- Part B: Corporate Entrepreneurship climate instrument: This section gathers information on the corporate entrepreneurial climate that are constructed by the following six constructs: Management support for corporate entrepreneurship, work discretion, rewards/reinforcement, time availability, organisational boundaries and specific climate variables.
- Part C: Biographical and geographic information: In this final section of the questionnaire the demographic information of the respondents are gathered. The respondents indicate their age group, gender, race, highest academic qualification, management level and province of business of their retail branch.

4.2.3 Confidentiality

Confidentiality of all the respondents was assured by submitting the questionnaire anonymous, electronically on Google survey directly to the Statistical Consultancy Services of the North-West University: Potchefstroom. This resulted that no respondents could be identified on their response on their survey.

4.2.4 Statistical analysis of data

The Statistical Consultancy Services of the North-West University: Potchefstroom campus did the gathering of the data and the analysis of the collected data. The analysis used both descriptive and inferential statistics. The validity of the questionnaire was assessed by calculating the Cronbach alpha coefficients.

4.3 RESPONSE TO THE SURVEY

The electronically survey was distributed by the Human Resources department of the organisation and responses were gathered by the Statistical Consultancy Services of the North-West University: Potchefstroom campus. Table 4.1 illustrate the response rate.

Table 4.1 Rating of survey

Details	Number	Percentage
Questionnaires distributed	30	100%
Questionnaires received	29	97%
Questionnaires analysed	29	97%

The sample (27.3% of the population) had a response rate of 97% with one outstanding survey that was ignored in the analysis of data. The population was a total of 110.

4.4 DEMOGRAPHIC INFORMATION OF RESPONDENTS

In part C of the questionnaire the survey questionnaire gathered the following demographic information and the classification of respondent's demographic information was gathered that consist of the following sections: age group, gender, race, highest academic qualification, management level and province of business of the retail branch.

4.4.1 Age group.

The results of the age group classification of the participating respondents are presented in Table 4.2.

Table 4.2 Age distribution

Age group	Number	Percentage
≤29	3	10.3%
30-39	10	34.5%
40-49	11	37.9%
50-59	4	13.8%
60+	1	3.4%
TOTAL	29	100%

The age of the respondents showed that 10.3% of the respondents are 29 years and younger, 3.4% are 60 years and older and 13.8% is between 50 and 59 years. The respondents between 30 years and 49 years consisted 72.4% of the responses. The potential risk of knowledge that could be lost is higher at the age group above 50, competitive advantage be retained through a possible mentor program.

4.4.2 Gender of respondents

Table 4.3 shows the results of the gender of the participants in the study

Table 4.3 Gender information

Gender	Number	Percentage
Male	17	58.6%
Female	12	41.4%
TOTAL	29	100%

From the 29 respondents 58.6% were male and 41.4% were female. Male respondents outnumbered the female respondents in the survey. With the previous all male dominant agri retail sector, a radical improvement.

4.4.3 Racial group classification of respondents

The respondents were requested to indicate their racial group. Table 4.4 depicts the race distribution of the respondents.

Table 4.4 Race distribution

Race group	Number	Percentage
Black	0	0%
White	28	96.6%
Coloured	1	3.4%
Indian	0	0%
Other	0	0%
TOTAAL	29	100%

The majority of the respondents 28 (96.6%) were White and 1 (3.4%) were Coloured. None of the respondents in the sample were Black or Indian. With South Africa legislation on Employment Equity Act of 1998 on promoting BEE policy, a major risk for the organisation. The organisation has an approved Employment Equity plan for the period 2014-2016.

4.4.4 Highest academic qualification by respondents

Respondents were requested to indicate their highest academic qualification. Table 4.5 illustrate the highest academic qualifications of the respondents.

Table 4.5 Highest academic qualifications achieved

Qualification	Number	Percentage
Lower than matric	0	0%
Matric	16	55.2%
Certificate	7	24.1%
Diploma	3	10.3%
Degree	1	3.4%
Post graduate degree	2	6.9%
Other	0	0%
TOTAL	29	100%

Table 4.5 indicates that none of the respondents have a lower academic qualification than a matric. The large portion of 16 (55.2%) respondents has indicated of having matric as their highest qualification. Respondents that indicated of having a matric, certificate or diploma consisted of 26 (89.6%) respondents. Three (10.4%) of the respondents have indicated they have a tertiary qualification. Continuous training program is followed by the organisation for the personal. Batho Pele training program for *Retail Manager Development Programme* is one of the external training programs that were followed.

4.4.5 Division in Agri retail

The respondents were requested to indicate to which division in the agri- business is their main responsibility. Table 4.6 present the indication of the respondents.

Table 4.6 Division in the Agri-business

Division	Number	Percentage
Executive management	0	0%
Marketing, handling, processing & packing of products	1	3.4%
Supply of production inputs	1	3.4%
Retail stores	23	79.3%
Equipment	0	0%
Financial services & insurance	0	0%
Corporate services	2	6.9%
Other	0	0%
TOTAL	29	100%

Respondents that indicated that they main responsibility are in the retail store are 23 (79.3%).

4.4.6 Province of business

The respondents were requested to indicate in which province their retail facility is operating. Table 4.7 indicated their response.

Table 4.7 Province of business

Province	Number	Percentage
Western Cape	0	0%
Eastern Cape	0	0%
Northern Cape	1	3.4%
Free State	15	51.7%
Kwazulu Natal	0	0%
Mpumalanga	7	24.1%
Gauteng	2	6.9%
Limpopo	0	0%
North West	4	13.8%
Other	0	0%
TOTAL	29	100%

The Table 4.7 indicates that the respondents were operational in 5 of the nine provinces, with the Free State province with the most respondents with 15 (51.7%) indications and the second most respondents were Mpumalanga with 7 (24.1%) of the indications.

4.5 RELIABILITY OF THE QUESTIONNAIRE

Welman *et al.* (2012:9) stated that qualitative researchers focus more on reliability, that is, consistent and a stable measurement of data as well as replicability. Ralmond (1993:55) agrees that for research findings to be creditable, these findings must be reliable.

An internal consistency method can be used to determine reliability. This instrument of internal consistency is the Cronbach coefficient alpha (Welman *et al.*, 2012:147). If the construct show a high alpha coefficient, then it can be concluded that a larger portion of the variance in the test result of the construct attribute to the general group factors. The coefficient varies between 0

(for no reliability) to a maximum of 1 (maximum reliability), with a value of 0.6 as acceptable and 0.7 is preferred to indicate a higher level of reliability (Kent, 2007:142).

Table 4.8 indicates the Cronbach alpha coefficients of the constructs measuring:

Table 4.8 Cronbach alpha coefficients per construct of questionnaire

Part A Company Entrepreneurial Orientation		Cronbach alpha
Intensity of entrepreneurship		
Degree of entrepreneurship (70%)		
A1-A6	Company Characteristics	.838
A7-A12	Top level Decision making	.627
Frequency of entrepreneurship (30%)		
A14-A16	New products introduction	.812
A18-A20	New Service introduction	.817
Part B Corporate Entrepreneurship Climate Instrument		
B1-B19	Management Support	.907
B20-B29	Work Discretion/ Autonomy	.800
B30-B35	Rewards/ Reinforcement	.594
B36-B41	Time Availability	.698
B42-B48	Organisational Boundaries	.782
B49-B78	Specific Climate Variables	.901

The result of Part A of the questionnaire as result of table 4.8 suggest that the instrument used in the study to access the **Company Orientation** with in the selected agri-retail business has acceptable reliability, as only one construct has a lower Cronbach alpha coefficient of 0.7. The construct of **Decision Making** will however not be discarded with the acceptable Cronbach alpha coefficient above 0.55 based on the research of Kent (2007:142).

The result of Part B of the questionnaire as result of table 4.8 suggest that the instrument used in the study to access **Corporate Entrepreneurial Climate** with in the selected agri- business has acceptable to high reliability, as only one construct has a lower Cronbach alpha coefficient of 0.7. The construct of **Reward/ Reinforcement** will however not be discard with the acceptable Cronbach alpha coefficient above 0.55 based on the research of Kent (2007:142).

4.6 ASSESSMENT OF THE QUESTIONNAIRE

The detail of the questionnaire that was assessed will be discussed in this section.

4.6.1 Variables measuring Company Entrepreneurial Orientation

The result of the empirical research can now be scrutinised as the reliability of the questionnaire has been verified. Ireland *et al.* (2006:22) had identified four constructs that assess the entrepreneurial orientation in the company. Using the Likert scale, these constructs were put to the respondents for assessment. Table 4.9 provide a layout of the constructs.

Table 4.9 Part A Constructs of the Company Entrepreneurial Orientation.

Part A Company Entrepreneurial Orientation <i>Intensity of entrepreneurship</i>	Statement Numbers	Number of statements
Degree of entrepreneurship (70%)	A1-A12	
Company characteristics	A1-A6	6
Top level Decision making	A7-A12	6
Frequency of entrepreneurship (30%)	A13-A21	
New products introduction	A13-A16	4
New Service introduction	A17-A20	4
New Process introduction	A21	1
TOTAL		21

The respondents had to indicate their degree of disagreement or agreement on each of the statements.

Statement A1 to A12 the respondents had to indicate one of the following:

Rating of Statement	Number
Strongly agree	1
Agree	2
Uncertain	3
Disagree	4
Strongly disagree	5

Statements A13, A17 and A21 the respondents had to provide a number of introductions.

Statement A14, A15, A16, A18 and A19 the respondents had to indicate one of the following:

Rating of Statement	Number
Significantly Less	1
Less	2
Same	3
More	4
Significant More	5

The findings of the survey are ranked from high to low mean value and are presented in table 4.10.

Table 4.10: Results of the Company Entrepreneurial Orientation.

NO	CONSTRUCT	n	Mean(x)	Standard deviation(s)
4	New Service Introduction	29	3.058	0.817
3	New Products Introduction	28	2.976	0.907
1	Company Characteristics	29	2.678	0.762
2	Top level Decision making	29	2.517	0.610
	TOTAL	28.75	2.807	0.774

Table 4.10 indicates an **average mean** of **2.807** that was recorded considering all four constructs measuring the company entrepreneurial orientation and an **average standard deviation of 0.774**. The construct that scored the highest agreement was the **Introduction of New Services** at a mean of **3.058** with a standard deviation of **0.817**. The construct, **New Product Introduction** was second with a mean of **2.976** and a standard deviation of **0.907**. The constructs **Top Level Decision Making** and **Company Characteristics** was rated on a Likert scale: 1 strongly agrees and 5 strongly disagree. **Top Level Decision Making** was measuring at a mean of **2.517** and a standard deviation of **0.610**. **Company Characteristics** were measuring at a mean of **2.678** and a standard deviation of **0.762**. The results on the Company Entrepreneurial Orientation are that the participants indicated that the organisation does improve on the providing new products and services. The participants indicate an uncertainty in the organisation characteristics and top level decision making. Communications and participation from management could rectify this concern.

4.6.2 Variables measuring Corporate Entrepreneurial Climate

Ireland *et al.* (2006:27-28) identified six constructs that assessed their entrepreneurial climate of the agri-business. Table 4.11 show each construct and the number of question in each section.

Table 4.11: Part B Corporate Entrepreneurial Climate Instrument

Part B: Corporate Entrepreneurial Climate Instrument	Statement Numbers	Number of statements
Management Support	B1-B19	19
Work Discretion/ Autonomy	B20-B29	10
Rewards/ Reinforcement	B30-B35	6
Time Availability	B36-B41	6
Organisational Boundaries	B42-B48	7
Specific Climate Variables	B49-B78	30
TOTAL		78

The respondents had to indicate their disagreement or agreement with each statement according the following Likert scale indication:

Rating of Statement	Number
Strongly disagree	1
Disagree	2
Uncertain	3
Agree	4
Strongly agree	5

Table 4.12 presents the results of the mean analysis of the constructs determining the corporate entrepreneurial climate of the organisation from the highest rating to the lowest order.

Table 4.12: Results of corporate entrepreneurial climate

NO	CONSTRUCT	n	Mean (x)	Standard deviation(s)
B2	Work Discretion/ Autonomy	29	3.200	0.633
B1	Management Support	29	3.196	0.572
B6	Specific Climate Variables	29	3.035	0.463
B3	Rewards/ reinforcement	29	2.747	0.557
B4	Time Availability	29	2.740	0.635
B5	Organisational Boundaries	29	2.271	0.614
	TOTAL	29	2.865	0.579

Table 4.12 indicates an **average mean** of **2.865** was recorded and an **average standard deviation** of **0.579**. The constructs which scored the highest are **Work Discretion/Autonomy** with a **mean** of **3.2** and a standard deviation of **0.633**. The construct that were the second highest was **Management support** with a **mean** of **3.196** and a standard deviation of **0.572**. The following constructs in the order from the highest to the lowest are **Specific Climate Variables** with a mean of **3.035** and standard deviation of **0.463** next was **Rewards/reinforcement** with a mean of **2.747** and a **standard deviation** of **0.557**, with **Time Availability** at a mean of **2.740** and a **standard deviation** of **0.635** and the last constructs was **Organisational Boundaries** with a mean of **2.271** and a standard deviation **0.614**.

4.7 RELATIONSHIP BETWEEN CORPORATE ENTREPRENEURIAL ORIENTATION CONSTRUCTS AND DEMOGRAPHIC VARIABLES

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

In the study the simple conservative test was used by applying the t-test. Levine *et al.* (2008:337) stated that the p-value represents the probability of getting a test statistical equal or more extreme than the sample result (given that a null hypothesis is true). Therefore their

indication that a small p-value indicates a low probability of equal means (statistically significance). Levine (2008:539) argues that a smaller p-value than 0.05 is considered a sufficient evidence of statistically difference.

Govender (2010:88) stated that in order to overcome the effects of the sample size on the p-value, the d-value must also be calculated. The d-value is employed to test the practical significance of a standardised difference between the means. The effect sizes which held to significance are presented in table 4.13.

Table 4.13: Classification of d-value. Source: Govender (2010:88)

d-value	Interpretation
>0.8	Large effect
0.5 – 0.8	Medium effect
0.2 – 0.5	Small effect

4.7.1 Relationship between corporate entrepreneurial orientation constructs and the gender of respondent

Demographical information was captured in Part C of the questionnaire. In this section this information are analysed to determine if there is a significant difference between the evaluations on the means of scores of males and female respondents in regard to a specific construct. Table 4.14 indicate the relationship between the four constructs measuring corporate entrepreneurial orientation and the demographic variable gender, with mean (\bar{x}), standard deviation (s), t-test (p) and effect sizes (d).

Table 4.14: The relationship between gender and corporate entrepreneurial orientation's constructs

NO	CONSTRUCTS	MALE			FEMALE			p	d
		n	\bar{x}	s	n	\bar{x}	s		
1	Company characteristics	17	2.7647	0.72183	12	2.5556	0.83283	0,489	0.25
2	Top level Decision making	17	2.6176	0.56754	12	2.3750	0,66334	0.315	0.37
3	New products introduction	16	2.8542	0.71976	12	3.1389	1.12329	0.453	0.25
4	New service introduction	17	3.1765	0.63493	12	2.8889	1.02822	0.402	0.28

Table 4.14 indicates that there are no significant statistical difference ($p < 0.05$) between gender of the respondents for the constructs of corporate entrepreneurial orientation, used in this study. The sample size effect (d-value) was classified as “small effect” on all these constructs. Male respondents rated three of the four constructs more positive than the female respondents. The differences between the two groups regarding the differences between the mean and the standard deviation can be seen as a small effect in the Cohen’s d value (between 0.2 and 0.5) in the probability that this study would be replicated.

4.8 RELATIONSHIP BETWEEN CORPORATE ENTREPRENEURIAL CLIMATE AND DEMOGRAPHIC VARIABLES

An empirical analysis was done to determine the effect of demographical variables on corporate entrepreneurial climate as measured in Part B in the questionnaire. The statistical significance as discussed in section 4.7 was used for the assessment of corporate entrepreneurial climate of the agri-business.

4.8.1 Relationship between corporate entrepreneurial climate and the gender of the respondents

Table 4.15 indicated the relationship between the factors measuring the corporate entrepreneurial climate of the business and the gender of the respondents with the mean (x), standard deviation (s), t-test (p) and effect sizes (d).

Table 4.15: The relationship between gender and the Corporate Entrepreneurial Climate of the Agri-business

NO	CONSTRUCTS	MALE			FEMALE			p	d
		n	x	s	n	x	s		
1	Management Support	17	3.1760	0.62686	12	3.2249	0.51046	0.819	0.08
2	Work Discretion/ Autonomy	17	3.1294	0.73124	12	3.3000	0.47290	0.453	0.23
3	Rewards/ Reinforcement	17	2.8627	0.66988	12	2.5833	0.29729	0.142	0.42
4	Time Availability	17	2.8118	0.63431	12	2.6389	0.65069	0.483	0.27
5	Organisational Boundaries	17	2.3866	0.67719	12	2.1071	0.49158	0.209	0.41
6	Specific Climate Variables	17	3.0165	0.45949	12	3.0611	0.48614	0.806	0.09

Table 4.15 indicates that there are no significant statistical difference ($p < 0.05$) between gender of the respondents for the constructs of corporate entrepreneurial climate, used in this study. The sample size effect (d-value) was classified as “small effect” on all these constructs. Male respondents rated three of the six constructs more positive while female respondents rated the other three more positively. The differences between the two groups regarding the differences between the mean and the standard deviation can be seen as a small effect in the Cohen’s d value (between 0.2 and 0.5) in the probability that this study would be replicated.

4.9 CORRELATION OF CORPORATE ENTREPRENEURIAL ORIENTATION CONSTRUCTS

The correlations between different constructs can be calculated by Spearman’s rho correlations. Huake and Kossowski (2011:88) stated that Spearman’s rank correlation coefficient is a nonparametric (distribution-free) rank statistic, proposed as a measure of the strength of the association between two variables. They also declare that Spearman’s coefficient is not a measure of the linear relationship between two variables but it assesses how well an arbitrary monotonic function can describe the relationship between two variables, without making any assumptions about the frequency distribution of the variables.

Huake and Kossowski (2011:93) warn to “*not to over interpret Spearman’s rank correlation coefficient as a significant measure of the strength of the associations between two variables*”.

The following are a Spearman’s rho coefficients as indication of the correlation or significant relationship between constructions at a p-value of 0.01:

Guidelines of value	Significant relationship
≤ 0.1	Small
0.3	Medium
≥ 0.5	Large

Table 4.16 will indicate the correlation of the corporate entrepreneurial orientation using the Spearman’s rho correlations.

Table 4.16: Correlations of Corporate entrepreneurial orientations

CONSTRUCTS		Company characteristics	Top level Decision making	New products introduction	New service introduction
Company characteristics	Correlations Coefficient	1.000	0.686	-0.508	-0.220
Top level Decision making	Correlations Coefficient	0.686	1.000	-0.326	-0.260
New products introduction	Correlations Coefficient	-0.508	-0.326	1.000	0.600
New service introduction	Correlations Coefficient	-0.220	-0.260	0.600	1.000

Correlation is significant at p-value of 0.01 (Positive negative).

Correlation is significant at p-value of 0.05 (negative)

In Table 4.16 it is show that in attributes done in the questionnaire there are a large **positive** correlation between the **company characteristics** and **top level decision making**; the participants probable see that top level decision making is part of the company's characteristics. There are a large **positive** correlation between **new product introduction** and **new service introduction**; this is an indication that both new product and new services are positively correlated. In table 4.16 it shows the negative correlation between **company characteristics** and **new product introduction**. There is a negative correlation at a p-value of 0.05 of -0326 **new product introduction** and **top level decision making**. The study shows that participants indicated that **new product introduction** is not part of the characteristics of the company and that there are a negative correlation in regard to **new product introduction** and **top level decision making**.

4.10 CORRELATION BETWEEN CONSTRUCTS OF CORPORATE ENTREPRENEURIAL CLIMATE

Table 4.17 will indicate the correlation of the corporate entrepreneurial climate using the Spearman's rho correlations.

Table 4.17: Correlations of Corporate entrepreneurial climate

CONSTRUCT		Management Support	Work Discretion/ Autonomy	Rewards/ reinforcement	Time Availability	Organisational Boundaries	Specific Climate Variables
Management Support	Correlation Coefficient	1.000	0.543	0.315	-0.491	0.182	0.818
Work Discretion/ Autonomy	Correlation Coefficient	0.543	1.000	0.041	-0.445	0.075	0.563
Rewards/ reinforcement	Correlation Coefficient	0.315	0.041	1.000	-0.228	0.624	0.228
Time Availability	Correlation Coefficient	-0.491	-0.445	-0.288	1.000	0.012	-0.479
Organisational Boundaries	Correlation Coefficient	0.182	0.075	0.624	0.012	1.000	-0.021
Specific Climate Variables	Correlation Coefficient	0.818	0.563	0.228	-0.479	-0.021	1.000

Correlation is significant at p-value of 0.01 (Positive negative).

Correlation is significant at p-value of 0.05 (Negative).

According to table 4.17 there is at a p-value of 0.01 a positive and negative Spearman's rho coefficients between **corporate entrepreneurial climate** constructs. The **positive** correlations are as follow:

- **Management support** has a large positive correlation with **Work Discretion/ Autonomy**, indication from participants that management support middle management autonomy or work discretion. **Management support** is the willingness of top level management to facilitate and promote entrepreneurial behaviour, including championing of innovative ideas and providing the resources people require to behave entrepreneurially (Ireland *et al.*, 2006:27). Work discretion or autonomy is top level management's commitment to tolerate failure, provide decision making latitude and freedom from excessive oversight and to delegate authority and responsibility to middle managers (Ireland *et al.*, 2006:27).
- **Specific Climate Variables** has a positive correlation with **Management Support** and **Work Discretion/ Autonomy**, indication from participants that management support middle management autonomy or work discretion and generating a positive entrepreneurial internal environment.
- **Rewards/ reinforcement** have a positive correlation with **Organisational Boundaries** are the indication from participants. Rewards or reinforcement involve the development and using systems that reinforce entrepreneurial behaviour, highlighting significant achievements and encourage pursuit of challenging work (Ireland *et al.*, 2006:27). Organisational boundaries are precise explanations of outcomes expected from

organisational work and development of mechanisms for evaluating, selecting and using innovations (Ireland *et al.*, 2006:28).

The **negative** correlations are as follow:

- **Time availability** has a negative correlation with both **Management Support** and with **Specific Climate Variables** (p-value of 0.01). indications are from participants that time availability have a negative effect on the entrepreneurial climate and management support are lacking and must be addressed. Time availability means evaluating workloads to ensure that individuals and groups have the time needed to pursue innovations and that their jobs are structured in ways that support efforts to achieve short and long term organisational goals (Ireland *et al.*, 2006:28).
- **Time availability** also has a negative correlation with **Work Discretion/ Autonomy** (p-value of 0.05), indication from participants are that time availability is not promoting a positive entrepreneurial climate in regards of work discretion or autonomy.

4.11 CORRELATION BETWEEN CORPORATE ENTREPRENEURIAL ORIENTATION AND CORPORATE ENTREPRENEURIAL CLIMATE

The only significant correlation at a p-value of 0.01 was between **Management Support** as a construct of **Corporate Entrepreneurial Climate** and all the **Corporate Entrepreneurial Orientation** constructs, some **positive** and some **negative**.

The **positive** Spearman's rho coefficients (p-value 0.01) are as follow:

- There is a positive correlation between **Management Support** and **Company characteristics (0.543)** and **Top Level Decision making (0.546)**, indications from participants are that there is strong leadership with a positive correlation with management support and top level decision making; middle management sees that as positive related to be part of the company's characteristics. This could be seen as negative towards the corporate entrepreneurial of middle management in regards of innovation, risk-taking and pro-activeness.

The **negative** Spearman's rho coefficients (p-value 0.01) are as follow:

- There is a negative correlation between **Management Support** and **New products introduction (-0.582)** and **New service introduction (-0.493)**. In regards to that management supports is the willingness of top level management to facilitate and promote entrepreneurial behaviour, including championing of innovative ideas and providing the

resources people require to behave entrepreneurially, the negative correlation to new product and service introduction are alarming and must be addressed.

The significant **positive** Spearman's rho coefficient correlation at a p-value of 0.05 was between **Time Availability** a construct of **Corporate Entrepreneurial Climate** and **New Products introduction (0.434)** and **New Service introduction (0.374)** as constructs of the **Corporate Entrepreneurial Orientation**.

The significant **negative** correlation at a p-value of 0.05 was between **Specific Climate Variable** a construct of **Corporate Entrepreneurial Climate** and **New Products introduction (-0.445)** and **New Service introduction (-0.437)** as constructs of the **Corporate Entrepreneurial Orientation**. Top management must generate an internal entrepreneurial environment to support middle management. Furthermore middle management must participate in the decision making and identifying of new product and services to promote the entrepreneurial behaviour.

There were no significant correlation of Part C **Demographic** constructs and the Corporate Entrepreneurial Orientation and the Corporate Entrepreneurial Climate under Spearman's rho coefficient at a p-value of 0.01.

4.12 CONCLUSION

Through the study the positive correlations are identified and they do contribute on enhancing the entrepreneurial behaviour of middle management. The study identified a few negative correlations concerning time availability, new product and service introductions. The top management can address these concerns to promote the entrepreneurial climate for a better corporate entrepreneurial orientation in the organisation. The goal is to generate a sustainable entrepreneurial mind set, which will benefit all stakeholders.

The following chapter will as a result of the study of Health Audit of Corporate Entrepreneurship in an agri-business and the literature study, provide a conclusion and indicate recommendations. The conclusion will be drawn on the results of the literature findings and the findings of the empirical study.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The final chapter of this study of Health Audit of Corporate Entrepreneurship in an agri-business will provide a conclusion and indicate recommendations. The conclusion will be drawn on the results of the literature findings and the findings of the empirical study. This section will also examine the reliability study based on the Cronbach alpha coefficient of the respondents on the assessment of the questionnaire on the *Health Audit of Corporate Entrepreneurship in an Agri-business*.

Recommendations will be drafted on the findings of the assessment and based on the literature study that was done.

5.2 CONCLUSIONS

Conclusions will follow the structure of the assessment questionnaire of the Health Audit of Corporate entrepreneurship. The reliability of the survey was been evaluated by the Cronbach alpha coefficient on each of the constructs of the survey on the Health Audit questionnaire (Chapter 4). *Welman et al.*, (2012:9) stated that quantitative research focus more on reliability that is consistent and stable measurement of data. *Welman et al.* (2012:147) confirmed that the Cronbach alpha coefficient is a measuring instrument of internal consistency.

5.2.1 Reliability of the corporate orientation of the Health Audit questionnaire

Reliability was done in chapter 4 and summaries on the Cronbach alpha coefficient in table 4.8.

5.2.2 Reliability of the corporate climate instrument of the Health Audit questionnaire

Reliability was done in chapter 4 and summaries on the Cronbach alpha coefficient in table 4.8.

Based on the criteria of Kent (2007:142) and on Field (2005:668) of all the constructs in Part A and Part B of the Health Audit of Corporate Entrepreneurship on an Agri-Business questionnaire, based on the Cronbach alpha coefficient, can be regarded as reliable.

5.2.3 Demographical information

The demographic information that was gathered consisted of the following sections: Age group, Gender, Race, Highest academic qualification, Management level and Province of business of the retail branch. All 29 respondents completed their demographic data.

- The majority (72.4%) of the group of middle management was between 30 and 49 years. This group could be divided between the group 30-39 years (34.5%) and 40-49 years (37.9%). Only 17.2% of the respondents were older than 50 years and only 10.3% was younger than 30 years. The respondents that were older than 60 years are 3.4%, keeping in mind the retirement age at this organisation is 62. The potential risk of knowledge that could be lost is higher at the age group above 50. Management must retain the competitive advantage that was obtained through experience and it is obtainable through a possible mentor program.
- The gender of the respondents of the group was 58.6% male and 41.4% female. There was a shift in the gender composition of middle management, with a traditional all male middle management in the agri-retail sector with the history of cooperative agriculture businesses.
- The race composition of the respondents were 96.6% white. With the BEE (black economic empowerment policies) legislation that was according Tangri and Southall (2008) been push since 1994 by a black majority government, hold non-compliance risk for this organisation. Only a sample of 29 respondents was evaluated on the questionnaire and not the population of middle management at the organisation. With South Africa legislation on Employment Equity Act of 1998 on promoting BEE policy, a major risk for the organisation. The organisation has an approved Employment Equity plan for the period 2014-2016.
- All the respondents were holders of a matric or equivalent qualifications. The respondents with a graduate degree or post graduate degree were 10.3% of the respondents. Continuous training program is followed by the organisation for the personnel. Batho Pele training program for *Retail Manager Development Programme* is one of the external training programs that were followed.
- The respondents that were directly link to retail stores were 79.3%.
- The majority of the respondents were located in the Free State with 51.7% and 24.1% from Mpumalanga.

5.2.4 Conclusion on corporate entrepreneurial orientation

Corporate orientation was assessed in Part A of the questionnaire of the Health Audit of Corporate Entrepreneurship in an Agri-business. The assessment was done on the five point Likert scale.

Degree of entrepreneurship that includes **Company characteristics** regarding corporate entrepreneurship and **Top level decision making** in regarding entrepreneurship were indicated. With this reverse indication Top level decision making and Company characteristics, both of these indications show a high degree of entrepreneurial commitment of top management.

Frequency of entrepreneurship that includes the introduction of new products, new services and new processes was assessed. Introduction of new services was indicated as neutral. Middle management don't get excited about new releases, this is one of the entrepreneurial activities that must urgently addressed. The organisation can use new introductions to spirit new growth in corporate entrepreneurship that could result in the increase of the triple bottom line.

Entrepreneurial Orientation: the participants indicated that the organisation does improve on the providing new products and services, but there is must room for improvement. The participants indicate an uncertainty in the organisation characteristics and top level decision making. Communications and participation from management could rectify this concern.

5.2.5 Conclusion on corporate entrepreneurial climate

- The corporate entrepreneurial climate was assessed. Work discretion/Autonomy at a mean of 3.2 and management support at a mean of 3.196 both just above 3 that was seen as uncertain. Specific Climate variables were seen as uncertain at a mean of 3.035. Reward/reinforcement at a mean of 2.747 and Time available at a mean of 2.740 are edging towards disagree. Organisational boundaries with a mean of 2.271 indicate that the majority of the respondents disagree. Management support can improve by increase the willingness of top level management to facilitate and promote entrepreneurial behaviour; including championing of innovative ideas and providing the resources people require to behave entrepreneurially. Work discretion or autonomy can improve through top level management's commitment to tolerate failure, provide decision making latitude and freedom from excessive oversight and to delegate authority and responsibility to middle managers. Rewards or reinforcement can be better employed by top management by the involvement, development and using of systems that reinforce entrepreneurial behaviour, highlighting

significant achievements and encourage pursuit of challenging work. Organisational boundaries can be breached by precise explanations of outcomes from organisational work, the development of mechanisms for evaluating, selecting and using innovations to the benefit of the organisation. Top management and middle management can evaluate workloads of personnel to determine and to ensure that individuals and groups have the time needed to pursue innovations and that their jobs are structured in ways that support efforts to achieve short and long term organisational goals.

5.2.6 Correlation between constructs of Corporate Orientation.

The correlations between different constructs can be calculated by Spearman's rho correlations. Huake and Kossowski (2011:88) stated that Spearman's rank correlation coefficient is a nonparametric (distribution-free) rank statistic, proposed as a measure of the strength of the association between two variables. They also declare that Spearman's coefficient is not a measure of the linear relationship between two variables but it assesses how well an arbitrary monotonic function can describe the relationship between two variables, without making any assumptions about the frequency distribution of the variables.

There are a **positive** correlation between the **Company Characteristics** and **Top Level Decision Making**, as well 'n **positive** correlation between **New Product Introduction** and **New Service introduction**. There are a negative correlation between **Company Characteristics** and **New Product Introduction**. There is a negative correlation between **New Product Introduction** and **Top level Decision Making**. The study shows that participants indicated that **new product introduction** is not part of the characteristics of the company and that there are a negative correlation in regard to **new product introduction** and **top level decision making**

5.2.7 Correlation between constructs of Corporate Entrepreneurial Climate

The correlation of the corporate entrepreneurial climate is indicated by using the Spearman's rho correlations. The **positive** correlations are as follow:

- **Management Support** has a positive correlation with **Work Discretion/ Autonomy**.
- **Specific Climate Variables** has a positive correlation with both **Management Support** and **Work Discretion/ Autonomy**
- **Rewards/ Reinforcement** have a positive correlation with **Organisational Boundaries**.

The **negative** correlations are as follow:

- **Time Availability** has a negative correlation with both **Management Support** and with **Specific Climate Variables**.
- **Time Availability** also has a negative correlation with **Work Discretion/ Autonomy**.

With the positive correlation of management support that improve by increase the willingness to facilitate and promote entrepreneurial behaviour and work discretion or autonomy that tolerate failure and provide latitude for decision making, middle management has an internal environment that support entrepreneurial thinking. The positive correlation with the rewards or reinforcement top management create an involvement and development of systems that reinforce entrepreneurial behaviour, highlighting significant achievements and encourage pursuit of challenging work. Organisational boundaries can be breached by precise explanations of outcomes from organisational work, the development of mechanisms for evaluating, selecting and using innovations to the benefit of the organisation. Top management and middle management can evaluate workloads of personnel to determine and to ensure that individuals and groups have the time needed to pursue innovations and that their jobs are structured in ways that support efforts to achieve short and long term organisational goals. The negative correlation of time availability is concerning and must be address by all personnel.

5.2.8 Correlation between Corporate Entrepreneurial Orientation and Corporate Entrepreneurial Climate

The only significant correlation was between **Management Support** as a construct of **Corporate Entrepreneurial Climate** and all the **Corporate Entrepreneurial Orientation** constructs, some **positive** and some **negative**. There is a positive correlation between **Management Support, Company Characteristics** and **Top Level Decision Making**. There is a negative correlation between **Management Support, New Products Introduction** and **New Service Introduction**.

The significant **positive** correlation was between **Time Availability** a construct of **Corporate Entrepreneurial Climate** and **New Products Introduction** and **New Service Introduction** as constructs of the **Corporate Entrepreneurial Orientation**.

The significant **negative** correlation was between **Specific Climate Variable** a construct of **Corporate Entrepreneurial Climate, New Products Introduction** and **New Service Introduction** as constructs of the **Corporate Entrepreneurial Orientation**.

The major points to address by management are the introduction of new products and services by top management and the time availability of personal to expand their

entrepreneurial behaviour. The other constructs all improve the entrepreneurial orientation and climate of the organisation. The organisation can reap the benefits of the value corporate entrepreneurial activities. After improvements and workshops a re-evaluation of the corporate entrepreneurial audit is recommended on all middle management.

There were no significant correlation of Part C **Demographic** constructs and the Corporate Entrepreneurial Orientation and the Corporate Entrepreneurial Climate under Spearman's rho coefficient at a p-value of 0.01.

5.3 RECOMMENDATIONS

The four constructs of Corporate Entrepreneurial Orientation (Company Characteristic, Top Level Decision Making, New Product Introduction and New Services Introduction) and the six constructs of Corporate Entrepreneurial Climate (management support, work discretion/autonomy, rewards/reinforcement, time available, organisation boundaries and specific climate variables) are present in the Entrepreneurial Orientation and behaviour of the selected Agri-business. The Entrepreneurial Climate of the Agri-retail business must be further developed and natured to support the growth the entrepreneurial orientation of the business will provide. The growth will have an impact on the Agri-retail business that will result in the success of the business.

To embrace the corporate entrepreneurial orientation in the agri-business, the following are recommended to be address:

- Demographic of personal. 55.1% of middle management is above the age of 40. Dynamic younger personal will bring new energy, technological enlightenment, new and diverse ideas. Link with younger customers and their needs.
The study shows that 96.6% of middle management is white. Race diversity is recommended to align with the race demographic of the citizens of South Africa. With the land reform that is implemented, therefor will the customers in the agri sector also be due to that matter also be changing. Agri business role will change to contribute valuable information towards upcoming farmers, mentorship to sustain food security.
- Research is recommended for new trends in products, services and systems that can add value for the agri-business cliental. Internal processes must be revisited to minimize paperwork and accommodated on the operational system. Audit reports, day to day

operational reports, stock taking system. Time availability, that was identify as negative, will be address for all the personal.

- Decision making, communication and harvesting of ideas can be address with implantation of committees. All levels of personal that can add value towards corporate entrepreneurial orientation and climate must be represented. Committee members can circulate to generate opportunities. These committees can be used to identify talent personal for key tasks.
- Personal must have the opportunities to invest in education and training. Personal will benefit, and the organisation will benefit, harvesting new ideas.
- Rewards for entrepreneurial behaviour must be addressed by Top management. The ideal would be to reward entrepreneurial behaviour shares in the business and/or in the profitability of the organisation. An entrepreneurial revival in the organisation could be predicted. Obaro's reward system can be investigated as a guideline.
- Top management must enhance participation in decision making from middle management, by centralize the decision making in top management will decrease entrepreneurial behaviour in middle management.

According to Hayton (2005:24), and through the literature study it was clear that to foster and create a corporate entrepreneurial climate, demands a more enlightened approach to management including the decentralisation of authority, participation in decision making, fostering innovative and creative ideas, the encouragement of leaner approach to risk taking and the elimination of a bureaucratic management style.

The study indicated the important role the internal environment and the external environment have on the entrepreneurial approach of the organisation. Strategic these environments must be continuously assessed to identify the opportunities. The exploitation of these opportunities can contribute towards achieving the strategic goals of this organisation. An organisation climate must be developed for employees to be able to share information, but also an environment where these information can be harvest to support creativity and innovation to create a compete advantage for this agri retail business to create and foster this advantage above the other competitors.

The challenge for this agri-retail business as indicated was already been identified by Groenewald (2010:103):

- To gain a sustainable competitive advantage though a corporate entrepreneurial approach in the business, at all levels of employment.

- Rejuvenate en revitalise existing business, divisions and branches.
- Development of new product, services and processes for the business.
- Pursue new entrepreneurial opportunities.
- Create new business or divisions within the existing business.
- Existing operations must be subjected to a strategic renewal approach to enhance the profitability of the organisation.
- Improve growth.
- Increase financial performance.
- Create and add value to new and existing activities.

Ireland *et al.* (2006:13) showed that corporate entrepreneurship in an organisation is influenced not only by the organisation or individual characteristics but also the internal and external work environment. The organisation's corporate entrepreneurship activities are influenced by factors within the organisation (internal factors) and from outside the organisation (external factors).

Ireland *et al.* (2006:13) stated that a corporate entrepreneurship strategy helps to guide the recognition and response to the factors of the internal and external environment. These factors also have numerous potential implications on the corporate entrepreneurial strategy and the stimulation on entrepreneurial behaviour.

Organisational factors have a direct influence on the internal environment that determines the level, support and interest of corporate entrepreneurial activities of middle management in an organisation (Hornsby *et al.*, 2002:259). The internal organisational factors have an influence on the types of entrepreneurial activities that an organisation cherish and pursue.

With Hornsby *et al.* (2002:259) and Ireland *et al.* (2006:13) the following recommendation were identified as internal factors that influence corporate entrepreneurship in middle management in this agri business that can be pursued:

- The use of rewards in enhancing corporate entrepreneurial activities through goals, feedback, and individual responsibility outcome based rewards. By using the right reward that can encourage middle management to be willing to take entrepreneurial risks.
- The presence of management support of middle management innovative ideas, allocating sufficient resources and even aligning the organisations process to enhance entrepreneurial activities.
- The availability of resources in pursuing innovative, entrepreneurial activities.

- The presences of a supportive organisational structure that can administrate the evaluation of ideas chose and implement those feasible ideas.
- The willingness of risk-taking by middle management and their reaction in failure by the organisation.
- To manage the conflict in an organisation between two conflicting sets of interest, or the conflict between quality and cost control.
- The success for enhancing the corporate entrepreneurial activities, are every employees responsibility. Top management and middle management must join forces to incorporate it throughout the whole organisation.

5.4 ACHIEVEMENTS OF OBJECTIVES

The measure of success of this study is based on the achievement of the primary and secondary objectives as presented in 1.3 in the study.

5.4.1 Primary objective

The primary objective of this study is to conduct a health audit for entrepreneurship in an agribusiness. The audit will determine: to what degree the internal environment (corporate entrepreneurial climate) of agri-business fosters and inspires middle management' interest in entrepreneurial orientation, and to what degree a commitment towards creative and innovative sanctions. The primary objective was achieved, and through realising the secondary objectives of this 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:

- Identify the internal factors (corporate entrepreneurial climate) considered when designing a corporate entrepreneurship strategy in agri-business.
- Describe the internal organisational environment that supports corporate entrepreneurship in an agri-business.
- Determine the role and contribution middle management in agri-business has towards facilitating corporate entrepreneurship.
- Determine the companies' entrepreneurial orientation through an audit.
- Determine the corporate entrepreneurial climate through an audit questionnaire.

- To make recommendation to the agri-business, to promote a corporate entrepreneurial climate and orientation.

The first secondary objective namely, **identify the internal factors (corporate entrepreneurial climate) considered when designing a corporate entrepreneurship strategy in agri-business**, was achieved through a literature review in chapter 3 and an empirical questionnaire that was analysed in chapter 4.

The second secondary objective namely, **describe the internal organisational environment that supports corporate entrepreneurship in an agri-business**, was achieved through a literature review in chapter 3 and an empirical questionnaire that was analysed in chapter 4.

The third secondary objective, **determine the role and contribution middle management in agri-business has towards facilitating corporate entrepreneurship**, was achieved through a literature review in chapter 3 and an empirical questionnaire that was analysed in chapter 4.

The fourth secondary objective, determine the companies' entrepreneurial orientation through an audit, was accomplished in chapter 4.

The fifth secondary objective, determine the corporate entrepreneurial climate through an audit questionnaire was accomplished in chapter 4.

The sixth secondary objective, to make recommendation to the agri-business, to promote a corporate entrepreneurial climate and orientation, was accomplished in chapter 5.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

Based on the findings of the study, the following suggestions are put forward for consideration pertaining future research on corporate entrepreneurship in an agri-retail business. The research was only confined to one agri-retail business. A suggestion is to expand the research to all the agri-retail business nationally and to be able to draft a benchmark model for the agri-retail sector.

The agri-retail businesses in South Africa are hindered by the perception of the general public that they don't have full access to the business experience. A suggestion for future studies is: to compose an empirical study on what the general public perception are of agri-retail business, what are their needs according to this potential business experience they seek and drafting of an entrepreneurial agri-retail business model for implementation nationally.

5.6 SUMMARY

This chapter concludes the study on the conclusions drawn from the empirical results as present in chapter 4.

The Cronbach alpha coefficient established the reliability test of all the constructs of the corporate entrepreneurial orientation and the corporate entrepreneurial climate instrument. The geographical assessment of the responders was discussed. The assessment of the questionnaire was discussed in the corporate entrepreneurial orientation and the corporate entrepreneurial climate.

The relationship between corporate entrepreneurial orientation and the demographic variables were discussed with the completion of the t-test with the finding that there were no statistical difference between the genders of the respondents.

The relationship between corporate entrepreneurial climate and the demographic variables were discussed with the completion of the t-test with the finding that there were no statistical difference between the genders of the respondents.

The correlation of the corporate entrepreneurial orientation constructs was done with the Spearman' rho coefficient with the following findings: That there were a **positive** correlation between the **Company Characteristics** and **Top level decision making**, as well 'n **positive** correlation between **New product introduction** and **New Service introduction**. There were a negative correlation between **Company Characteristics** and **New product introduction**. There were also a smaller negative correlation between **New product introduction** and **Top level decision making**.

The correlation of the corporate entrepreneurial climate constructs was done with the Spearman' rho coefficient with the following findings: The **positive** correlations were **Management support** that has a positive correlation with **Work Discretion/ Autonomy**. **Specific Climate Variables** has a positive correlation with **Management Support** and **Work Discretion/ Autonomy**. **Rewards/ reinforcement** have a positive correlation with **Organisational Boundaries**. The **negative** correlations were **Time availability** that has a negative correlation with both **Management Support** and with **Specific Climate Variables**. **Time availability has** also has a negative correlation with **Work Discretion/ Autonomy**

The correlation between corporate entrepreneurial orientation constructs and corporate entrepreneurial climate constructs was done with the Spearman' rho coefficient with the

following findings: The significant correlation was between **Management Support** as a construct of **Corporate Entrepreneurial Climate** and all the **Corporate Entrepreneurial Orientation** constructs, some **positive** and some **negative**. There was a positive correlation between **Management Support** and **Company characteristics** and **Top Level Decision making**. There was a negative correlation between **Management Support** and **New products introduction** and **New service introduction**. The less significant **positive** correlation was between **Time Availability** a construct of **Corporate Entrepreneurial Climate** and **New Products introduction** and **New Service introduction** as constructs of the **Corporate Entrepreneurial Orientation**. The less significant **negative** correlation was between **Specific Climate Variable** a construct of **Corporate Entrepreneurial Climate** and **New Products introduction** and **New Service introduction** as constructs of the **Corporate Entrepreneurial Orientation**.

The recommendations were done in section 5.3 of this chapter for corporate entrepreneurship in an agri-retail business.

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

BIBLIOGRAPHY

- Aliber, M., Baipheti, M., Jacobs, P., 2015. Agricultural employment scenarios. <http://www.hsra.ac.za/EGDI.phtml>. Date of access: November 30. 2016.
- Aloulou, W., Fayolle, A. 2005. A conceptual approach of entrepreneurial orientation within small business context. *Journal of Enterprising Culture*, 13(1):21-45.
- Anon. 2007. Agriculture underestimated. *Finweek*: 73 & 76, April. 26.
- Anon. 2016. Hinterland. <http://www.hinterland.co.za/en-za/corporate/profile>. Date of access: November 30. 2016.
- Antonic, B. & Hisrich, R.D. 2001. Intrapreneurship: construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16(1):495-523.
- Bosman, F.H. 1927. Boerdery in Suid Afrika. Departement van Lanbou. Pretoria: Staatsdrukkery en kantoor van skryfbehoeftes.
- Bhardwaj, B.R., Agrawal, S. & Momaya, K. 2007. Corporate entrepreneurship model: source of competitiveness. *MB Management Review*, 19(2):131-145.
- Burgelman, R.A. 1983. A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly*, (28):223-244.
- Burns, P. 2008. Corporate entrepreneurship: Building the entrepreneurial organisation. 2nd ed Hampshire: Palgrave Macmillan.
- Chen, Y., Wang, Y., Nevo, S., Benitez-Amado, J., Kou, G., 2015. IT capabilities and product innovation performance: The roles of corporate entrepreneurship and competitive intensity. *Information & Management*, 52(6):643-657.
- Christensen, K.S. 2004. A classification of the corporate entrepreneurship umbrella: labels and perspectives. *International Journal of Management Enterprise Development*, 1(4):301-315.
- Competition Commission. 2007. Research Report: The South African agriculture industry in context. <http://www.compcom.co.za/policyresearch/policyDocs/Agricoops.doc>. Date of access: September 5, 2015.

Competition Commission. 2015. <http://www.compcom.co.za/the-15-year-review/> Date of access: November 29. 2016

Coulter, M. 2003. *Entrepreneurship in Action*. 2nd ed. Upper Sadle River, NJ: Prentice Hall.

Damanpour, F. 1991. Organizational innovations: a meta-analysis of effects of determinant and moderators. *Academy of management journal*, 34(3):555-590.

De Villiers, M.J. 2012. Antecedents of strategic corporate entrepreneurship. *European Business Review*, 24(5): 400-424.

Doyer, O.T., D'haese, M.F.C., Kirsten, J.F., Van Rooyen, C.J. 2007. Strategic focus areas and emerging trade arrangements in the South African agricultural industry since the demise of the marketing boards. *Agrekon*, 46(4):494-513.

Drejer, A. 2006. Strategic innovation: a new perspective on strategic management. *Handbook of Business Strategy*, 7(1):143-147.

Durkan, T. 2005. Entrepreneurial behaviour amongst larger business in the New Zealand retail sector – an investigation into the value of corporate entrepreneurship. New Zealand: UNITEC. (*Dissertation - MBA*).

Eeswaran, E., Kannan, G. 2012. 3rd International Conference on Business and Economic research. Corporate entrepreneurship. The path to sustainable development and leading innovation. Conference presented in Bandung, Indonesia, 12-13 March 2012.

Field, A., 2005. *Discovering statistics using SPSS*. 2nd ed. London: Sage.

Govender, D. 2010. An Assessment of corporate entrepreneurship in a petrochemical company. *Potchefstroom: NWU. (Dissertation-MBA)*.

Groenewald, D., 2010. Assessment of corporate entrepreneurship and the levels of innovation in the South African short-term insurance industry. University of Pretoria. (Doctoral dissertation).

Hauke, J., Kossowski, T. 2011. Comparison of values of Pearson's and Spearman's correlation coefficients on the same sets of data. *Quaestiones geographicae*, 30(2):87-93.

Hayton, J.C. 2005. Promoting corporate entrepreneurship through human resource management practices: a review of empirical research. *Human resource management review*, 15(1):21-41.

Hornsby, J.S., Kuratko, D.F., Zahra, S.A. 2002. Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of Business Venturing*, 17(3):253-273.

Ireland, R.D., Kuratko, D.F., Morris, M.H. 2006. A health audit for corporate entrepreneurship: innovation at all levels: part 1. *Journal of Business Strategy*, 27(1):10-17.

Jacobs, R., 2007. Agricultural retail businesses in South Africa: The higher demand on competition. *Potchefstroom: NWU. (Dissertation – MBA)*.

Johnson, D., 2001. What is innovation and entrepreneurship? Lessons for larger organisations. *Industrial and Commercial Training*, 33(4):135-140.

Jong, J.P.J., Parker, S.K., Wennekers, S. & Wu, C. 2011. Corporate entrepreneurship at the individual level: measurement and determinants. *Scientific Analysis of Entrepreneurship and SMES*, 1:1-27.

Kearney, C., Hisrich, R.D., Antoncic, B., 2013. The mediating role of corporate entrepreneurship for external environment effects on performance. *Journal of Business Economics and Management*, 14(sup1):S328-S357. Date of access: July 8, 2015.

Kuratko, D.F. & Hodgetts, R.M. 2007. *Entrepreneurship: theory, process and practice*, Ohio: Thompson Learning.

Kent, R. 2007. *Marketing research: approaches, methods, and applications in Europe*. London: Thomson Learning.

Levine, D., Stephan, D., Krehbiel, T., Berenson, M. 2008. *Statistics for managers*. 5th ed. New Jersey, NJ: Prentice Hall.

Lotz, H.M., 2009. An assessment of the determinants of corporate entrepreneurship in agricultural businesses: An integrated framework (*Doctoral dissertation, Potchefstroom: North-West University*).

Lumpkin, G.T & Dess, G.G. 2001. Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5):429-451.

McFadzean, E, O'Loughlin, A. & Shaw, E. 2005. Corporate entrepreneurship and innovation part 1: the missing link. *European Journal of Innovation Management*, 8(3):350-372.

- Minarcine, S.M. 2007. Entrepreneurial strategy: the role of planning, intuition, and improvisation. Capella University. (*Doctoral Thesis*) 181p.
- Morris, M.H., Kuratko, D.F. & Covin, J.G. 2008. Corporate entrepreneurship and innovation. 2nd Edition. Ohio: Thomson South Western.
- Oosthuizen, J.H. 2006. An integrated framework to improve the entrepreneurial climate in South African mining industry. *Potchefstroom: NWU. (Thesis -Ph.D)*.
- Ortmann, G.F., King, R.P., 2007. Agricultural cooperatives I: History, theory and problems. *Agrekon*, 46(1):18-46.
- Page, J., Shimeles, A., 2015. Aid, employment and poverty reduction in Africa. *African Development Review*, 27(S1):17-30. <http://onlinelibrary.wiley.com/doi/10.1111/1467-8268.12136/full> Date of access: November 29, 2016.
- Pearce, J.A., Kramer, T.R. and Robbins, D.K., 1997. Effects of managers' entrepreneurial behavior on subordinates. *Journal of Business Venturing*, 12(2):147-160.
- Philip, K. 2003. Co-operations in South Africa: their role in job creation and poverty reduction. <http://www.sarpn.org.za/documents/d0000786/index.php> Date of access: September 6, 2015.
- Piesse, J., Doyer, T., Thirtle, C., Vink, N., 2005. The changing role of grain cooperatives in the transition to competitive markets in South Africa. *Journal of Comparative Economics*, 33(1):197-218.
- Ralmond, P. 1993. Management projects: design and research and presentation. London: Chapman and Hall.
- Rauch, A., Wiklund, J., Lumpkin, G.T. & Frese, M. 2009. Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practise*, 33: 761-787.
- Riley, M., Wood, R.C., Clark, M.A., Wilkie, E. & Szivas, E. 2007. Research and writing dissertations in business and management. London: Thomson Learning.
- Simsek, Z., Lubatkin, M.H., Veiga, J.F., Dino, R.N. 2009. The role of an entrepreneurially alert information system in promoting corporate entrepreneurship. *Journal of business research*, 62(8):810-817.

Schollhammer, H. 1982. Internal corporate entrepreneurship. *Encyclopedia of entrepreneurship*, 209-223.

Sexton, R.J., Iskow, J. 1993. What do we know about the economic efficiency of cooperatives: an evaluative survey. *Journal of Agricultural Cooperation*, 8:15-27.

Serfontein, D.J. 1970. Sentraal Westlike Koöperatiewe Maatskappy Bepreker. Senwesco. Potchefstroom, North-West: Potchefstroom Herald.

South Africa. 1996. Marketing of Agriculture Products Act 47 of 1996.

South Africa Department of Justice. 2007. Media summary –judgement delivered in the Supreme Court of Appeal. <http://www.justice.gov.za/sca/judgements> Date of access: September 5, 2015.

South Africa Department of Agriculture, Forestry and Fisheries. 2015. Annual report 2014/2015. Pretoria.

SPSS Inc. 2015. IBM SPSS Statistics Version 23, Release 23.0.0, Copyright© IBM Corporation and its licensors. <http://www-01.ibm.com/software/analytics/spss/>

Stols, E.M., 2013. An assessment of corporate entrepreneurship in the personal protective equipment industry. *Potchefstroom: NWU (Dissertation –MBA)*.

Sull, D.N. 2004. Disciplined entrepreneurship. *MIT Sloan Management Review*, 46(1): 75.

Tangri, R., Southall, R., 2008. The politics of black economic empowerment in South Africa. *Journal of Southern African Studies*, 34(3):699-716.

Thornberry, N.E. 2001. Corporate entrepreneurship: Antidote or oxymoron? *European Management Journal*, 19(5):526-553.

Turner, T., Pennington III, W.W., 2015. Organizational networks and the process of corporate entrepreneurship: how the motivation, opportunity, and ability to act affect firm knowledge, learning, and innovation. *Small Business Economics*, 45(2):447-463.

Van Antwerpen, H., 2012. A proposed corporate entrepreneurial framework in the retail division of an agri-business. *Potchefstroom: NWU (Dissertation –MBA)*.

Van Eeden, E.S. 2009. Time cultivates winners. Senwes – a century of agriculture. Klerksdorp, North-West: Senwes Ltd.

Van Rooyen, C.J., Esterhuizen, D. & Doyer, O.T. 2000. How competitive is agri-businesses in the South Africa food chain? <http://www.up.ac.za/academic/ecoagric/publi/abartcl15/pdf> Date of access; September 5, 2015

Vesper, K.H., 1984. Three faces of corporate entrepreneurship: A pilot study. University of Washington. Graduate School of Business. *Frontiers of Entrepreneurship Research* 294-320.

Vink, N., Kirsten, J., 2000. Deregulation of agricultural marketing in South Africa. Tech. Rep., The Free Market Foundation, Monograph no 25, Sandton..

Welman, C., Kruger, F., Mitchell, B. 2012. *Research Methodology*. 3ed. Cape Town. Oxford University Press.

Wiklund, J., Shepherd, D., 2005. Entrepreneurial orientation and small business performance: a configurational approach. *Journal of business venturing*, 20(1):71-91.

Zahra, S.A., 1991. Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of business venturing*, 6(4):259-286.

ANNEXURE A

Code number:	A
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Corporate Entrepreneurial Questionnaire

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CORPORATE ENTREPRENEURIAL QUESTIONNAIRE

Dear respondent

Thank you for your time and participation in this survey.

South African agri-businesses are facing major challenges as they come under increasing pressure from local and global competitors in a playing field that is anything but even. Competing under such conditions is difficult and South African agri-businesses are involved in a race of catch up with competitors.

In this competitive environment, corporate entrepreneurship (where the whole business acts in an entrepreneurial manner) can be the vehicle for business survival and competitiveness, and many businesses and scholars recognise corporate entrepreneurship as a critical factor in business success.

By means of this survey an attempt is made to measure the role middle management's zone of influence and involvement in enhancing entrepreneurial activities in your agri-business. Your honest opinion regarding the various statements will be valued.

The survey is divided into three sections:

Part A is the 'assessment of your Agri-business's entrepreneurial intensity.

Part B is a diagnosing the internal work environment for Corporate Entrepreneurship.

Part C consists of biographical and geographic information.

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

GENERAL INSTRUCTIONS

All questions/statements can be answered by marking the relevant block with an X

Use the following key to indicate your preference

GRADE	TERM USED
1	Strongly agree
2	Agree
3	Uncertain
4	Disagree
5	Strongly disagree

Please select the number which best describes your opinion about a specific question or statement.

PART A

Company Orientation

For the following statements, please indicate the number that best corresponds to the level of agreement with each statement.

		Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Our Agri Business is characterized by:						
A1	a high rate of new product/service introductions, compared to our competitors (including new features and improvements);	1	2	3	4	5
A2	an emphasis on continuous improvement in methods of production and/or service delivery	1	2	3	4	5
A3	risk-taking by key executives in seizing and exploring chancy growth opportunities	1	2	3	4	5
A4	a "live and let live" philosophy in dealing with competitors;	1	2	3	4	5
A5	seeking of unusual, novel solutions by senior executives to problems via the use of "idea people", brainstorming etc.	1	2	3	4	5
A6	a top management philosophy that emphasises proven products and services, and the avoidance of heavy new product development costs	1	2	3	4	5

In our company, top level decision-making is characterized by:

A7	cautious pragmatic, step-at –a-time adjustments to problems;	1	2	3	4	5
A8	active search for big opportunities	1	2	3	4	5
A9	rapid growth as the dominate goal	1	2	3	4	5
A10	large, bold decisions despite uncertainties of the outcomes	1	2	3	4	5
A11	compromises among the conflicting demands of owners, government, management, customers, employees, suppliers, etc.;	1	2	3	4	5
A12	steady growth and stability as primary concerns;	1	2	3	4	5

New product introduction

A13 What is the number of new products your company introduced during the past two years?

		Significantly Less	Less	Same	More	Significantly More
A14	How many product improvements or revisions did you introduce during the past two years?	1	2	3	4	5
A15	How does the number of new product introductions at your organisation compare with those of your major competitors?	1	2	3	4	5
A16	To what degree did these new product introductions include products that did not previously exist in your market ("new to the market")?	1	2	3	4	5

New Service Introduction (for those who sell services)

A17 What is the number of new services your company introduced during the past two years?

		Significantly Less	Less	Same	More	Significantly More
A18	How many existing services did you significantly revise or improve during the past two years?	1	2	3	4	5
A19	How does the number of new services introductions your company made compare with those of the competitors?	1	2	3	4	5

		Not at all	To no extent	Uncertain	To some extent	To a great extent
A20	To what extent did these new service introductions include services that did not previously exist in your markets?	1	2	3	4	5

New Process Introduction

A21 Please estimate the number of significant new methods of operational processes your organisation implemented during the past two years? Examples of process innovations include new systems for improved services or inventories, an improved process for collecting receivables, a major new sales or distribution approach, etc.

Source: EI Questionnaire adapted from Miller (1983), Morris and Kuratko (2002)

PART B: Corporate Entrepreneurship climate Instrument (CECI)

We are interested in learning about how you perceive your workplace and the agri-business corporation.

Section1: Management support for Corporate Entrepreneurship

		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
B1	My organisation is quick to use improved work methods	1	2	3	4	5
B2	My organisation is quick to use improved work methods that are developed by workers	1	2	3	4	5
B3	In my organisation, developing one's own ideas is encouraged for the improvement of the corporation	1	2	3	4	5
B4	Upper management is aware and very receptive to my ideas and suggestions.	1	2	3	4	5
B5	A promotion usually follows from the development of new and innovative ideas.	1	2	3	4	5
B6	Those employees who come up with innovative ideas on their own often receive management encouragement for their activates.	1	2	3	4	5
B7	The doers on projects" are allowed to make decisions without going through elaborate justification and approval procedures.	1	2	3	4	5
B8	Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	1	2	3	4	5
B9	Many top managers have been known for their experience with the innovation process.	1	2	3	4	5
B 10	Money is often available to get new project ideas off the ground.	1	2	3	4	5
B11	Individuals with successful innovative projects receive additional rewards and compensation beyond the standard reward system for their ideas and efforts.	1	2	3	4	5
B12	There are several options within the organisation for individuals to get financial support for their innovative projects and ideas.	1	2	3	4	5
B13	People are often encouraged to take calculated risks with ideas around here	1	2	3	4	5
B14	Individuals risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.	1	2	3	4	5
B15	The term "risk taker" is considered a positive attribute for people in my work area.	1	2	3	4	5

B16	This organization supports many small and experimental projects realizing that some will undoubtedly fail.	1	2	3	4	5
B17	An employee with a good idea is often given free time to develop that idea.	1	2	3	4	5
B18	There is considerable desire among people in the organization for generating new ideas without regard for crossing departmental or functional boundaries.	1	2	3	4	5
B19	People are encouraged to talk to employees to other departments of the organization about ideas for new projects.	1	2	3	4	5

Section 2: Work Discretion

		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
B20	I feel that I am my own boss and do not have to double check all of my decisions with someone else	1	2	3	4	5
B21	Harsh criticism and punishment result from mistakes made on the job.	1	2	3	4	5
B22	This organization provides the chance to be creative and try my own methods of doing the job	1	2	3	4	5
B23	This organization provides the freedom to me and my own judgement.	1	2	3	4	5
B24	This organization provides the chance to do something that makes use of my abilities.	1	2	3	4	5
B25	I have the freedom to decide what I do on my job.	1	2	3	4	5
B26	It is basically my own responsibility to decide how my job gets done.	1	2	3	4	5
B27	I almost always get to decide what I do on my job.	1	2	3	4	5
B28	I have much autonomy on my job and left on my own to do my own work.	1	2	3	4	5
B29	I seldom have to follow the same work methods or steps for doing my major tasks from day to day.	1	2	3	4	5

Section 3: Rewards/Reinforcement

		Strongly disagree	disagree	Uncertain	Agree	Strongly agree
B30	My manager helps me get my work done by removing obstacles and roadblocks.	1	2	3	4	5

B31	The rewards I receive are dependent upon my innovation on the job.	1	2	3	4	5
B32	My supervisor will increase my job responsibilities if I am performing well in my job.	1	2	3	4	5
B33	My supervisor will give me special recognition if my work performance is especially good.	1	2	3	4	5
B34	My manager would tell his/her boss if my work was outstanding.	1	2	3	4	5
B35	There is a lot of challenge in my job.	1	2	3	4	5

Section 4: Time Availability

		Strongly disagree	disagree	Uncertain	Agree	Strongly agree
B36	During the past three months my work load kept me from spending time on my developing new ideas.	1	2	3	4	5
B37	I always seem to have plenty of time and work load to do everything well.	1	2	3	4	5
B38	I have just the right amount of time and work load to do everything well.	1	2	3	4	5
B39	My job is structured so that I have very little time to think about wider organizational problems.	1	2	3	4	5
B40	I feel that I am always working with time constraints on my job.	1	2	3	4	5
B41	My co-workers and I always find time for long-term problem solving.	1	2	3	4	5

Section 5: Organizational Boundaries

		Strongly disagree	disagree	Uncertain	Agree	Strongly agree
B42	In the past three months, I have always followed standard operating procedures or practices to do my major tasks.	1	2	3	4	5
B43	There are many written rules and procedures that exist for doing my major tasks.	1	2	3	4	5
B44	On my job I have no doubt of what is expected of me.	1	2	3	4	5
B45	There is little uncertainty in my job.	1	2	3	4	5
B46	During the past year, my immediate supervisor discussed my work performance with me frequently.	1	2	3	4	5

B47	My job description clearly specifies that standard of performance on which my job is evaluated.	1	2	3	4	5
B48	I clearly know what level of work performance is expected from me in terms of amount, quality and timelessness of output.	1	2	3	4	5

Section 6: Specific Climate Variables

		Strongly disagree	disagree	Uncertain	Agree	Strongly agree
B49	This company definitely rewards employees who take calculated risks and innovate.	1	2	3	4	5
B50	Jobs in the company tend to be broadly defined with considerable discretion in how tasks are performed.	1	2	3	4	5
B51	In this company, employees can pursue multiple career paths.	1	2	3	4	5
B52	This company tries hard to develop the creative potential of employees.	1	2	3	4	5
B53	Annual performance appraisals in this company include an evaluation of employee innovativeness	1	2	3	4	5
B54	Around here, it seems like there is more concern with process that with performance.	1	2	3	4	5
B55	This company does a good job of balancing incentives for individual initiative with incentives for team collaboration.	1	2	3	4	5
B56	If you are innovating on the job, you cannot get ahead in the company.	1	2	3	4	5
B57	An overly bureaucratic structure takes away from our ability to be entrepreneurial in the company.	1	2	3	4	5
B58	Our company is organized in a way that encourages managers to "micromanage" employees and projects.	1	2	3	4	5
B59	We have too many levels of management in this company.	1	2	3	4	5
B60	I would characterize the company structure as being highly flexible.	1	2	3	4	5
B61	A rigid chain of command limits our ability to experiment with new ideas.	1	2	3	4	5
B62	Red-tape and slow approval cycles are problems in this company.	1	2	3	4	5
B63	Managers in this company strongly believe in delegating decision-making responsibility.	1	2	3	4	5
B64	Controls is very tight in this company, we tend to count every rand every hour.	1	2	3	4	5
B65	Senior management focuses on eliminating any slack within budgets.	1	2	3	4	5
B66	Once budgets are finalized and accepted, they are difficult to revise.	1	2	3	4	5
B67	The lines of command clearly allocate authority and responsibility to each business unit/department.	1	2	3	4	5
B68	The organizational structure is very clear defined and delineated.	1	2	3	4	5

B69	In this company, employees have a lot of say in how things are done.	1	2	3	4	5
B70	Ours is a culture that rewards the tried and true.	1	2	3	4	5
B71	This is a company that celebrates innovative achievements.	1	2	3	4	5
B72	We have a culture that strongly discourages failure.	1	2	3	4	5
B73	There is a sense of urgency in the company regarding the importance of change and innovation.	1	2	3	4	5
B74	This company subscribes to the motto "if it isn't broke, don't fix it".	1	2	3	4	5
B75	Innovation and risk-taking are core values in the company.	1	2	3	4	5
B76	Lines of command clearly allocate authority and responsibility to each business unit/department.	1	2	3	4	5
B77	New ideas to receive quick go/no go decisions from management in the company.	1	2	3	4	5
B78	The company's environment encourages people to talk openly with others about ways to improve the firms operations?	1	2	3	4	5

Source: CECl is adapted from original work done by Hornsby et al. (2002.pp49-63)

PART C: BIOGRAPHICAL AND GEOGRAPHIC INFORMATION

The following information is required to assist with the statistical analysis of data for comparison amongst different interest groups. Responses will be treated confidentially. Your assistance in providing this important information will be highly appreciated. Mark the applicable block with an **X**.

C 01	Indicate your age group	≤ 29	30 - 39	40 - 49	50 - 59	60+
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C 02	Indicate your gender	Male	Female
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C 03	Indicate your race	Black	White	Coloured	Indian
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C04	Indicate your highest academic qualification	
	Lower than matric	
	Matric	

Certificate	
Diploma (Technical College or Technicon)	
Degree	
Post graduate degree	

C 05	Indicate your division	
	Executive management	
	Marketing, handling, processing & packaging of produce	
	Supply of production inputs (seed, crop care, animal feeds & management services)	
	Retail stores	
	Equipment (marketing, maintenance & manufacture of agriculture equipment)	
	Financial services & insurance	
	Corporate services	
	Other (commodity trading & subsidiaries)	

C 06	In which Province is your agri-business	
	Western Cape	
	Eastern Cape	
	Northern Cape	
	Free state	
	Kwazulu-Natal	
	Mpumalanga	
	Gauteng	
	Limpopo	
	North west	
	Other	

THANK YOU VERY MUCH FOR YOUR VALUED INPUT

ANNEXURE B

Kollega

Hiermee word jy uitgenooi om deel te neem aan 'n navorsingstudie wat goedgekeur is deur [REDACTED] Bestuur. Jou insette is **anoniem** en sal as **streng vertroulik** hanteer word, die data sal slegs vir akademiese doeleindes gebruik word.

Die vraelys sal jou nagenoeg 15 minute neem om te voltooi.

Thys de Beer is tans besig met sy MBA studies aan die NWU Besigheidskool, sy navorsingstudie handel oor "Corporate Entrepreneurship". Jou deelname aan hierdie studie sal help om die invloed en betrokkenheid van middelbestuur aan entrepreneuriese aktiwiteite binne die agri-besigheid te bepaal.

Die vraelys is beskikbaar by die volgende link:

FILL OUT FORM

Die vraelys moet asseblief voor of **op 7 Oktober** voltooi word. Kontak [REDACTED] met enige navrae in die verband.

Groete

[REDACTED]

This message (and attachments) is subject to restrictions and a disclaimer, read more: [Afrikaans](#) | [English](#)
I've invited you to fill out a form:

CORPORATE ENTREPRENEURIAL QUESTIONNAIRE

Dear respondent

Thank you for your time and participation in this survey.

South African agri-businesses are facing major challenges as they come under increasing pressure from local and global competitors in a playing field that is anything but even. Competing under such conditions is difficult and South African agri-businesses are involved in a race of catch up with competitors.

In this competitive environment, corporate entrepreneurship (where the whole business acts in an entrepreneurial manner) can be the vehicle for business survival and competitiveness, and many businesses and scholars recognise corporate entrepreneurship as a critical factor in business success.

By means of this survey an attempt is made to measure the role middle management's zone of influence and involvement in enhancing entrepreneurial activities in your agri-business. Your honest opinion regarding the various statements will be valued.

The survey is divided into three sections:

Part A is the 'assessment of your Agri-business's entrepreneurial intensity.

Part B is a diagnosing the internal work environment for Corporate Entrepreneurship.

Part C consists of biographical and geographic information.

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

FILL OUT FORM

LAST UPDATED: 9 DECEMBER 2016