CUSTOMERS' PERCEPTIONS OF BUSINESS UNITS WITHIN AN AGRICULTURAL BUSINESS IN SOUTH AFRICA

By

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To whom it may concern

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ABSTRACT

The benefits that customer relationship management bring forth are critical factors such as customer satisfaction and loyalty Customer satisfaction is a well-researched subject in Management and has been referred to as *God, King and beyond*. Companies are dependent on customer satisfaction and/or positive customer perceptions in order to survive, in that the existence and growth of companies depend on customers' repeated and increased purchases due to positive feelings towards the company. Also, customer satisfaction may increase the good reputation of a company and lead to positive word-of-mouth advertising that may in turn bring in new customers.

Agricultural businesses are an important vehicle of agriculture growth in South Africa; however, research on customer satisfaction among agricultural business customers is scarce. Agricultural businesses (previously known as cooperatives) were established on the notion that through cooperation between the various farmers, they could obtain better services and products at reduced prices that would add value to the farmer on his farm (farmer-centred). Cooperatives were a viable business form until 1996, when the Marketing Control Board and subsidised interest rates were abolished. The majority of the agricultural cooperatives were converted to investor-oriented firms (IOFs), that had the primary goals of being profitable and maintaining a valuable share price (corporate-centred). Agricultural businesses, however, are complex due to the fact that the customers of an agricultural business are in most cases also the shareholders of the company. Also, agricultural businesses serve a niche market (farmers) and the relationship between the organisation and its customers differs from that of other industries.

Traditional customer satisfaction research has focussed on using the SERVQUAL method, which in effect only tests service quality. This study aims to simplify the measuring instrument, but also add other drivers of customer satisfaction; namely, satisfaction concerning price, product, personnel, service and management. The agricultural business consists of various business units that are managed as smaller businesses, which all form part of the larger agricultural "umbrella" company. It is, thus,

the primary objective of this study to determine the relationship between the drivers of customer satisfaction (price, product, service, personnel and management) of the various business units and link it to the profitability of these units; and to determine the impact of these variables on the customer satisfaction with the company.

Secondary empirical objectives include determining which of the drivers of customer satisfaction have the biggest impact on customer satisfaction of the overall company; determining which of the business units have the biggest impact on overall satisfaction; determining if the frequency of the use of the different business units affect the overall satisfaction of the agricultural business and lastly, determining whether the perception of performance by customers of the business units has an influence on profitability.

The study was of a quantitative nature, making use of mailed questionnaires sent to the total population, that is, members of a major agricultural business in Central South Africa that provide more than R100 000 in business to the agricultural business. A total of 963 questionnaires were sent out and 345 useable questionnaires were returned, making the response rate 35.8% of the total population.

The main results indicated that satisfaction concerning *retail shops*, *insurance* and *mechanisation (workshops)* have a statistically significant relationship with overall customer satisfaction, which indicates that in order to increase overall customer satisfaction, satisfaction with these three business units should be looked at first. *Product, service* and satisfaction concerning *management,* as drivers of customer satisfaction, all have a statistically significant influence on overall customer satisfaction. Also, when the various drivers inherent in the various business units were tested against overall customer satisfaction, the results indicated that there were two significant drivers inherent in a business unit, namely *retail shops product* and *grain marketing price*. In addition, statistical significant results indicated that the more often a business unit is used, the more satisfied customers are (except in the case of *retail shops*). The average contribution to net profit of each business unit was calculated over a five year period and it was compared to the average *performance* of each business unit. The graph indicated that there is a definite correlation between contribution towards profit and customer satisfaction.

Retail shops as a business unit provided interesting results that indicated that *retail shops price*, *retail shops product*, *retail shops personnel* and *retail shops service* had the biggest impact on all the overall drivers of customer satisfaction. This indicates that *retail shops* are seen as the “window” to the agricultural business by the customers. The respondents were also asked to indicate what they perceived to be the primary objectives of the agricultural business versus what they felt the objectives should be. Very importantly, the results were significant in determining that they perceived the objectives of the agricultural business to be company/corporate-centred. In contrast, they felt the objectives should be farmer-centred. Specific recommendations were made with regard to bettering especially *retail shops* and increasing the availability and quality of *retail shops product* in an effort to maximise customer satisfaction.

ABSTRAK

Die voordele van die bestuur van kliënteverhoudings bring kritieke faktore soos kliëntetevredenheid en loyaliteit na vore. Klantetevredenheid is ’n goednagevorste bestuursaspek waarna al as “*God, King and beyond*” verwys is. Maatskappye se oorlewing word deur klantetevredenheid en/of positiewe klantepersepsie bepaal omdat die bestaan en groei van maatskappye van klante se herhaalde en toenemende aankope op grond van positiewe gevoelens jeens die maatskappy afhang. Verder kan klantetevredenheid die goeie reputasie van ’n maatskappy uitbou en tot positiewe persoonlike reklame lei wat weer nuwe klante kan lok.

Alhoewel die landbousakesektor ’n belangrike middel tot landbouontwikkeling in Suid-Afrika is, is navorsing oor klantetevredenheid by landbouverwanteklante skaars. Landbouondernemings (voorheen bekend as koöperasies) is daarop geskoei dat hulle deur samewerking tussen verskeie boere beter dienste en produkte teen verlaagde pryse kan bekom wat waarde tot die boer op sy plaas kan toevoeg (boergesentreerd). Koöperasies was ’n lewensvatbare ondernemingsvorm tot en met 1996 toe die Bemarkingsbeheerraad en gesubsidieerde rentekoerse afgeskaf is. Die meeste landboukoöperasies is in beleggersgeoriënteerde firmas (BOF’s) omskep met die hoofoogmerke winsgewendheid en die handhawing van waardeerbare aandeelpryse (maatskappygesentreerd). Landbouondernemings is kompleks omdat die klante van ’n landbouonderneming ook in die meeste gevalle die aandeelhouers van die maatskappy is. Landboumaatskappye dien ook ‘n nismark (boere) en die verhouding tussen die onderneming en die klante verskil van diè van ander industrieë.

Tradisionele klantetevredenheidsnavorsing fokus op die gebruik van die SERVQUAL-metode, wat in der waarheid slegs dienskwaliteit toets. Hierdie studie stel dit ten doel om die meetinstrument te vereenvoudig en ook ander klantetevredenheidsaandrywers by te voeg, naamlik tevredenheid rakende prys, produk, personeel, diens en bestuur. ’n Landbouonderneming bestaan uit verskeie sake-eenhede wat as kleiner ondernemings bestuur word en almal deel van die groter landbou “sambreel”-maatskappy uitmaak. Die hoofoogmerke van hierdie studie is dus om die verhouding tussen die klantetevredenheidsaandrywers (prys, produk, diens, personeel en bestuur) van die

onderskeie sake-eenhede te bepaal en dit met die winsgewendheid van hierdie eenhede in verband te bring; en om die impak van hierdie veranderlikes op klantetevredenheid ten opsigte van die maatskappy te bepaal.

Die sekondêre empiriese doelwitte van die studie behels om te bepaal watter van die klantetevredenheidsaandrywers die grootste impak op klantetevredenheid ten opsigte van die algehele maatskappy het; watter van die sake-eenhede die grootste impak op algehele tevredenheid het; of die gebruiksfrekwensie van die onderskeie sake-eenhede die algehele tevredenheid met die landbouonderneming beïnvloed; en, laastens, of klante se persepsie rakende die prestasie van die sake-eenhede ’n invloed op winsgewendheid het.

Die studie was kwantitatief van aard en het gebruik gemaak van vraelyste wat per gewone pos na die algehele populasie (bestaande uit die lede van ’n groot landbouonderneming in Sentraal Suid-Afrika wat meer as R100 000 bydra tot die omset van die landbouonderneming) gestuur is. Altesaam 963 vraelyste is uitgestuur en 345 bruikbare vraelyste is teruggestuur. Die responskoers was dus 35,8%.

Die vernaamste resultate toon ’n statisties beduidende verband tussen tevredenheid ten opsigte van *kleinhandelswinkels*, *versekering* en *meganisasie (werkswinkels)* en algehele klantetevredenheid – wat daarop dui dat om algehele klantetevredenheid te verhoog, tevredenheid ten opsigte van hierdie drie sake-eenhede eerste aandag moet geniet. *Produk*, *diens* en tevredenheid met *bestuur* het as klantetevredenheidsaandrywers al drie ’n statisties beduidende invloed op algehele klantetevredenheid. Verder, toe die onderskeie aandrywers inherent aan die onderskeie sake-eenhede teen algehele klantetevredenheid getoets is, het die resultate getoon dat daar twee beduidende aandrywers inherent aan ’n sake-eenheid is, naamlik *kleinhandelswinkelproduk* en *graanbemarkingsprys*. Hierbenewens toon statisties beduidende resultate dat die gebruiksfrekwensie van ’n sake-eenheid die mate van klantetevredenheid weerspieël (behalwe in die geval van *kleinhandelswinkels*). Elke sake-eenheid se gemiddelde bydrae tot netto wins is oor ’n tydperk van vyf jaar bereken en met sy gemiddelde *prestasie* vergelyk. Die grafiek toon ’n definitiewe korrelasie tussen wins en klantetevredenheid.

Kleinhandelswinkels as ’n sake-eenheid het interessante resultate opgelewer wat aandui dat *kleinhandelswinkelpryse*, *kleinhandelsproduk*, *kleinhandelswinkelpersoneel* en *kleinhandelswinkeldiens* die grootste impak op al die algehele klantetevredenheidsaandrywers het. Hiervolgens beskou klante *kleinhandelswinkels* as die “venster” van die landbouonderneming. Respondente is ook gevra om aan te dui wat hulle as die hoofdoelwitte van die landbouonderneming beskou teenoor wat hulle voel die doelwitte behoort te wees. Van groot belang was die beduidende resultate waarvolgens bepaal is dat respondente die doelwitte as synde maatskappygesentreerd waargeneem het, maar gevoel het dat die doelwitte boer-gesentreerd behoort te wees. Daar word spesifiek aanbeveel dat *kleinhandelswinkels* verbeter word en dat die beskikbaarheid en kwaliteit van *kleinhandelswinkels* verhoog word om klantetevredenheid te maksimeer.

CHAPTER 1

BACKGROUND AND INTRODUCTION

1.1 Introduction

The implementation of strategies and processes to enhance the relationship between an organisation and its customers are called customer relationship management. The benefits that customer relationship management bring forth are critical factors such as customer satisfaction and loyalty (Krasnikov, Jayachandran & Kumar, 2009:61). One of the major concerns in any organisation is the necessity for customer satisfaction that leads to loyalty, as acquiring new customers cost more than retaining current customers. Customer satisfaction is the number one antecedent to retaining customers (Bodet, 2008:156). In the contemporary business, customer satisfaction has been referred to as “King, God and beyond”. Since organisations depend on repeat business for survival, profits increase if customers are efficiently served (Nowak & Washburn, 1998:441). Businesses, in essence, serve society’s needs and keep them happy. If society is not happy, its members will turn against the business by refusing to deal with the business and consequently the business will lose transactions and profits will decline (Cant, Brink & Brijball, 2006:7). Factors such as the prices of products, product quality, service quality (Nowak & Washburn, 1998:441), personnel efficiency (Adomaitiene & Slatkeviciene, 2008:77) and the perception customers have of management (the agency cost principle) (Ortmann & King, 2007(1):54) all have an influence on customer satisfaction, because these factors shape the opinion of customers towards the business.

The importance of the agricultural industry is without contention and agriculture as a business industry should receive the respect and attention it deserves (Masemola, 2008:2). The South African government acknowledges agricultural cooperatives as an important vehicle in the economic and social development of the country. Agricultural cooperatives create employment, generate income, facilitate broad-based black economic empowerment (BBBEE), and alleviate poverty, with specific reference to small-scale farmers and other communities (RSA, 2005:1).

Since the deregulation of cooperatives (resulting from the first democratic government in 1994), several cooperatives have converted to investor-oriented firms (IOF's), due to the elimination of government support, pressure to become more efficient and inherent problems with cooperatives as a stand-alone legal entity (Ortmann & King, 2007(2):220). Various debates (Helmberger & Hoos, 1962; Emelianoff, 1942 and Robotka, 1947) over the years have deliberated on whether a cooperative enterprise should be treated as an IOF or as an organisation of economic units (such as traditional cooperatives). This debate is viewed by Sexton (1995:94) as one of semantics and therefore, for the objective of this study, both agricultural cooperatives and investor-oriented firms will be referred to as agricultural businesses. Although the business forms differ, both were originally cooperatives, operate in the same environment and deal with the same type of customer.

Agricultural cooperatives, as well as converted cooperatives (Competition Commission, 2007:59) are involved in various activities such as:

- Marketing: bargaining for better prices, and the handling, manufacturing, processing and selling of farm products.
- Farm supply: purchase in volume, manufacture, process and distribute farm supplies and inputs such as feed, seed and fertiliser.
- Service: for example, trucking, storage, artificial insemination, credit, utilities and insurance (Ortmann & King, 2007(1):43).

An agricultural business thus serves customers through a variety of activities such as financing, grain marketing and storage, and dealer shops. Most typical agricultural businesses in South Africa as a result consist of various business units that are operated for the benefit of their customers. The theory behind the formation of an agricultural business or cooperative is that the organisation is owned and controlled by the members who use the services of the organisation, buy its goods, and supply goods such as, grain for marketing and storage (NCBA, 2008).

It can, therefore, be assumed that the prices, product quality, service quality, personnel, management as well as the various business units that form part of an

agricultural business all have an influence on the perception of customers and/or satisfaction with the business. If a customer perceives a business's price to be fair, it is positively correlated towards customer satisfaction (Martin-Consuegra, Molina & Esteban, 2007:464). The qualities of products provided by the business, as well as the quality of service, are both critical factors in establishing customer satisfaction (Nowak & Washburn, 1998:442). One of the strategies used by a business to compete more effectively is to improve personnel efficiency in an attempt to improve service delivery in order to maximise the satisfaction of the customer (Kotler, 2000:295). The agency problem also has an influence on customer satisfaction in this particular study since the members/shareholders of an agricultural business are also the customers of the business. If the agents (managers) do not act in the best interest of the principal (member/customer) in an agricultural business, it can lead to customer dissatisfaction (Ortmann & King, 2007(1):54). Given that agricultural businesses comprise of various business units, the question also arises as to which business unit has the biggest impact on overall customer satisfaction.

By making use of customer relationship management strategies and approaches it is possible to gain a competitive advantage in the market place (Torres, Akridge, Gray, Boehlje & Widdows, 2007:2). Satisfied customers are loyal customers and these customers will buy more of the products and services offered by the business and are less sensitive to prices. Loyal customers also account for the majority of the profits of a business. It is therefore crucial to increase customer satisfaction as a strategy to improve the loyalty of customers (Kotler, 2000:48). The primary objectives of every business are the maximisation of profitability and the long-term survival of the business (sustainable profitability), and therefore one of the main strategies to be followed will involve consideration of customer needs so as to satisfy the customer (Cant *et al.,* 2006:9).

One of the main reasons agricultural businesses were formed initially was to generate greater profits for farmers by obtaining services and inputs at lower cost and marketing of inputs at better prices (Ortmann & King, 2007(1):43). An agricultural business is unique in the sense that the members of the organisation can also be regarded as the owners, the customers, as well as the suppliers - which creates a distinctive value-

chain relationship between the organisation and the customer. Because of these different and interrelated roles of the owners, customers and suppliers, the importance of customer satisfaction is multiplied (Nel, 1994:50).

This chapter aims to state the problem, the primary and secondary research objectives, as well the research hypotheses of the study. The research method will be discussed with specific reference to the research design, the target population, sampling selection, the research instrument, the collection and the analysis of the data. The rationale for the study will also be provided. The chapter will end with concluding remarks.

1.2 Problem Statement

Customer relationship management is directly relation to satisfying customers' needs. Through the process of customer relationship management, the expectations of customers can be reached due to the manner in which the product and/or service are presented to the customer (Hardeep & Amandeep, 2011:166). Customer satisfaction and loyalty are antecedents for the survival of any business; the reason being that higher levels of customer satisfaction should lead to higher levels of loyalty which would increase cash flow, an increased market value of the business and therefore higher levels of profitability (Luo & Bhattacharya, 2006:4). Various drivers of customer perception have been identified, such as the prices offered by the business, the quality of products, the quality of service, the efficiency of personnel and the management of the business (Nel, 1994:50). All of these factors narrows the gap between what the customer expects and what the customer perceives after buying/receiving/experiencing the product and/or service (Zeithaml, Bitner & Gremler, 2009:34).

The agricultural sector plays a critically important role in South Africa, both from a social and an economic developmental viewpoint, employing approximately 30% of the country's workforce (Competition Commission, 2007:1). Agricultural businesses serve commercial farmers as suppliers of inputs, as marketing agents of their commodities and as service providers (Ortmann & King, 2007(2):220). Thus, the agricultural business acts as a supplier to its customers from the input side of the value-chain, as

well as the marketing and the selling of commodities from the output side of the value-chain, while also providing various services such as financing and insurance.

Although the business format of agricultural businesses changed from conventional cooperatives to companies, in many cases the expectations of the farmers are still the same. Already in 1994, when deregulation of cooperatives started taking place, Nel (1994:320) acknowledged the complex nature of agricultural businesses. The distinct difference between a cooperative and a company is that, in the case of the former, value-adding has to take place on the farm; and in the case of the latter, the primary objective is maximisation of wealth within the company. Therefore, the main focus of agricultural businesses has shifted dramatically from being farmer-oriented to being corporate-oriented. Cooperatives were established on the basis that they would provide the greatest benefit to the producers/owners. However, with the conversion of these agricultural cooperatives to IOF's, the focus is primarily on profit and share price maximisation (Harvey & Sykuta, 2006135). According to Olson & Boehlje (2010:2) rivalry among agribusinesses is one of the fundamental factors affecting the survival of these firms. Also, it has been established that agribusiness firms would only be able to obtain customers from competitors and retain existing customers by competing on price and non-price factors, i.e. keeping customers satisfied. Customer relationship management therefore becomes an integral part in the organisation in ensuring that customers are satisfied and loyal towards the organisation (Liou, 2008:4374).

Given that the complex relationship of customers and members/shareholders are indistinguishable, it follows that the farmer/customer expects the agricultural business to add value to his business (farm), rather than to make profit as a business. This conflict of interest could potentially lead to an inverse relationship between profitability and customer satisfaction and therefore testing customer satisfaction of agricultural business customers becomes vital.

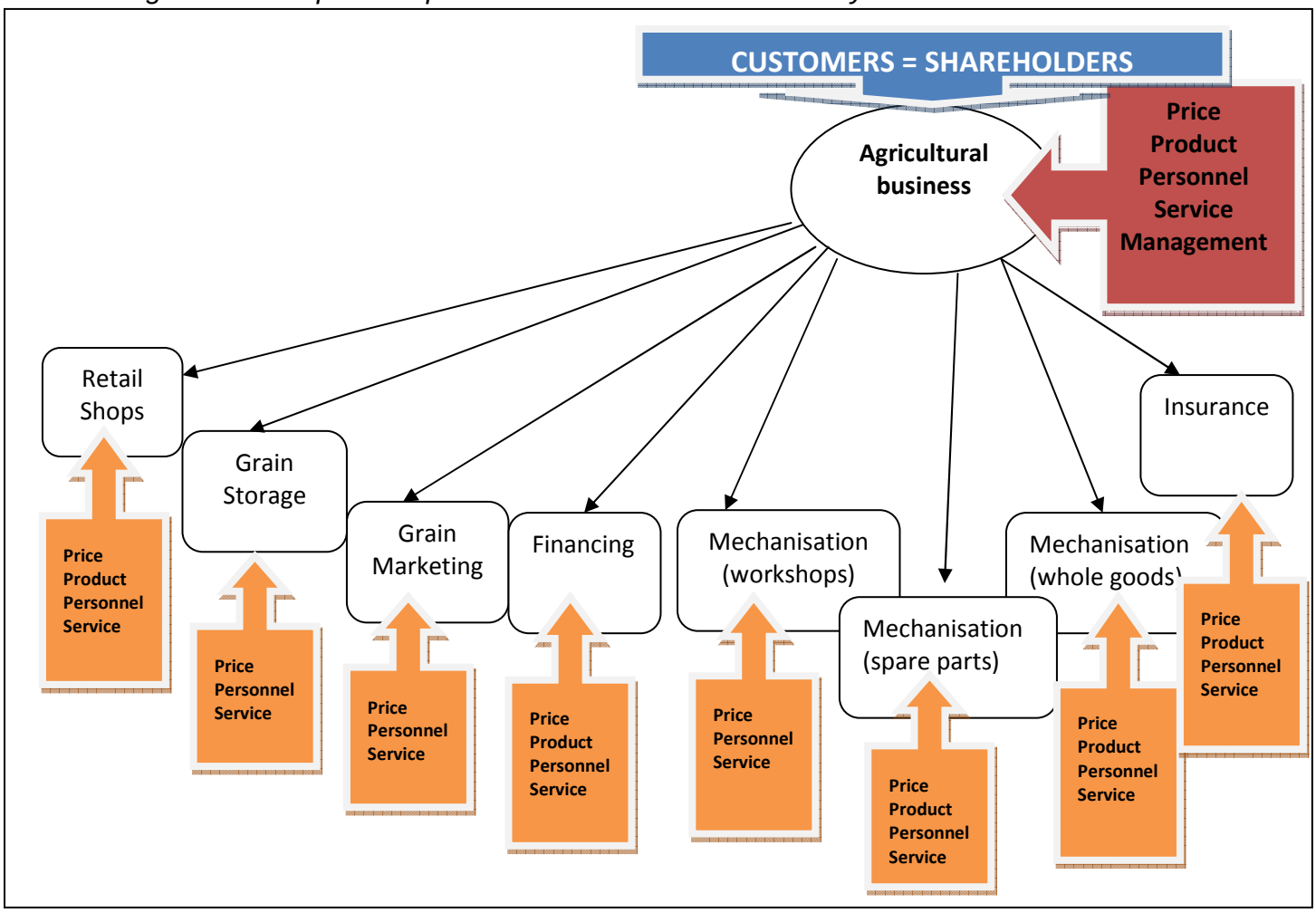
Business units, such as retail shops, grain marketing and financing within an agricultural business provide a unique opportunity to test customer satisfaction, as the customers making use of the various business units are relatively homogeneous. Also, the customers making use of the business units are business owners themselves

(farmers), with the effect that this analysis becomes a business-to-business research study. Therefore, each business unit will be regarded as a business in its own right, under the ‘umbrella’ of the agricultural business.

It is crucial to examine customer satisfaction with business units within an agricultural business with specific reference to price, product, service, personnel and management, as relevant literature suggest (Chapter 3). Traditional customer satisfaction studies focus mainly on service, whereas other drivers also have a significant influence on customer satisfaction. The study therefore aims to include these drivers in the testing of customer satisfaction. The various business units that are available to the customer could also act as drivers or destroyers of overall customer satisfaction. As was pointed out earlier, the main objective of every business is to maximise profitability and long-term survival (Cant *et al.,* 2006:7). Customer satisfaction and loyalty is therefore linked to profitability (Nel, 1994:50) and for that reason the impact of the various drivers of customer satisfaction need to be examined. A need therefore exist in testing the various drivers of customer satisfaction in the business units of an agricultural business in order to improve understanding of what satisfy customers in this unique industry. The following figure is a graphical representation of the research study and the variables to be tested.

Figure 1.1 illustrates the agricultural business as the “umbrella” organisation that consists of the various business units. Inherent in each business unit is drivers of customer satisfaction, namely price, product, personnel and service. There are also overall drivers of customer satisfaction that provide an overview of how customers perceive the performance of the various drivers of customer satisfaction in terms of their expectations.

Figure 1.1: Graphical representation of the research study



1.3 Research Objectives and Hypotheses

The following primary and secondary objectives are set for this study.

1.3.1 Primary Objectives

The primary objective of this study is to determine the relationship between the drivers of customer satisfaction and the profitability of the various business units and the impact thereof on the overall customer satisfaction with the company.

1.3.2 Secondary Objectives

The following secondary objectives are set to achieve the primary objective:

- Conduct a literature review on the background of the agricultural industry in South Africa with specific reference to the unique supply chain relationship between agricultural businesses and farmers.

- Conduct a literature review on customer relationship management and the drivers of customer satisfaction, such as price, product, service, personnel, management and business units within an organisation.

- Conduct a literature review on the relationship between customer satisfaction, loyalty and profitability.

- Determine which of the drivers of customer satisfaction (price, product, personnel, service and management) have the biggest impact on customer satisfaction with the overall company.

- Determine which of the business units have the biggest impact on overall satisfaction.

- Determine if the frequency of the use of the different business units affect the overall satisfaction with the agricultural business.

- Determine whether the perception of performance by customers of the business units has an influence on profitability.

- Develop a framework from the above results in order to aid in enhancing customer satisfaction in agricultural businesses.

1.4 Hypotheses

It is the purpose of the stated hypotheses to determine whether there are significant relationships between the company's overall satisfaction and the business units, the drivers of customer satisfaction, as well as the drivers of customer satisfaction inherent in the business units. Due to the unique nature of the research study and the need for a theoretical contribution on customer satisfaction with agricultural businesses and their business units, the study aims to evaluate the following hypotheses:

Hypothesis Statement Number 1:

H0: There is no single business unit that can significantly influence overall customer satisfaction with an agricultural business.

H1: There is one or more business unit(s) that can significantly influence overall customer satisfaction with an agricultural business.

Hypothesis Statement Number 2:

H0: There is no single driver of customer satisfaction that can significantly influence overall customer satisfaction with an agricultural business.

H1: There is one or more driver(s) of customer satisfaction that can significantly influence overall customer satisfaction with an agricultural business.

Hypothesis Statement Number 3:

H0: There is no single driver of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction with an agricultural business.

H1: There is one or more driver(s) of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction with an agricultural business.

Hypothesis Statement Number 4:

H0: There is no significant relationship between the frequency with which business units are used and the satisfaction of customers.

H1: There is a significant relationship between the frequency with which business units are used and the satisfaction of customers.

1.5 Method of Investigation

This section describes the research method that will be applied in this study. Specific emphasis is placed on the analysis of literature and on the empirical investigation.

1.5.1 An Analysis of the Literature and Resources

A literature review was conducted with regard to the agricultural industry and value chain relationship between agricultural businesses and farmers, customer satisfaction and the drivers of customer satisfaction and profitability. Relevant books, articles, journals, published reports and Internet sources were analysed as secondary resources. The purpose of the literature review was to achieve secondary objectives in providing a background and an understanding of all the aspects with regard to the relationship between the drivers of customer satisfaction and profitability of agricultural businesses in South Africa.

1.5.2 Empirical Investigation

In order to achieve both the primary objectives and most of the secondary objectives, an empirical study was undertaken. As part of the empirical discussion, the research design, the sampling method, the research instrument, data collection, and the data analysis that were used during the course of this study will be described briefly. A detailed chapter will elaborate on the information presented in this section.

1.5.3 Research Design

Research design can be defined as a ‘detailed plan’ that should act as a guide in planning a course of action, so that the most valid research findings become evident (Hussey & Hussey, 1997:114). It is a ‘deliberately planned’ route to follow in the collection and analysis of data so that the aim of the research will become clear through the specific procedure employed (Jankowicz, 2000:190).

The research design employed in this study is a quantitative approach. Quantitative research can be described as research that can be expressed numerically (Lancaster, 2005:66). To express the results quantitatively it is necessary to use techniques such as representative samples, questionnaires and data processing as part of data collection and analysis (Crouch & Housden, 2003:116).

The research technique employed in this study is of a quantitative nature, making use of questionnaires to ascertain the data required. The aim of the study is to determine the drivers of customer perception and sustainable profitability of a major agricultural business in South Africa through the use of fully structured questionnaires.

1.5.4 Target population

A population is ‘a group of people, events or things of interest that the researcher wished to investigate’ (Sekaran, 1992:225). When the entire population is studied, therefore no sample is drawn; this is called a census (Zikmund, Babin, Carr & Griffin, 2010:387). This study aimed to determine the drivers of customer satisfaction and profitability by obtaining relevant information from all of the customers of a major agricultural business.

The target population comprised all active customers of a major agricultural business in Central South Africa that provide R100 000 or more volume of business to the agricultural business. In order to make provision for non-response, it was decided to use the whole population. This decision eliminated the use of a population sample and is therefore considered to be a census. Given that all individuals in the population had a

non-zero probability of selection, each member of the population had an equal probability of being selected. The reason the census method being used was due to the fact that the agricultural business consists of various business units with customers making use of the business unit to varying degrees. In addition, when populations are relatively small and easily accessible, accuracy will be increased by using a census rather than sampling (Cooper & Schindler, 2006:403). The customers making use of the business units are also businesses (farms), therefore this could be regarded as a business-to-business research study (Brennan, Canning & McDowell, 2011:5).

1.5.5 Sampling selection

Sampling is the selection of an adequate amount of respondents from a certain population, so that generalisation of the properties or characteristics of the population can occur through the study of these respondents. By investigating the sample, the researcher will be able to draw conclusions about the particular population (Sekaran 1992:226). As was pointed out above, given that a census approach was used in the study, it was not necessary to draw a sample.

The respondents were classified according to the size of their farming operation that provides direct business to the agricultural business. Respondents that provide between R100 000 and R250 000 worth of trade were classified as small, respondents that provide between R250 001 and R650 000 worth of trade were classified as medium and respondents that provide more than R650 001 worth of trade were classified as big.

1.5.6 Pilot study

In this study, a pilot study was first undertaken. To gain familiarity with the problem, preliminary research needs to be done before a model or design can be developed to investigate and understand the occurrence or trend completely (Sekaran, 1992:95). The pilot study involved the completion of questionnaires by the top 20% of individuals/farmers from another major agricultural business in the Free State. These individuals are responsible for approximately 80% of the revenue of the business. The objectives of the pilot study were to test the questionnaire to determine if adequate

information was obtained from the respondents and to ensure that all the respondents interpret and understand all the questions in the same way.

1.5.7 Research Instrument

The research instrument used in this study was a questionnaire. The questionnaire was pre-tested during the pilot study. From the responses obtained from the pilot study, revisions were made to certain questions in the questionnaire. The questionnaire made use of closed-ended and Likert scale questions and aimed to determine which of the drivers of customer satisfaction such as price, product, service, personnel, management of the company as a whole and the various business units have the biggest impact on customer satisfaction with the overall company; which business unit has the biggest impact on overall satisfaction; if the frequency of the use of the different business units affect the overall satisfaction of the customers towards the agricultural business; and lastly, whether the perception of performance by customers of the business units has an influence on profitability. Profitability information was gathered through published financial reports of the agricultural business to determine the relationship between customer satisfaction and profitability of the business units and the company as a whole.

Since only one agricultural business was examined, there might be uncertainty as to whether this study should not be classified as a case study. The reason why this particular study is not regarded as a case study can be attributed to the fact that the business units that form part of the larger agricultural business (“umbrella” organisation) is managed and organised as smaller businesses themselves. Also, the customers of the various business units are businesses themselves. The total response was 345 customers (businesses/farms), which make use of 11 various business units. This study can therefore be regarded as a business-to-business research study. The business units therefore, are smaller businesses that have the same customer base. As a result of this reasoning, the study is not regarded as a case study.

1.5.8 Collection of Data

The questionnaire was distributed by the agricultural business to all active customers that contribute R100 000 or more in volume of business to the agricultural business. Questionnaires were mailed to the respondents. A total of 963 questionnaires were sent out to respondents and 345 usable questionnaires were sent back. The response rate was therefore 35.8% of the total population.

1.5.9 Data Analysis

The data obtained from the questionnaire were analysed by means of descriptive statistics, cross-tabulations, regression analysis and factor analysis. The data were analysed by using SPPS (Version 18.0).

1.6 Rationale and contribution

Customer satisfaction is a field of business management that has received much research attention, especially through the use of the SERVQUAL method. It is such an important concept for profitability within a business, but the importance of customer perception and satisfaction in an agricultural business is of even greater consequence, because of the unique and complex customer/shareholder relationship. The biggest problem with SERVQUAL is that customer satisfaction with regard to only service quality is tested, while there are various other variables such as price, product, personnel and management that could impact on the satisfaction of the customer. All of these measures are frequently tested on their own but not together, and it has not yet been linked to profitability as it is in this particular study. The research also aimed to determine the extent to which various business units within the agricultural business impact on the customer satisfaction of the overall company and if there is a relationship between the satisfaction of the business unit customers and the profitability of the business units itself. This is a unique opportunity to test diverse business units within one company with the same customer base (also businesses).

1.7 Demarcation of the study

The research study focuses on customer perception and satisfaction with a major agricultural business (previously an agricultural cooperative) that consists of various business units that make up the larger “umbrella” organisation. This agricultural business is situated in Central South Africa (covering the Free State, the Northwest and the majority of the Northern Cape) and the main focus of this agricultural business is grain production, storage and marketing. The study focuses specifically on how customers perceive the various drivers of customer satisfaction (price, product, personnel and service) of the various business units, as well as the business units’ performance as a whole. Also, the relationship between the company’s drivers of customer satisfaction (price, product, personnel, service and management), and the performance of the company overall are linked to the customers’ perception of the various business units, as well as the connection between customer satisfaction with the business units and the contribution towards profit of the business units. The literature review explicates the background of the agricultural industry in South Africa, and focuses specifically on the unique nature of agricultural businesses, as well as the drivers of customer satisfaction, and the connection between customer satisfaction and profitability.

1.8 Conclusion

This chapter provides background to the study, as well as the problem statement. This study aims to determine which of the drivers of customer satisfaction (price, product, service, personnel and management), as well as the various business units, have the biggest impact on the overall satisfaction with the company as a whole, and to determine the relationship between these variables and the profitability of the business units. The research method is presented, as well as the rationale for the study. Chapter 2 provides a literature review on the background and history of the agricultural industry in South Africa and the unique value chain relationship between the customers of an agricultural business and the agricultural business itself.

CHAPTER 2

THE BACKGROUND OF THE AGRICULTURAL INDUSTRY IN SOUTH AFRICA

2.1 Introduction

Of the 870 million people living in Africa, 60% are dependent on agriculture (Venter & Neuland, 2005:73). Currently, the agriculture industry employs roughly 7.2% of the population in South Africa (Stats SA, 2011). As early as 1922 (when the Cooperatives Societies Act was implemented), cooperatives have played an essential role in the evolution of South African agriculture (Competition Commission, 2007:13). Government support in the form of tax concessions and subsidised interest rates made cooperatives a viable and lucrative business option up until 1994, for then the newly elected South African government decided to discontinue financial and developmental support. Due to this contraction in agricultural support, major cooperatives were converted to investor-oriented firms (IOFs) or companies, which ushered in a new era for agriculture (Ortmann & King, 2007(b):220).

Predominantly, cooperatives are not motivated by profit, but rather to serve members' needs and exist for the benefit of the members (NCBA, 2008). In contrast to cooperatives, a company or investor-oriented firm (IOF) has the primary goal of increasing the wealth of the shareholder, measured by the company's share price (Megginson, Smart & Lucey, 2008:23). These two goals contradict each other in the sense that cooperatives are focused on the customer, while an IOF focuses on the profit motive and the shareholder (Helmberger & Hoos, 1962:257). Very importantly, in an agricultural business, the owner of the cooperative/IOF is also the customer (Katz & Boland, 2002:75). Another unique feature of agricultural businesses (both cooperatives and IOF's) is that services are provided to a homogenous group of customers and span various divisions, such as trading of agricultural commodities, handling and storage, marketing, retail outlets and financial services (Competition Commission, 2007:59).

It is the intention of this chapter to provide a background of the agricultural industry in South Africa by referring to the history and development of agricultural businesses. Essential legislation pertaining to agricultural businesses, as well as to the current state of South African agriculture, will be discussed. The definitions of agricultural businesses (both cooperatives and investor-oriented firms) will be provided together with a comparison of the two business forms. The stakeholders in agricultural businesses will be considered, with special attention paid to the relation between the shareholder and the customer of an agricultural business. Lastly, the unique value chain relationship will be analysed and particular attention is paid to the part relationship management plays in the supply chain.

2.2 The history and development of agricultural cooperatives and agricultural businesses in South Africa

The first successful cooperative was founded in Rochdale, England in 1844, called the Rochdale Society of Equitable Pioneers. Cooperatives can be found in developed and developing countries, in both the East and the West (Van Niekerk, 1988:10). The following section traces the advent and development of agricultural cooperatives in South Africa and the subsequent conversion into investor-oriented firms.

2.2.1 Prior to the 1990s

The period from 1859 to 1870 can be characterised by the establishment of the first commercial farmers, as well as the migration of farmers into the interior of South Africa. Immigrants from other countries with knowledge of other industries and conditions also descended on South Africa and important industries such as grape, wool, meat, citrus, tobacco and grain were founded due to the climate and topography extremes in the country. There was a definite lack of communication between the farmers and the consumer market at that time and the new farmers and immigrants realised that there was a need to stand together in order to protect themselves (Van Niekerk, 1988:18). Up until 1910, farming in the interior of South Africa was mainly subsistence based, while agricultural production in the coastal areas was more commercially oriented (Competition Commission, 2007:13).

The Pietermaritzburg Consumer's Cooperative was registered in 1892 in terms of the Companies Act and became the first South African cooperative. The cooperative was registered under the Companies Act, seeing that no cooperative act existed at the time (Van Niekerk, 1988:19). Cooperatives were registered under the respective Companies Acts in the Orange Free State until 1909 and up until 1922 in the Cape and Natal (Van Niekerk, 1988:24). Several Acts were passed in the period from 1904 to 1908 that deserve special attention. Firstly, the Natal Agricultural Development Act of 1904, the Cape Development Act of 1905 and the Transvaal Land Bank Act of 1907 were all established to empower cooperatives in obtaining loans from the government. The Cooperative Societies Act of 1908 of Transvaal should be regarded as the first Cooperatives Act in South Africa (Van Niekerk, 1988:24). In 1910, the Union of South Africa was established and Orange Free State cooperatives were placed under the Transvaal Registrar and therefore all cooperatives in the Orange Free State were registered under the Companies Act of Transvaal until 1922 (Nel, 1994:18).

It is important to note that the development and history of agriculture and the legislation that goes with it should be seen in conjunction with the other laws implemented by the white South African government that supported white commercial farmers (Ortmann & King, 2007(a):46). The financing of agricultural cooperatives was the function of the Land and Agricultural Bank of South Africa (the Land Bank), established in 1912. The Land Bank Act of 1912 exerted influence on cooperatives in the sense that due to the financing function, the Land Bank also had to investigate the financial position of cooperatives, which had a positive influence on cooperatives in the Cape Province and Natal (Van Niekerk, 1988:25).

A new agricultural cooperative era commenced with the introduction of the Cooperatives Societies Act 28 of 1922, which focused mainly on agricultural cooperatives (Ortmann & King, 2007(a):45). The Act governed all cooperatives in the four South African provinces and all previous legislation was repealed with the Cooperatives Act of 1922 (Nel, 1994:18). The Act was also established to secure input supply output marketing services (Ortmann & King, 2007(a):46). As a result of the implementation of the Act, the agricultural industry saw a revival of agricultural

cooperatives and the Registrar actually had to ensure that fewer agricultural cooperatives were established in order to ensure their survival (Van Niekerk, 1988:27). There were only 81 cooperatives in 1922, and this number increased to 405 in 1929 (Van Niekerk, 1988:29). Unfortunately, the subsequent Great Depression from 1929 to 1933 had a negative effect on South African agricultural cooperatives (Nel, 1994:19).

In 1939, the Cooperatives Societies Act 29 was passed, which determined that a new type of cooperative with limited liability was now possible – a special cooperative farmer's company - which had the right to deal with non-members and to accept persons other than farmers as members (Van Niekerk, 1988:31). From 1939, a trend in larger cooperatives with more branches emerged, while some cooperatives started performing multiple functions (Nel, 1994:20). During the period from the 1950s to the 1980s there was an increase in the mechanisation of the commercial agricultural sector, as well as subsidies - such as disaster relief, research, interest rate subsidies and price supports provided to white farmers.

The Cooperatives Act 91 of 1981 made provision for trading cooperatives and was amended on at least eight occasions (Ortmann & King, 2007(a):45). Due to the substantial costs associated with supporting commercial farmers, government could not sustain the cooperatives. In the 1980s, subsidies, tax concessions and the deregulation of agricultural financing and marketing took place, which made cooperatives less dependent on the government of South Africa, simultaneously lessening the role of cooperatives (Ortmann & King, 2007(a):46). The main role players remained in place, while government intervention relaxed (Van Zyl, Vink, Kirsten & Poonyth, 2001:725).

2.2.2 From the 1990s to the present

With the deregulation of the financial sector, subsidies to agricultural cooperatives were abolished in the 1990's (Ortmann & King, 2007(a):47). After the first democratic election of 1994, policy initiatives such as trade liberalisation, land reform, institutional restructuring in the public sector, the promulgation of the Marketing of Agricultural Products Act and the Water Act, and trade policy and labour market reforms were instigated with the purpose of correcting past injustices and creating a reduction in

capital-intensive growth, while enhancing the international competitiveness of the agricultural sector (Sandrey & Vink, 2007:324). The Marketing of Agricultural Products Act 47 of 1996 ended government control of agricultural products and lead to the marketing boards being terminated, to promote a free market in agricultural products. Cooperatives lost their monopoly powers because of the demise of the marketing boards and could no longer acquire government subsidies (Ortmann & King, 2007(a):47). The transition of the South African agricultural sector to a market economy was supported by the new policy reforms and this had a significant impact on cooperatives in South Africa (Piesse, Doyer, Thirtle & Vink, 2004:202).

The Cooperatives Act of 1981 was not regarded by the present government as being appropriate in the new legislative era of South Africa, for the following reasons (Ortmann & King, 2007(a):45):

- Registered cooperatives are not explicitly required to conform to cooperative principles.
- The presumption exists that the government plays an interventionist role in relation to cooperatives.
- The focus is primarily on agricultural cooperatives.
- Provisions protecting members' interest are poorly articulated.
- There are arduous requirements to register a cooperative.

Due to these challenges, the government decided to draft a new Cooperative Act based on the International Cooperative Alliance (ICA) principles (Ortmann & King, 2007(a):45). According to the current Cooperatives Act of 2005, cooperatives no longer fall under the responsibility of the Department of Agriculture, but are now part of the Department of Trade and Industry, specifically the Cooperative Enterprise Division (Competition Commission, 2007:30). Due to all the policy reforms and subsequent loss of monopoly and subsidies, many cooperatives decided to convert to investor-oriented firms (Ortmann & King, 2007(a):47).

2.3 Legislation with regard to agriculture in South Africa

Even though legislation falls outside the scope of this study, it is still important to identify the most important laws and policies that shaped the agricultural landscape as it is today.

2.3.1 Prior to the 1990s

The following legislature pertains to the early 1900s to 1981:

- *Companies Act (Pre-Union):* The Companies Act of Natal, the Orange Free State and the Cape were respectively used to register cooperatives, due to the absence of a cooperatives act (Van Niekerk, 1988:24).
- *The Natal Agricultural Development Act of 1904*: This can be regarded as the first legislation with the purpose of advancing agriculture and agricultural cooperatives by providing finance assistance to farmers (Van Niekerk, 1988:19).
- *The Cape Development Act of 1905* and *the Transvaal Land Bank Act of 1907:* Both Acts consented to the granting of loans to cooperatives in an effort to promote the establishment and development of agricultural cooperatives (Van Niekerk, 1988:24).
- *The Transvaal Cooperative Societies Act of 1908:* This was the first cooperative act passed in South Africa and determined that members' liability will be unlimited and that a superintendent will do regular inspections of cooperatives (Van Niekerk, 1988:25).
- *Union of South Africa (1910):* On the 31st of May 1910, the four colonies (Orange Free State, Transvaal, Natal and the Cape Province) amalgamated into one union that was a self-governing dominion of the British Empire, under the reign of the King of England (RSA Presidency, 2009:1). The Orange Free State cooperatives were consequently controlled by the Transvaal Registrar, under provision of the Transvaal Cooperative Societies Act. The Cape and Natal cooperatives were not, and cooperatives were still registered under the Companies Act. This threw farmers into confusion (Van Niekerk, 1988:25).

- *Land Bank Act of 1912:* The financing of agricultural cooperatives were henceforth controlled by the Land and Agricultural Bank of South Africa and the Act ensured that the Land Bank was sanctioned to investigate the financial position of cooperatives (Van Niekerk, 1988:25). The Land Bank provided farmers and cooperatives with funds at lower interest rates than that of commercial banks (Competition Commission, 2007:28).
- *The Cooperative Society Act 28 of 1922:* The Act ensured that all cooperatives in all four provinces were now governed by one law. All other previous cooperative legislation was repealed with the introduction of the Cooperative Societies Act of 1922 (Nel, 1994:18). Farmers that owed money to the cooperative were obligated to provide the cooperative with the crop (Competition Commission, 2007:28). The establishment of this Act can be considered as a milestone in agricultural legislation, in that all four provinces were included and in that it focused mainly on agricultural activities (Ortmann & King, 2007(a):45).
- *The Marketing Act of 1937:* One of the intentions of the Marketing Act was to stabilise the prices of agricultural products. Due to this new Act, control boards were established whose intent it was to provide stabilised prices to farmers. This meant that farmers did not have to belong to a cooperative in order to bargain better prices for their products, because all farmers were subject to the same prices (Nel, 1994:19).
- *The Cooperative Societies Act 29 of 1939*: The new Act made the establishment of special cooperative farmers' companies with limited liability possible. Such companies could also deal with non-members (Nel, 1994:20).
- *The Cooperatives Act 91 of 1981:* The Act also made provision for trading cooperatives and was amended on at least eight occasions (Ortmann & King, 2007(a):45).

The legislation from the early 1900s until the early 1980s instigated a new era, where cooperatives were established and the importance of the business form recognised with subsidies, stabilized prices for farmers and lower interest rates. During this time period, cooperatives were an important vehicle in the establishment of the South African agricultural industry.

2.3.2 Current legislation

Although the first democratic elections were held in 1994 and the Government of National Unity came into being, new policies for agriculture were initiated only in 1996, after the withdrawal of the National Party from the Government of National Unity (Competition Commission, 2007:21).

The following legislature is currently applicable to the agricultural sector in South Africa:

- *The Companies Act 61 of 1973:* This Act is still in operation in South Africa. Several cooperatives converted to investor-oriented firms and consequently controversy arose about whether farmers' interest would be best served by an agricultural cooperative or by a company. As was pointed out in section 2.1, a company's main aim is to increase shareholder wealth by way of the share price, whereas a cooperative's main aim is to serve farmers (Ortmann & King, 2007(a):48).
- *The Marketing of Agricultural Products Act 47 of 1996:* The Act ended government control of agricultural products, and with this control boards and subsidies to cooperatives were also terminated. This meant free market trade of agricultural products would henceforth be in effect (Ortmann & King, 2007(a):47).
- *The Cooperatives Act 14 of 2005*: The responsibility for cooperatives shifted from the Department of Agriculture to the Department of Trade and Industry. With the deregulation of the agricultural sector, many cooperatives decided to convert to investor-oriented firms (companies); therefore, ownership of the cooperative had to change hands (from the members to the shareholders) (Competition Commission, 2007:31).

In short, the post-apartheid era in South Africa changed the agricultural environment in the sense that cooperatives no longer receive subsidies and the prices of agricultural products are determined by market forces, not the government. Agricultural cooperatives are, therefore, not as protected as they were from 1900 to the 1990s, with the result that cooperatives had to adapt to ensure survival and competitiveness. The

major agricultural cooperatives had mounting pressure to become more efficient and therefore adjusted to post-apartheid legislation by converting to companies (Ortmann & King, 2007(b):220). These agricultural businesses (companies) now have to survive and grow in a perfect competitive market, where prices of products are determined by supply and demand, just like any other company in any other industry.

The following legislation that do not directly impact on agricultural businesses, but should still be considered, as the farmer are affected:

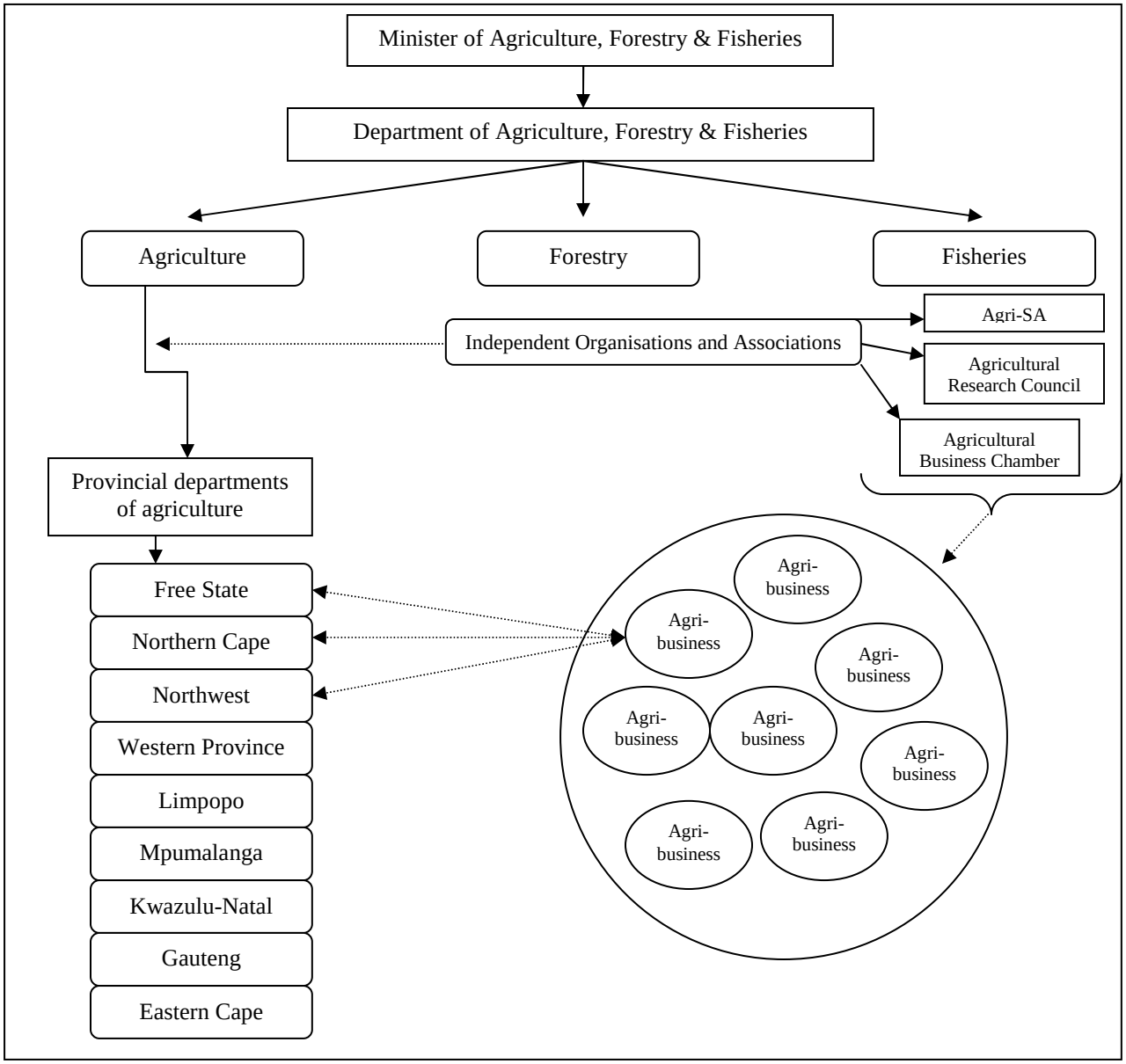
- *The Land Reform Act 3 of 1996*: The 1913 Native Land Act favoured farmers from European descent and skewed the ownership to such an extent that 77% of land in South Africa belonged to white farmers. With the implementation of the Land Reform Act aims for the restitution of land rights to the victims of forced removals, the redistribution of land to the disadvantaged, as well as the tenure reform aimed at promoting security of tenure for all. According to this act, farmers might be expected to return their farms to previous inhabitants of the land (Mufune, 2010:10).
- *AgriBEE Sector Charter*: This charter forms part of Section 12 of the Broad Based Black Economic Empowerment Act 53 of 2003. This charter thus focuses on the inclusion of previously disadvantaged black farmers by giving access to ownership and control to these individuals in an effort to decrease income inequalities in the agricultural sector (Esterhuizen, Doyer, Van Heerden, 2008:1).
- *Labour Legislation*: The Labour Relations Act 66 of 1995, the Basic Conditions of Employment Act of 1997 and the Employment Equity Act 55 of 1998 all have an influence on the employment of farm workers on farms, as well as on the employees of agricultural businesses. It promotes fair and equal distribution of labour and ensures that minimum wages are paid and that employees work in healthy and satisfactory environments (South African Department of Labour, 2012:1).

It is the opinion of the author that the legislation mentioned above can have an indirect influence on agricultural business, as it has a direct influence on the farmers themselves, be it positive or negative. It is therefore needed to monitor this legislation

to ensure the effective management of agricultural businesses in terms of long-term strategic planning.

An overview of the agricultural industry is presented below in Figure 2.1:

Figure 2.1: The South African agricultural industry



Adapted from South African Department of Agriculture, Forestry and Fisheries (2012:1).

The agricultural sector in South Africa is regulated by the Department of Agriculture, Forestry and Fisheries, which are the responsibility of the Minister of Agriculture,

Forestry and Fisheries. The national department thus have command over each province's department of agriculture. Within the agriculture industry there are various independent organisations and associations that could have an indirect influence on the Department of Agriculture and agricultural businesses. It is the estimation of the author that these organisations can assist the industry with issues such as trade, research and policy. Agricultural businesses however, operate in a competitive market environment, and although the national and provincial departments and the independent organisations and associations could indirectly influence the industry (therefore the dashed lines), the agricultural businesses are self-sufficient and independent.

2.4 Current state of agricultural businesses in South Africa

Up until the 1990s, cooperatives represented a viable business form, but after the deregulation of agricultural products and the discontinuation of governmental support, most of the major South African agricultural cooperatives converted to investor-oriented firms (Ortmann & King, 2007(b):220). The conversion of cooperatives already started in the United States of America post-1985, when cooperatives struggled financially. In an effort to compete more successfully in the market, cooperatives were converted into companies that focus on providing investors an adequate return on their investments (Cook, 1997:82).

As was indicated in section 2.3.2, Act 47 of 1996 (The Marketing of Agricultural Products) effectively ended governmental control of agricultural products and prices and ushered in a new era where market forces control the prices of agricultural products (Ortmann & King, 2007(a):47). These amendments instigated the South African agricultural industry to evolve into a market economy (Piesse, Doyer, Thirtle & Vink, 2004:202). The intense competitiveness of the global agricultural sector, consumer demand changes, as well as the regulatory changes influenced the overall competitiveness of South African agribusiness (Saungweme, 2009:11). Commercial farmers also have to position themselves in this competitive market and therefore are very demanding and well-informed in practices and requirements of agricultural businesses (Saungwene, 2010:4).

According to the Agricultural Business Chamber (ABC, 2010), South African agricultural businesses need to compete not only in the domestic market, but also in foreign markets in an effort to establish new markets and new customers. Agricultural businesses, therefore, have to compete with domestic and international forces, and grow and survive in a highly unstable industry with very demanding customers. According to Esterhuizen (2006:4) South African agribusinesses currently have to compete in a changing business environment that amongst other changed from an industry that had regulation and institutional help to a self-help industry. Also, the business environment is now driver by information, technology and knowledge and is more focused on the consumer than on the producer. Agricultural businesses would therefore have to manage relationships with all of the stakeholders involved in the company, but especially the customers in an effort to ensure these customers' satisfaction, loyalty and ultimately profitability. These issues are discussed in more detail in Chapter 3 and 4.

2.5 Definitions of agricultural businesses

The following section will accentuate the differences between cooperatives and investor-oriented firms by defining each and also providing a comparison of the two business entities in terms of differences, but also similarities.

2.5.1 Cooperatives

The International Cooperative Alliance (ICA, 2010) defines a cooperative (co-op) as "an autonomous association of persons united voluntarily to meet common economic, social and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise". Cooperation is a joint vertical integration between the farmer and the organisation, attaining economies of scale that farmers would not have achieved on their own (Kyriakopoulos & Van Bekkum, 1999:3).

The National Cooperative Business Association expands on the above by explaining cooperatives as:

- Being owned and democratically controlled by members – the people who use the co-op's services or buy its goods – not by outside investors; Co-op members elect their board of directors from within the membership;
- Returning surplus revenue to members proportionately to their use of the cooperative, not proportionately to ownership share;
- Not being motivated by profit, but by service – to meet members' needs for affordable and high quality goods or services;
- Existing solely to serve members; and
- Paying taxes on income kept within the co-op for investment and reserves. Surplus revenues from the co-op are returned to individual members who pay taxes on that income (NCBA, 2008).

The South African Cooperatives Act 14 of 2005 denotes that an agricultural cooperative produces, markets or processes products, as well as provide services and agricultural inputs to the cooperative members (RSA, 2005).

Cooperatives can be classified according to their main activities such as marketing, farm supply and service. These three types of cooperatives can be differentiated as follows (Ortmann & King: 2007(a):43):

- Marketing cooperatives: bargain for better prices; handle, process or manufacture, and sell farm products.
- Farm-supply cooperatives: purchase in volume; manufacture, process or formulate, and distribute farm supplies and inputs such as seed, fertiliser, feed, chemicals, petroleum products, farm equipment, hardware and building supplies.
- Service cooperatives: provide services such as trucking, storage, ginning, grinding, drying, credit and insurance.

It is also possible that a particular cooperative could be classified as belonging to more than just one type of cooperative, given that a cooperative's main activities might incorporate all three mentioned above. The agricultural business assessed in this particular study encompasses all three activities including marketing (grain marketing), farm supply (retail shops, mechanisation [spare parts] and mechanisation [whole

goods]) and services (grain storage, financing, mechanisation [workshops] and insurance).

In the case of cooperatives, the profits yielded at the end of the year are distributed pro rata to the members of the cooperatives according to the amount of produce (contribution) with which they have supplied the cooperative (Hansmann, 1988:270).

The literature therefore states that an (agricultural) cooperative is based on the principles that services and inputs are provided to the members – and only the members – of the cooperative. Service, and not profit, is the number one priority for cooperatives. Also, any surplus revenue is distributed back to the member in proportion to their use of the cooperative.

Before 1996, legislation related to South African cooperatives granted (amongst others) subsidised loans to commercial farmers; established and controlled marketing channels for the products provided by the farmers; and guaranteed cooperative debt. Because of these benefits afforded to them, farmers were obliged to be part of a cooperative to gain financial benefit. With the implementation of the Marketing of Agricultural Products Act 47 of 1996, which effectively ended government assistance to cooperatives, the results were the following:

- The government effectively withdrew support to cooperatives.
- Cooperatives had to become more competitive and function like any other business. Therefore, various smaller cooperatives amalgamated to form bigger and more competitive agricultural businesses (providing more services). This might have lead to the relationship between the agricultural businesses and their customers not being as personal as it used to be.
- Farmers were not obligated to make use of the cooperatives; they could trade independently, and therefore cooperatives did not have a hold on farmers any more (Ortmann & King, 2007(a):46).

The ultimate outcome of these consequences was that agricultural businesses had to ensure that customers were satisfied in order to retain them, which highlights the importance of this specific research study.

2.5.2 Investor-oriented firms / Companies

Firer, Ross, Westerfield & Jordan (2008:9) offer possible company goals such as survival, avoiding financial distress and bankruptcy, competing, increasing market share and sales, minimising cost, maximising profit, as well as sustaining a steady growth in profits. All of these goals are financially related and either directly or indirectly profit-oriented. The goal that encompasses all of these possible goals, however, is to increase the wealth of the shareholders (owners), vis-à-vis the share price.

Under normal circumstances, an investor in an IOF would seek out companies that have the highest growth potential or provide the highest return on the amount invested. The individual would be a shareholder, but would not have any direct involvement in the company itself. In the case of agricultural businesses, the shareholder/customer would want returns in the form of better prices, user control, and access to markets as well (Sikuka, 2010:39).

It is the opinion of the author that in a typical company, both the shareholders and the customers are considered to be very important stakeholders, but the customers and the shareholders are generally not the same people, as they are in the case of an agricultural business as deducted from the legislation and literature on cooperatives. In other industries, if they are both customers and shareholders, the relationship is not as pronounced as it is with agricultural businesses.

It is, however, essential to note that although major agricultural cooperatives have converted to IOFs; they still consign themselves to exist with the primary goal of serving the farmer (Hind, 1999:31).

2.5.3 Comparison

The most important differences and similarities between cooperatives and companies are the following (Competition Commission, 2007:8):

- The distribution of profits in the case of a cooperative can be two-fold with an interest payment on a portion of the capital provided by the member and/or a bonus payment proportionately to use of the co-op. A company may or may not decide to make dividend payments on the share capital.
- Control of the cooperative in the form of voting power will be based on either the principle of “one man, one vote”, or voting will be based on the proportionate patronage by the member to the cooperative, while voting power in a company is based on shareholding.
- In the case of a cooperative, the value of capital investments by the members do not appreciate and the co-op may buy back the capital from members, whereas shares in a company can appreciate and depreciate in value and shares can be bought and sold at will.
- The main purpose of membership in a cooperative is to obtain a service, while the purpose of a company is to make a profit on the investment made. A similarity between cooperatives and companies is that both are legal entities and therefore have limited liability.

There are uncertainties in the agricultural community as to whether an agricultural cooperative or an IOF will better serve the needs and interests of the farmers. A cooperative will be managed by a management structure that is under the control of the farmers/members themselves, while an IOF is managed by a management structure and owned and controlled by the shareholders. An IOF has the benefit of attracting top quality management, easier access to capital, entrepreneurial flair and supports both shareholder and customer interests. A cooperative, on the other hand, can reduce costs, enhance income, and can contribute towards lessening poverty and creating jobs and empowerment (Ortmann & King, 2007(a):48).

A problem with cooperatives, however, is that cooperative members might struggle with the member/shareholder conflict. They may receive good service, but the return on their investment could be significantly less than what a shareholder in a company would receive (Ortmann & King, 2007(a):48). The agricultural industry makes the contradictory goals more complex in that members/shareholders that do not trade with the company would require profit maximisation and a large dividend payout, while

those farmers doing business with the agricultural business would prefer lower prices from the business (Hind, 1999:537). The general accounting performance measure known as ROI (return on investment) would therefore not be an optimal measure, as it is for IOFs. The reason being that suppliers (farmers) are paid the best possible price for their products and customers (farmers) are charged the lowest possible price for products and services provided by the agricultural cooperative (Kyriakopoulos, Meulenberg & Nilsson, 2004:384). These goals could be labelled as member-centred goals, which are difficult to quantify (Hind, 1999: 30). This approach is also referred to as business-at-cost (Ortmann & King, 2007(a):42).

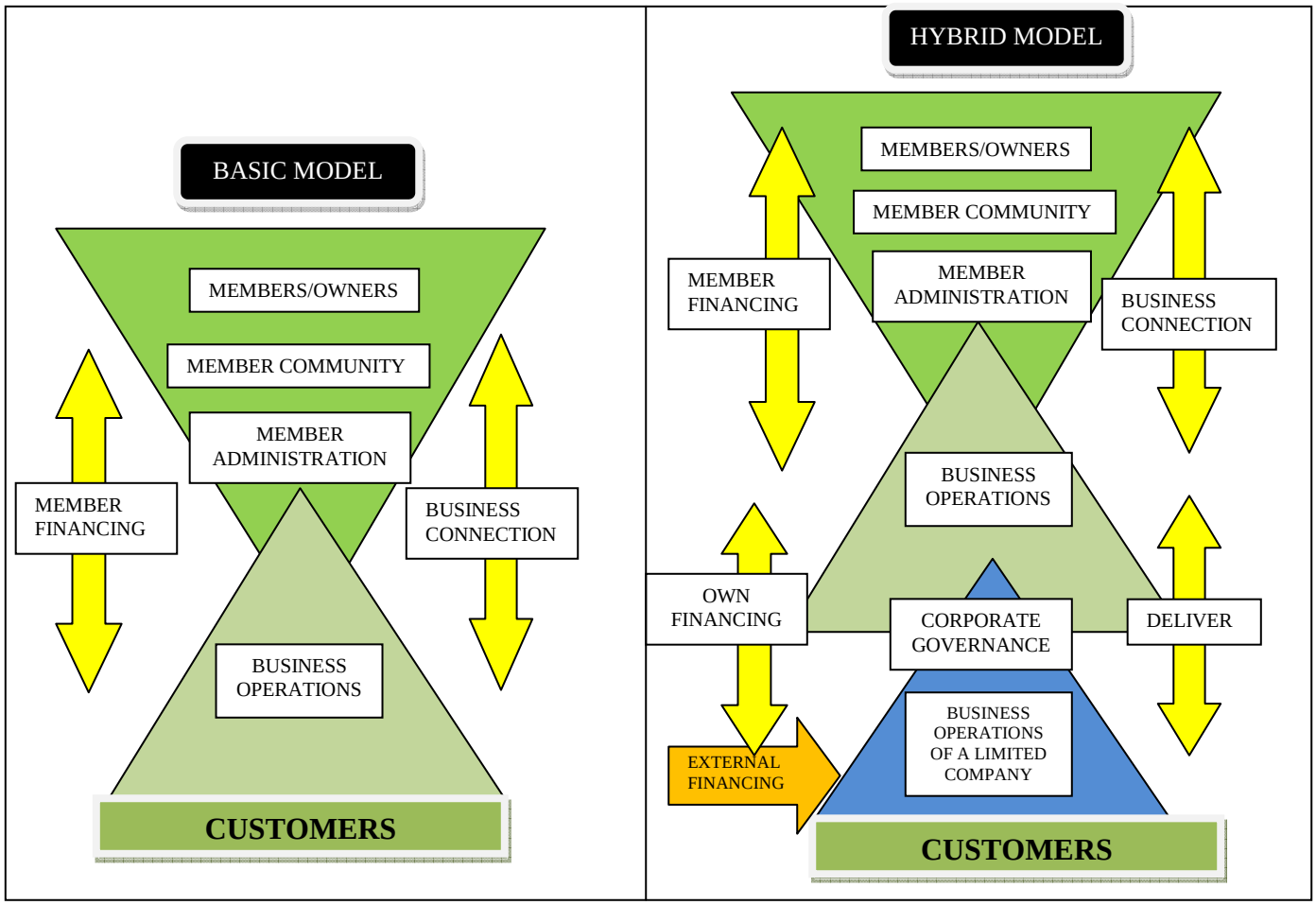
In comparing agricultural cooperatives and IOFs, it is important to note that cooperatives represent a vertical integration between the farming operation (the farmers' own business) and processing and marketing of the produce. All of the farmers that participate jointly "own" the cooperative and the operations of the cooperative are under their private control. An agricultural cooperative is thus user-owned, as well as user-controlled and the farmer has three parts pertaining to the cooperative; namely, ownership, control and benefit (Kyriakopoulos & Van Bekkum, 1999:3).

One of the main differences between an agricultural cooperative and an IOF is that the various stakeholders, such as the owners, suppliers, customers and investors are more often than not, one and the same person. All of these stakeholders may have diverse and contradictory goals depending on the specific "hat" they might be wearing (Hind, 1999:537). Because agricultural businesses serve the farmers, they are focussed on a niche market and the nature of their relationship towards the farmers differ from other industries.

Figure 2.3 illustrates the basic cooperative model, as well as the hybrid (agricultural IOF) model. The basic model illustrates the principles on which cooperatives are based. It follows from the basic cooperative model that the members/owners are involved in the community, as well as the administration and the business operations. The hybrid model includes an additional business operation of a limited company that can be more complex and include factors such as corporate governance and external

financing. In the hybrid model, the customer is also further removed from the actual business operations than in the basic cooperative model.

Figure 2.3: The principles on which a cooperative and agricultural IOF is based



Adapted from Skirnik (2002:105).

The basic cooperative model illustrates two united parts, which is the members/owners and the business operations. These two parts work together in terms of financing and business connections. An important consideration is also that the members and the customers are the same individuals, therefore the cooperative is managed to provide members with the best quality products and services at the lowest possible prices. There is thus no profit motive. The hybrid model is more complex as a different dimension is added; that of the business operations of a limited company. Due to this modification, which basically demands the maximisation of shareholders wealth (the current share price); shareholders' interests are the focal point. Outside investors can purchase shares in the company and consequently the IOF has to deliver a return on

the investment these shareholders have made by way of the share price. Therefore, there is a strong profit motive present and the focus is not only on providing products and services to customers at the best possible prices, but also to make a profit. The hybrid model therefore blurs the line between the owners/shareholders and the customers and make them two different entities, which they are not in the case of the majority of agricultural businesses. Thus, there is a distinct difference between the objectives and focus of a producer-owned firm (cooperative) and that of a traditional IOF. This distinct difference between the two organisational structures creates more trust between the producer and the cooperative than the producer and the IOF (Harvey & Sykuta, 2006:135).

It is difficult to compare the level of performance between cooperatives and conventional investor-oriented firms, as the objectives of a cooperative is much broader, and as a result cooperatives should adopt different strategies than that of an IOF to achieve their objectives (Hind, 1999:537).

2.6 Stakeholders in Agribusinesses

The following stakeholders can be observed in an agricultural business (both cooperatives and investor-oriented firms):

2.6.1 Owners (Members/shareholders/investors)

Final control of a company (investor-oriented firm) ultimately rests with the shareholders. These individuals are the owners of the firm; they elect a board of directors and they can hire and fire management (Firer, Ross, Westerfield & Jordan: 2008:12). According to Galle (2007:21) “the cooperative conducts business for the benefit of the members, not for the benefit of shareholders. Hence, the cooperative is not considered to be an association of capital, but an association of persons”. Therefore, in the case of a cooperative, the owners are the members using the services and products of the cooperative, and in the case of an IOF, the shareholders are the owners of the company irrespective of whether they use the products or services of the company.

2.6.2 Directors

The board of directors are elected by the shareholders (owners) of the agribusiness and these individuals oversee and supervise the organisation by controlling management. These individuals' primary intent is to look after the farmers in their specific districts. Important issues such as the strategy and objectives are still under control of the shareholders, while certain organisational issues are under direct control of management (Sikuka, 2010:54). More often than not, agribusinesses require a person sitting on the board of directors to be a user of the particular business. This has the advantage that the individual will have technical knowledge that an outsider would probably lack (Sikuka, 2010:69). Future success of an agribusiness can only be ensured with a well-developed board and experienced managers (Katz & Boland, 2002:87).

2.6.3 Top Management

Management are employed by the board of directors in an effort to assure that their (and the shareholders') interests are cared for and maximised. These individuals manage the company on behalf of the shareholders (Firer, *et al.,* 2008:11). Variables such as growth, size and market share of the IOF are invariably set by top management, with the main aim of taking care of the shareholders' interests (Gitman, 2009:20).

2.6.4 Employees

Recruitment sometimes tends to be a problem for agribusinesses as a result of the negative view of the job market towards agriculture and also because the employment opportunities are based in rural areas. This leads to limited availability of suitable applicants (Sikuka, 2010:75). Employees are the individuals working within the agricultural business with the obligation to ensure that customers receive the best quality service. These individuals desire security of employment and if this security is threatened, it could lead to unmotivated employees (Nel, 1994:50).

2.6.5 Suppliers

Suppliers provide an organisation with the necessary resources to function, which can include anything from equipment to materials for manufacturing (Botha, 2007:71). Agricultural businesses can have a variety of suppliers due to the many products and services on sale. For an agricultural cooperative with mainly grain-related activities, the farmers (also the customers and shareholders of the agribusiness) supplying the agricultural business with grain for resale are the suppliers. On the other hand, large farm equipment, such as tractors, would be supplied by an external organisation (Ortmann & King, 2007(a):43).

2.6.6 Customers

Customers can be described as those individuals or businesses in the market environment that use the products or services supplied by the organisation and are considered to be the most important, seeing that if a customer is lost, so is profit and ultimately survival (Botha, 2007:70). In an agricultural business the farmers making use of the services and products are the customers of the agricultural business (Olson & Boehlje, 2010:2).

According to Hind (1999:32) the various stakeholders within an IOF could have differing objectives, as distinguished in Table 2.1.

Table 2.1: The objectives of various stakeholders within an organisation

Interest groups	**Performance indicators**
Owners	Profitability, growth, dividends, security, share price
Directors	Growth, market share, profitability, security
Managers	Growth, cash flow, discretionary expenditure
Employees	Earning levels and growth, employment levels, security
Suppliers	Prices, growth, variation and security of orders, payment period
Customers	Prices, quality, after-sales service, efficiency of distribution

	channels, new product development, credit terms
Investors	Share price, dividends, asset composition and growth, financing of assets, return on capital

Table 2.1 lists the various interest groups within an organisation and their specific needs and wants and how they measure performance. It is important to note the opposing differences between the performance indicators of owners (shareholders) and that of customers.

2.7 Customers versus Shareholders

The following table provides various corporate goals (generally for an IOF) and various goals of the farmer-customer or farmer-supplier. Corporate-centred goals are more focused on profit, financial security, industry-image and growth, while farmers seek a more farmer-centred approach, which includes best deals, maximum dividends, bonuses on trades and the opportunity for the farmer to participate in decision-making. This highlights the complicated dualistic issue of having customers and owners being the same individuals in an agricultural business (Hind, 1999:542). It is thus clear that there is a distinct difference between farmer-centred goals (which focus more on service lower prices) and corporate-centred goals (which focus more on profit-maximisation).

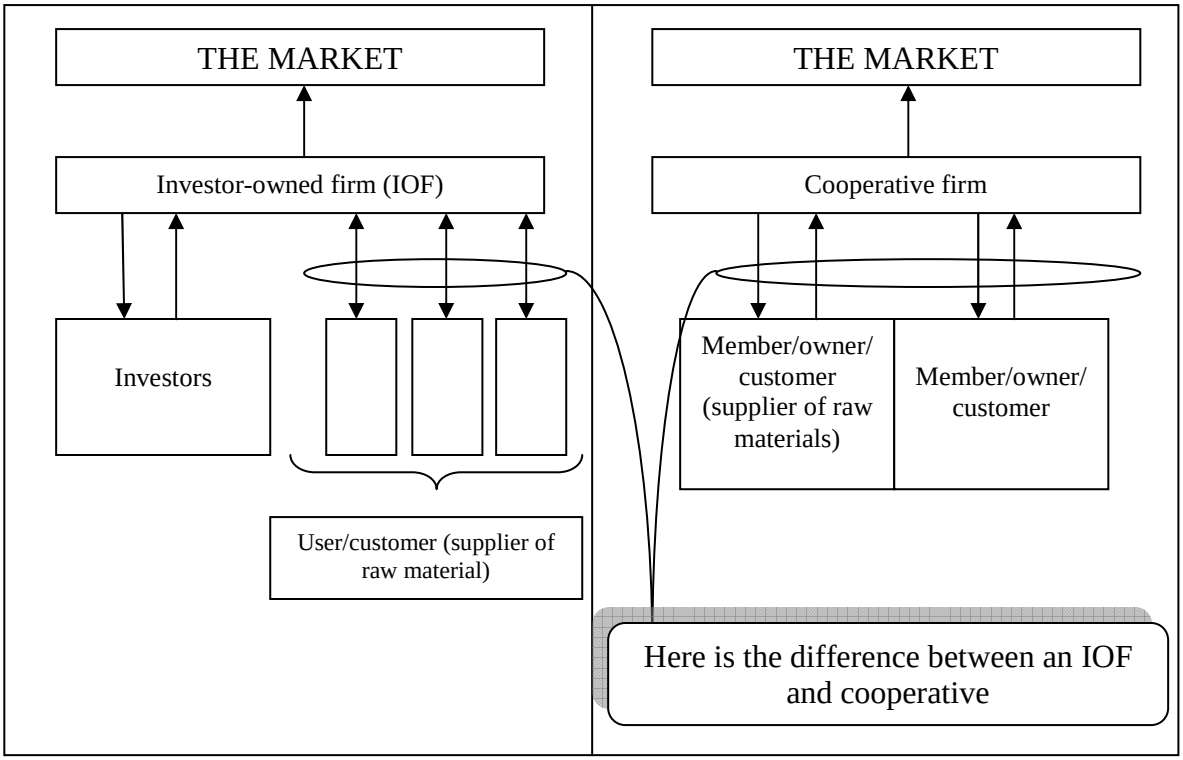
Table 2.2: The objectives of various stakeholders within an organisation

Goals	**Stakeholder-centred**
A business which maximises profit	Corporate-centred
A business which is financially secure	Corporate-centred
A business which gives the best deal to farmers	Farmer-centred
A business which pays maximum dividends to farmers	Farmer-centred
A business with a good image in the industry	Corporate-centred
A business which pays a maximum bonus on trade	Farmer-centred
A business which goes for growth	Corporate-centred
A business in which the farmer can participate in decision making	Farmer-centred

(Adopted from Hind, 1999:542)

The description of cooperatives state that the business is user-owned, user-controlled and user-benefitted. Also, the owners (members) are the major users (customers and suppliers) of the cooperative (Cook, 1997:79). As shown in Figure 2.3, the major difference between an IOF and a cooperative lies in the fact that the users (customers) of an IOF can be differentiated from the investors (owners), while with a cooperative the owner and user (customer) is interlinked. It is, however, important to note from Figure 2.4 that the shareholders in the agribusiness under consideration in this study are also the major users (customers) of the business. Therefore, it can be assumed that although the business has converted from a cooperative to an IOF, the major users/customers and the owner/shareholders are still intact. The implication of this is that the customers/shareholders could be accustomed to the way a cooperative is managed (with the focus on service and better deals for the farmer), but due to the fact that an investor-owned firm is focussed on profitability and the maximisation of the share price, this could have a negative influence on how the customer/shareholder perceive the organisation (Van Dijk, 1997:97).

Figure 2.4: The major difference between an IOF and cooperative



(Adapted from Van Dijk, 1997:97).

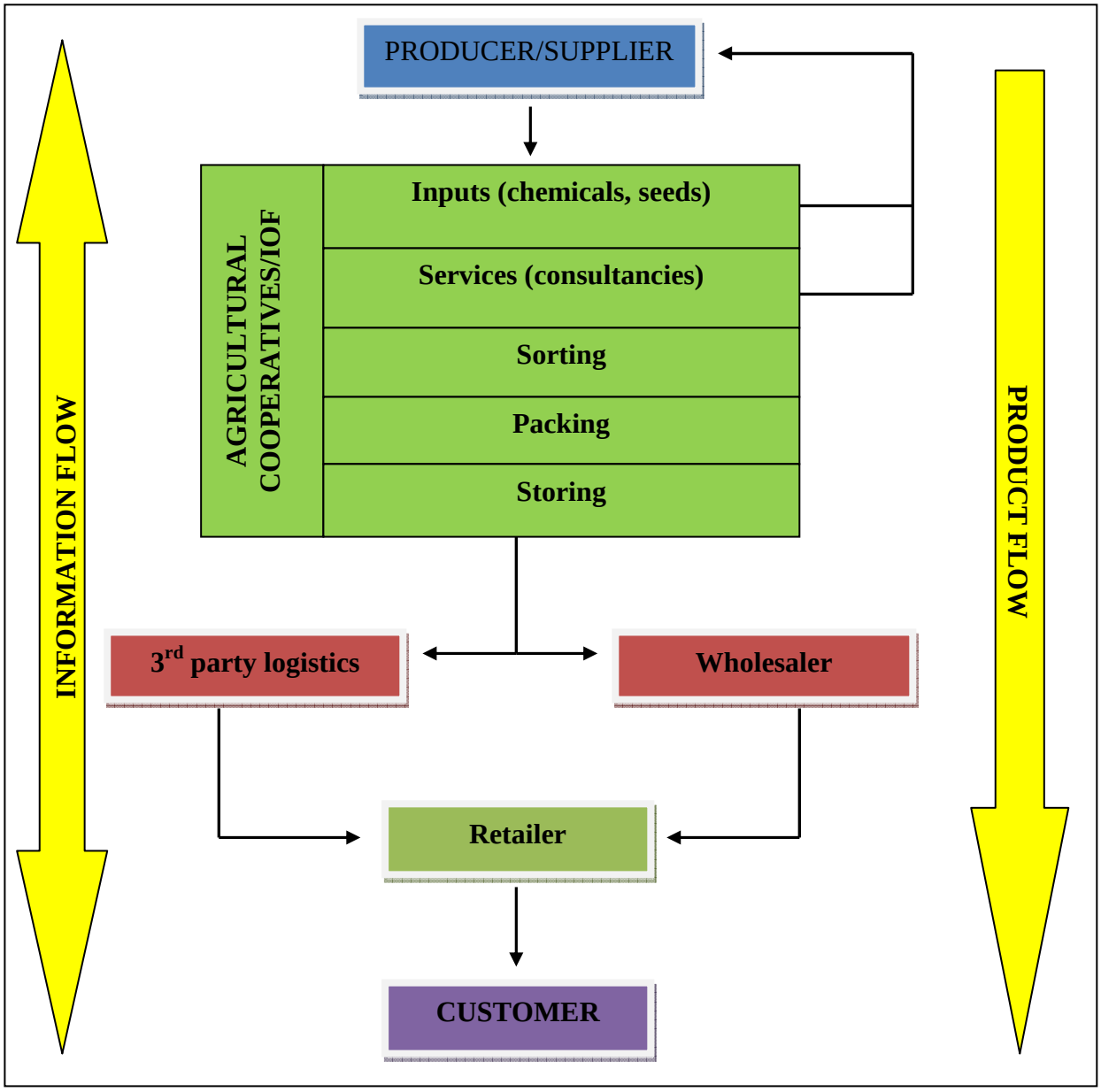
Most corporations are owned collectively by the investors - in the case of agricultural businesses – the shareholders. In the case of agricultural cooperatives however, the individuals that own the cooperative are also customers (customer-owned) (Hansmann, 1988:267-270).

2.8 Unique Supply Chain Relationship

The supply chain of an agribusiness starts at the farm gate and incorporates all transactions until the product reaches the end-user (Van Rooyen, Esterhuizen & Doyer, 2000:2). An analysis of the supply chain of agricultural business is important in that it is relatively unique. A supply chain can be defined as the combination of business processes from the original supplier providing products, services and information to the end-user (customer) of the inputs to ensure that value is added to the customer (Cooper, Lambert & Pagh, 1997:2). In simpler terms it can be described as all of the processes, services, information, resources, activities and people that move the product/service from the supplier to the customer. It includes, therefore, all the processes that convert raw material into an end product for the consumer.

Figure 2.5 illustrates the flow of the product/service from the producer/supplier (the farmer) to the customer (agricultural business supply chain). The most important part of the process for the purposes of this study, though, is the indication that the services, as well as the inputs provided by the agricultural business to the producer, make the producer also a customer of the agricultural business. Herein is the uniqueness of the agricultural business supply chain, as in a traditional company the customer and the producer are two different entities (Manos & Manikas, 2010:646).

Figure 2.5: The agricultural business supply chain



(Adapted from Manos & Manikas, 2010:646).

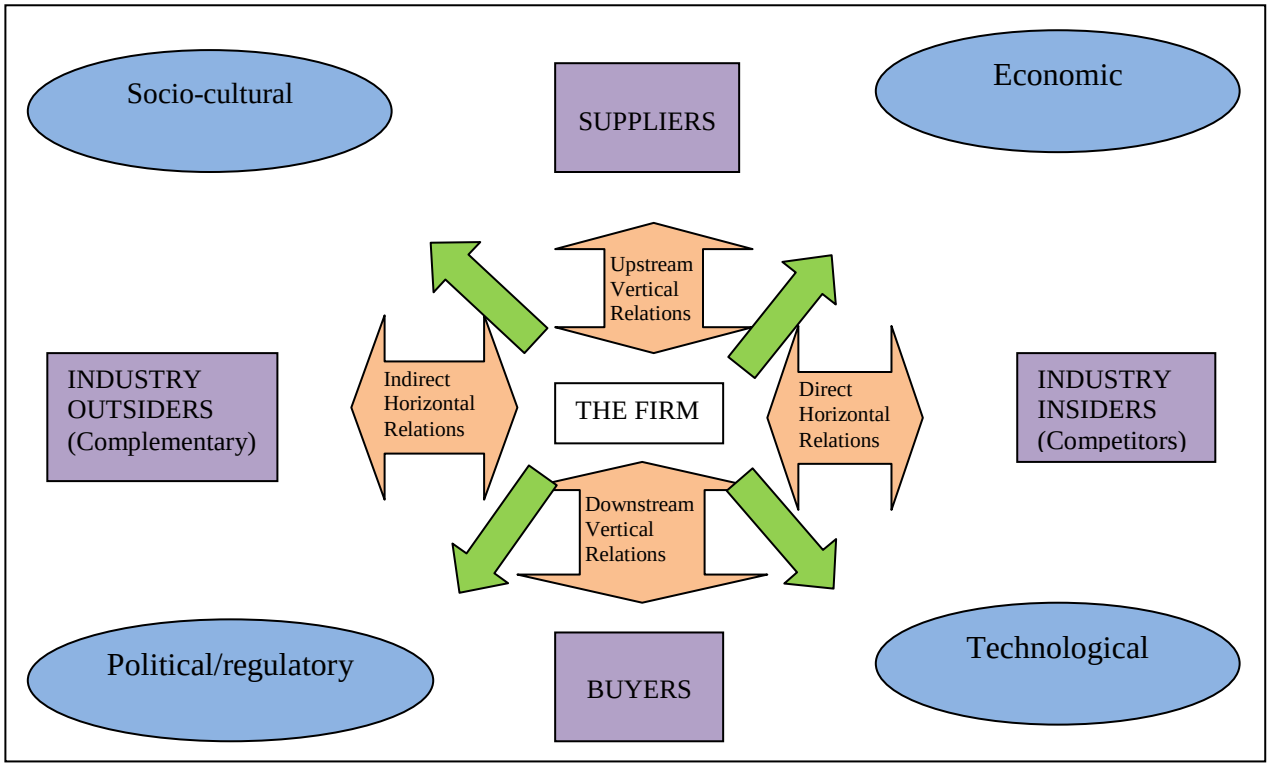
According to Saungweme (2009:45) the environment within which an agricultural business's supply chain operates is constructed by various relationships. It is necessary for a business to manage and integrate these relationships with the three different types of players around the supply chain. The business has to integrate with the various players that form part of the environment surrounding the supply chain:

- Vertical integration:
    - Upstream with suppliers
    - Downstream with customers

- Horizontal integration:
    - Direct: Competitors within the industry
    - Indirect: Complementary relationships outside the industry
- Integration with political, technological, economic and socio-cultural macro-environment.

It can be represented graphically as follows:

Figure 2.6: The agricultural business supply chain relationships



Adapted from Saungweme (2009:45).

Figure 2.6 therefore illustrates that the supply chain of an agricultural business thus has to integrate vertically with the customers (downstream) and the suppliers (upstream). Importantly, the customers would also be the shareholders (owners) of the company and in certain instances also the suppliers. The supply chain of an agricultural business is thus unique when these factors are considered (Saungweme, 2009:45).

Supply chain management have received a great amount of research attention due to the fact that maintaining the supply chain can reduce risks and uncertainty and

ultimately increase customer satisfaction, loyalty and increase profitability (Park, Shin, Chang & Park, 2010:496). As discussed earlier, in the case of an agricultural business, the supply chain is unique, as the supplier and the customer are frequently the same person. Relationship marketing can be defined as the management of strategic relationships with all major stakeholders in the company, specifically customers, but also suppliers (Godson, 2009:4). In this case customer relationship management, as well as supplier relationship management, are very unique and important in establishing and building relationships in an agricultural business as the majority of the shareholders are also customers.

Customer relationship management focuses on the farmer/customer, while supplier relationship management, to a large extent, will also focus on the farmer/supplier. Customer relationship management are, in many instances, a critical part of becoming and remaining competitive in the agricultural market. Many companies have moved away from traditional marketing strategies towards customer relationship management in an effort to reach business goals and objectives (Piercy, 2009:857). The main goal of customer relationship management is thus to investigate the needs of profitable customers by making use of specific customer information in an effort to build relationships with these customers. By building relationships and focussing on the needs of the customers, customer satisfaction will increase, and with that customer loyalty and ultimately profitability (Roberts-Lombard, 2011:3487).

Together with customer relationship management, supplier relationship management is also a very important factor in relationship management. The main goal of relationship management with a supplier is measuring the value of supplier by evaluating the performance and capabilities of the supplier. The organisation should then manage the development of the supplier in an effort to increase the supply capabilities of the supplier, as well as the quality and production time (Park *et al.,* 2010:498). Factors such as mutual inter-dependency, trust and commitment between an organisation and its suppliers are critical factors that will ultimately add value to the customer (Roberts-Lombard, 2010:2). Therefore, in the supply chain of an agricultural business, it is important to build lasting and sustainable relationships with both the customers and the

suppliers in an effort to create an efficient supply chain that brings about increased customer satisfaction, loyalty and ultimately profitability.

2.9 Conclusion

This chapter aimed to provide a background of the agricultural industry in South Africa, with specific reference to the unique supply chain relationship between an agricultural business and the farmers (customers/shareholders/suppliers). Up until the 1990s a cooperative business form was more viable due to subsidies, lower interest rates and price stabilisation. With the conversion of major agricultural cooperatives to IOFs, the primary goal of the business form changed and with it created various challenges. A major challenge of an agricultural business is that the customer of an agricultural business is also the shareholder and these two stakeholders have contradictory needs, wants and performance measures. It is, however, clear that farmers making use of an agricultural business still want the IOF to be farmer-centred with better prices, maximum dividends and bonuses and making them part of decision-making. These goals are directly at odds with the goals of IOFs. Agricultural businesses also operate in increasingly competitive and globalised markets with demanding customers that are well-informed. All these factors make customer satisfaction even more important, as these individuals are so interconnected to the survival and competitiveness of an agricultural business. The need for increased relationship management are therefore very important in creating an efficient supply chain that leads to satisfied customers/suppliers, loyalty and profitability. The chapter that follows will focus specifically on customer satisfaction and the drivers of customer satisfaction.

CHAPTER 3:

CUSTOMER RELATIONSHIP MANAGEMENT

3.1 Introduction

> *A large amount of research on customer satisfaction has investigates customer-related outcomes including: customer loyalty, customers' behavioural intentions, positive word of mouth, customers' share of wallet, customers' defection, and other behaviours. One of the most common findings, in existing research, is a direct and strong link between customer satisfaction and customer loyalty behaviour (Naumann, Williams & Kahn, 2009:320).*

When there is a difference between customers' expectations and customers' perceptions, a customer gap emerges. From a relationship point of view, it is important to know what are your customers' expectations, as well as their perceptions of the product/service or organisation. Therefore, to manage customer relationship, it is necessary to decrease the gap between the customers' expectations and their perceptions (Zeitham, Bitner & Gremler, 2009:33). Within the wide field of traditional marketing, the theory of relationship marketing developed as the market dynamics changed, stagnation of marketing as a subject area, as well as the fact that the marketing mix strategy became too narrow and inflexible (Godson, 2009:12). The focus of relationship marketing is on the customer, and ensuring that the relationship with the customer is enhanced in an effort to expand trust and commitment from the side of the customer, which would lead to customer loyalty and satisfaction (Brink & Berndt, 2009:41). Through building and maintaining relationships with customers, customer satisfaction can be increased. The field of customer satisfaction is one of the most important factors in any organisation. It has been determined that it costs six times more to acquire a new customer than to retain an existing one. It is therefore of utmost importance to treasure customers and keep them as happy as possible (Prabhakar, 2007:5). Customer satisfaction has been found to impact on purchase intentions, customer retention, reduced customer defections, share of wallet, increased responsiveness to cross-selling efforts, reduced complaints and word of mouth (Aksoy,

Cooil, Groening, Keiningham & Yalçin, 2008:107). Satisfied customers could become loyal customers; and every opportunity to interact with the customer provides the business with the prospect of creating value due to a long-lasting relationship (Richards & Jones, 2008:123).

This chapter commences with a discussion on customer expectations and perceptions. Relationship management and the link with customer satisfaction are considered, after which a detailed definition of customer satisfaction in respect of the full experience the customer go through, as well as a vertical and horizontal representation of satisfaction.

The results of customer satisfaction are thereafter highlighted; specifically, that it influences repeat buying, shapes word-of-mouth communication, lowers consumers' price sensitivity, and has implications for consumer recruitment. Dissatisfaction, on the contrary, could lead to complaints and lawsuits. Both customer satisfaction and dissatisfaction ultimately affect shareholder value. Each of the drivers of customer satisfaction is also examined; namely, the perception of price fairness, the perception of product quality, the perception of service quality, the perception of personnel superiority and rapport, as well as management as part of the agency cost theory. Lastly, concluding remarks are made.

3.2 Customer Expectations and Perceptions

An important standard of satisfaction judgment is the customer's expectations, which can be defined as "anticipation or predictions of future events". The customer's expectations include the hopes, apprehensions, uncertainties, probabilities, as well as predictions of future product or service performance (Arnould *et al.,* 2004:767). Perceptions can be defined as the customers' subjective measurement of an experience, product, service of company (Zeithaml *et al.,* 2009:34*)*.

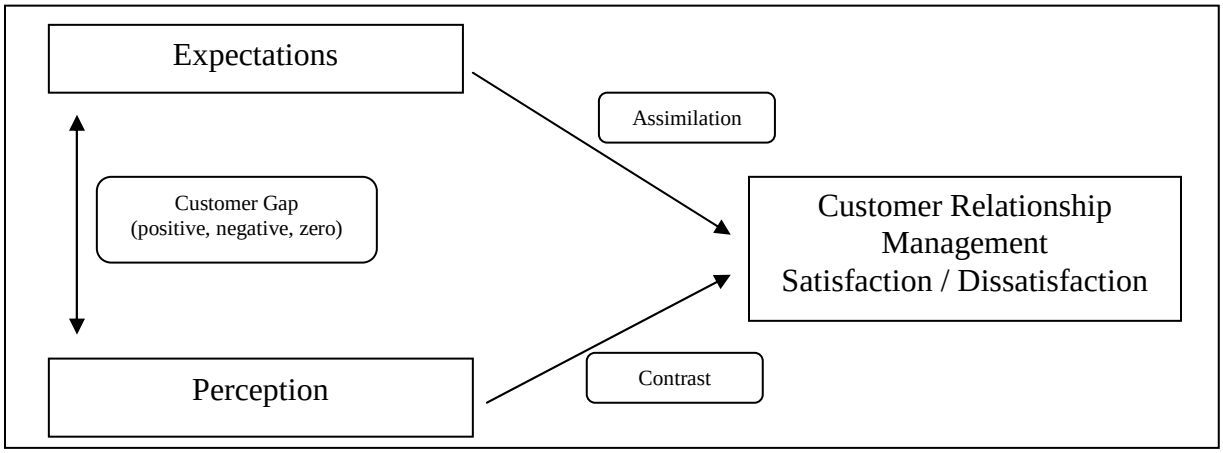
According to Zeithaml, *et al.* (2009:102) customers can have one of three expectations for an experience, namely a desired expectation (reflects what the customer wants from the experience), an adequate expectation (reflects what the customer would be

willing to accept) and a predicted experience (reflects what the customer believes he/she is likely to get). The customers' perceptions of fairness, attributions, customers' emotional responses, as well as the features and attributes of the product, service or experience, all have an influence on customer satisfaction, which can be referred to an a 'broad perception' (Zeithaml, *et al.,* 2009:133).

Confirmation can be defined as when the expectation matches the perception of performance of the product or service. Disconfirmation is when there is a difference between the expectations of the customer and the perception of performance of the product or service (Blackwell *et al.,* 2006:222). There are two types of disconfirmation: negative disconfirmation and positive disconfirmation. Negative disconfirmation occurs when the perception of product performance is lower than expected; hence, consumers are more likely to be dissatisfied. Positive disconfirmation occurs when the perception of product performance is better than expected, which is more likely to result in satisfaction. "Specifically, consumer satisfaction is the result of an evaluative process that compares pre-purchase expectations, with perceptions of performance during and after the consumption experience" (Rod, Ashill, Shao & Carruthers, 2008:105).

The expectancy-perception model of satisfaction (Arnould, *et al.,* 2004:769 and Zeithaml, *et al.,* 2009:34) establishes that when pre-consumption expectations are not reached, or when it is indeed reached or even exceeded is a major component of customer satisfaction. The model is graphically displayed in Figure 3.1:

Figure 3.1: The expectancy-perception model of satisfaction



Adapted from Arnould, *et al.,* (2004:769) and Zeithaml, *et al., (*2009:34).

The model can be explained as follows:

- Expectations and perceptions of performance jointly determine either satisfaction or dissatisfaction.
- Positive disconfirmation - when perception of performance exceeds expectations, which would lead to satisfaction.
- Negative disconfirmation - when expectations exceed perception of performance, which would lead to dissatisfaction.
- Neutral confirmation - when expectations are equal to perceptions of performance, which leads to neither satisfaction nor dissatisfaction.
- Assimilation - individuals are reluctant to admit and acknowledge discrepancies between expectations and perceptions of performance.
- Contrast - the tendency to exaggerate discrepancies between expectations and perceptions of performance.

Figure 3.1 demonstrates that, on the one hand, if the perception of performance of a product or service exceeds the expectation, then customer satisfaction would be increased. However, two types of satisfaction might emerge. The customer might have assimilation tendencies, which would mean that he/she would try to ignore the discrepancy between expectations and perception of performance, or the customer might have contrast tendencies, where he/she exaggerates the discrepancy and makes it larger than reality. The customer would therefore communicate more satisfaction than is really the case. On the other hand, when the expectation of a customer exceeds the perception of performance, customer dissatisfaction would increase. If the customer has assimilation tendencies, he/she would try to ignore the discrepancy and, maybe, attempt to explain away the discrepancy. If the customer has a contrast tendency, then he/she would exaggerate the dissatisfaction actually experienced. If however, the perception of performance of the product or service is equal to the expectations of the customer, there would be a neutral confirmation and neither satisfaction nor dissatisfaction would prevail. Therefore, just meeting the expectations of the customer is not enough to lead to customer satisfaction. In addition, it has been found that negative disconfirmation harm the organisation immensely more than positive disconfirmation could benefit the organisation; therefore, negative disconfirmation should be avoided at all cost (Wu, 2011:243).

Therefore, as stated earlier, it is only after the product or service has been consumed by the customer that the expectations can be either confirmed or disconfirmed. Neutral confirmation is when the perception of performance of the product or service is equal to the expectations the customer harboured. Disconfirmation can be either positive (perception exceeds expectations) or negative (expectations exceed perception). Positive disconfirmation leads to an increase in customer satisfaction, while negative disconfirmation leads to an increase in customer dissatisfaction.

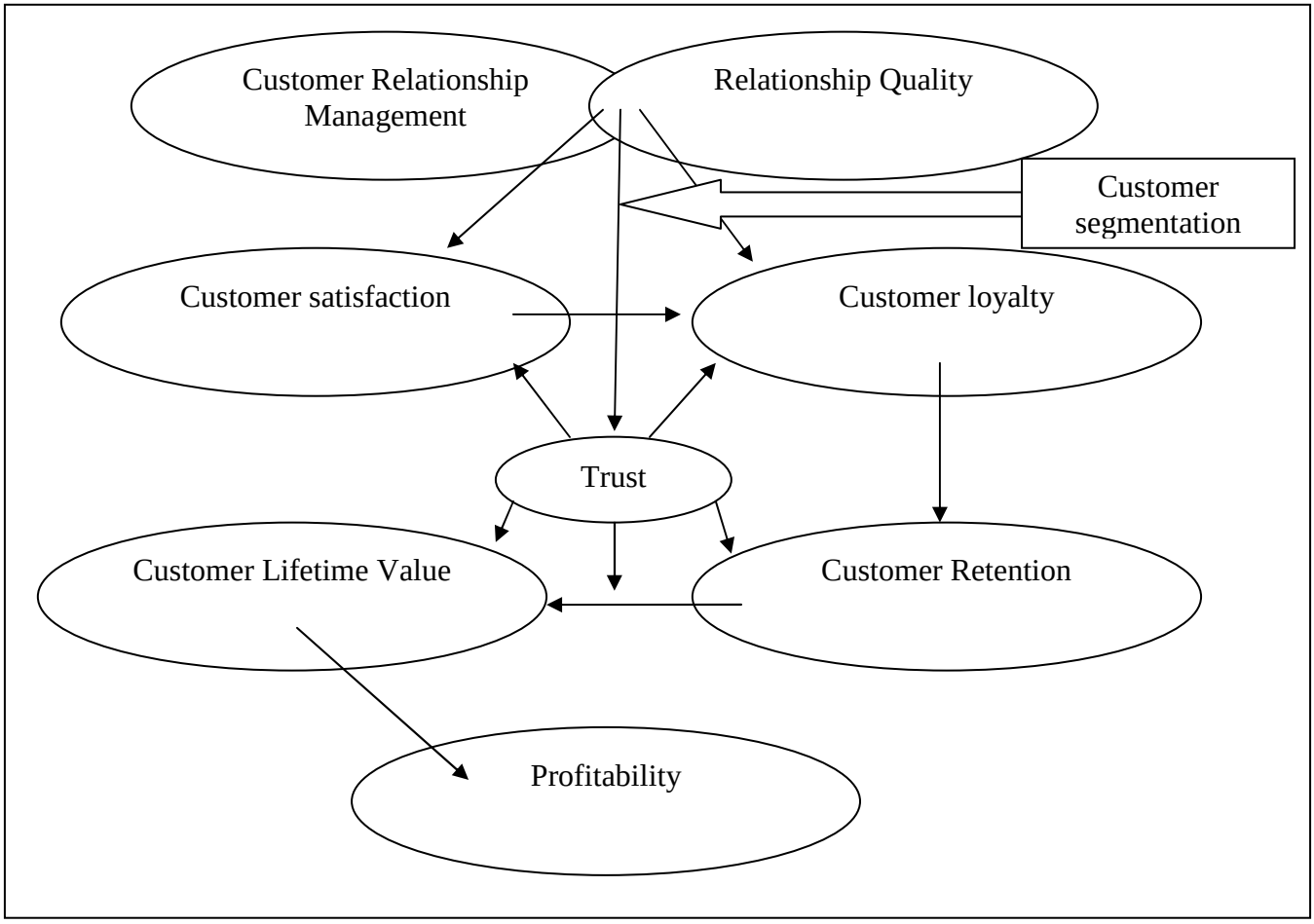
3.3 Relationship management

Customer Relationship Management (CRM), as an important focus within relationship management, can be defined as an approach used in collecting customer information and using this information in building improved relationships with different customers (Ernst, Hoyer, Krafft & Krieger, 2011:290). It has been proven that when CRM enhance both trust and commitment in the company, customers become more satisfied (Palmatier, Jarvis, Bechkoff & Karded, 2009:1) and more loyal. It is thus possible to acquire new customers and retain existing customers, while increasing their profitability towards the company (Roberts-Lombard, 2011:3487).

Customer relationship management (CRM) has been commended as a technique to ensure that customers experience richer encounters with the organisation, become satisfied and loyal. Loyalty towards the organisation will be increase the likelihood that customers would maintain a relationship with the organisation (retention) and also urge new customers to the organisation through positive word-of-mouth. The organisation then has the opportunity to sell more products and/or services to the new and existing customers, that increase customers' profitability and eventually business profitability (Kumar, Pozza, Peterson & Shah, 2009:147).

According to Van Zyl and Coetzee (2012:17) customer relationship management can be demonstrated by the Figure 3.2:

Figure 3.2: The path from customer relationship management to profitability



Adapted from Van Zyl & Coetzee (2012:17)

Figure 3.2 can be explained as follows:

By segmenting the various customers (dividing customers into groupings according to spending habits, interest, etc.), it is possible to manage customer relationships better, as well as improve the quality of the specific relationships. Segmenting customers in this specific study could mean to group the customers according to region, size, type of farming activities and the business units they make use of. This action has three outcomes, namely an increase in customer satisfaction, an increase in trust towards the organisation and an increase in customer loyalty. Customer loyalty is also an outcome of customer satisfaction and therefore also leads to customer retention. Trust towards the organisation is present and linked to customer satisfaction, customer loyalty, customer retention and customer lifetime value. Therefore, if a customer trust an organisation he/she would become more satisfied and loyal, the person would

continue patronising the organisation (retention) and thereby increase his/her lifetime value to the organisation. By increasing the customer lifetime value, the organisation's profitability should be enhanced.

The objective of CRM strategies, therefore, is to identify customers (customer segmentation), acquire knowledge about these customers, use the knowledge to build quality relationships (customer relationship management) and influence these customers perception of the organisation positively (customer satisfaction) (Richards & Jones, 2008:120).

It has been established that one of marketing's main goals is to build long-term relationships that are sustainable and lucrative for the business (Palmatier *et al.,* 2009:1). There is thus a direct positive correlation between successful customer relationship management and customer satisfaction. The link between customer relationship management and customer satisfaction can be due to three factors (Mithas, Krishnan & Fornell, 2005:202):

- Customer relationship management makes it possible for firms to customise their services and products for individual customers. This customisation thus increases the customers' perception of quality of said products and services and customer satisfaction is increased.
- Customer relationship management enables firms to increase the reliability of the customer experience in ensuring that orders, accounts and requests are processed timely and accurately. This also increases the perceived quality of the service for customers, which consequently increase customer satisfaction.
- Customer relationship management helps firms to manage customer relationships irrespective of what stage the relationship is in, be it the initiation stage, the maintenance stage or the termination stage. By modifying the relationship according to the life stages of the customers, the customers' satisfaction is increased.

Customer satisfaction is thus the result of effective customer relationship management. Agricultural businesses could therefore customise products and services to suit certain customers and increase their perception of the service, product and/or experience. This

would increase their trust and commitment towards the agricultural business and ultimately their satisfaction. The rest of the chapter will be dedicated to discuss and analyse customer satisfaction in detail.

3.4 Definition of customer satisfaction

The following section provides background to the definition of customer satisfaction, an examination of expectations and finally, the definition of customer satisfaction used in this study.

3.4.1 Background

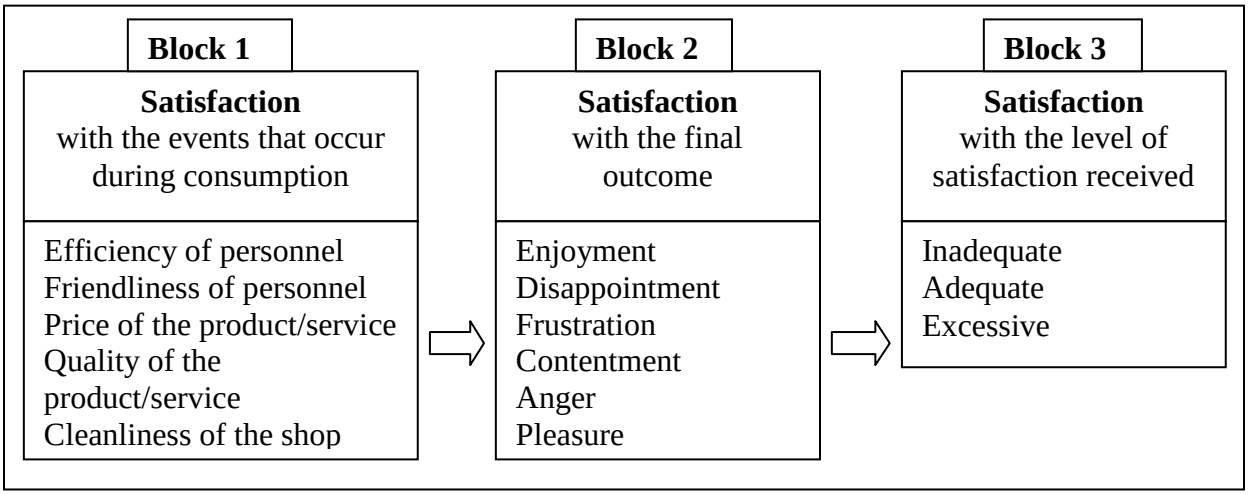
The judgment of satisfaction by the customer has been described in more than one way. On the one hand, there are researchers that argue (Westbrook, 1987 and Oliver, 1980) that customer satisfaction is a cognitive-based incident where the customer forms certain initial expectations of what the specific product or service should provide. The product or service is then judged against those expectations and the customer will either be satisfied or dissatisfied (to varying degrees). On the other hand, customer satisfaction can be based on how the customer judges the experience during the acquisition and consumption of the product or service; therefore, the entire experience is judged by the customer, but there are no initial expectations (Martin-Consuegra, Molina & Esteban, 2007:460).

Several authors build on the first viewpoint and its emphasis on prior expectations. According to Prabhakar (2007:5) customer satisfaction is a subjective, non-quantitative state the consumer finds him/herself in and which arises from a combination of the quality of the product, the quality of service, customer engagement, price of the product or service, as well as meeting and/or exceeding the customer's expectations with regard to the product or service. Customer satisfaction can also be defined as a judgement made by the consumer with respect to any aspect of the product or service experienced. The judgement of satisfaction includes a "pleasurable level of consumption-related fulfilment", but also under-fulfilment, as well as over-fulfilment (Arnould, Price & Zinkhan, 2004:755). Also, Oliver (2009:8) states that customer

satisfaction is the “fulfilment response” from the customers’ point of view. It is the judgement made by the customer whether a specific product of service provides him/her with a pleasurable level of fulfilment, but also under-fulfilment or over-fulfilment. Very importantly, the expectancy/disconfirmation model of customer satisfaction established by Mohr (1982) supports the notion that customer satisfaction can be determined by focusing on expectations, performance, disconfirmation/confirmation and satisfaction/dissatisfaction. This theory is also examined further by Arnould *et al.,* (2004:769).

Before the latter part of the 1990s, customer satisfaction was only considered and measured for the particular product or service the customer acquired, therefore only “post-purchase evaluative judgments concerning specific purchase decisions” (Bodet, 2008:157) were considered. Lately, customer satisfaction is more concerned with the customers’ previous experience of the company and the product or service collectively. This approach thus implies that it is better to measure overall satisfaction, rather than just customer intention or behaviour (Bodet, 2008:157). Figure 3.1 presents interim and final satisfaction as experienced in the context of a standard product or service encounter and illustrates satisfaction with the entire experience (Oliver, 2009:7):

Figure 3.3: Satisfaction with the entire consumption experience



Adapted from Oliver (2009:7).

Block 1 presents all of the events that occur during consumption or the experience and it includes everything from the efficiency of the personnel, the price of the product or service to the cleanliness of the shop.

Block 2 represents the satisfaction the customer experience with regard to the final outcome. For the customer of a business, this could mean enjoyment, pleasure or disappointment. The final block, Block 3, leads to the level of satisfaction the customer experiences pertaining to the satisfaction they received. This could be inadequate, adequate or excessive. If, for instance, the customer expected to be disappointed by the business, but was satisfied with the service, then the satisfaction would have been excessive and vice versa. If, however, the customer has a specific level of satisfaction that they expected and that level is reached, then the satisfaction level would be adequate. The model thus assumes that the measurement of customer satisfaction takes place throughout the entire experience.

Another approach to defining satisfaction is displayed in Table 3.1 where the vertical and horizontal distinctions of satisfaction are presented. A vertical division "implies a level of distinction" from a micro perspective (the individual) to a macro perspective (society at large). A horizontal division provides information with regard to what would have an impact at the level of satisfaction (antecedents), where satisfaction is centred (core concept), as well as the possible consequences of satisfaction or dissatisfaction.

Table 3.1: Vertical and horizontal distinctions of satisfaction

Viewpoint	**Antecedents**	**Core Concept**	**Consequences**
Individual: one transaction	Performance or service encounter	Transaction-specific satisfaction	Complementing, complaining, word-of-mouth
Individual: time accumulated	Accumulated performance history	Summary satisfaction	Attitude, loyalty, switching
Firms' customers in the aggregate	Reputation, product quality, promotion	Average satisfaction, repurchase rates, competitive ranking	Share, profits
Industry or commercial sector	Average quality, monopoly power	Consumer sentiment	Regulation, taxation

Society	Product and service variety, average quality	Psychological well-being	Tranquillity, productivity, social progress, alienation, consumerism

Adapted from Oliver (2009:9)

Table 3.1 indicates that an individual that only uses a business once (one transaction), can only judge satisfaction on account of the performance of that one service encounter; therefore satisfaction centres upon transaction-specific satisfaction and the consequence of satisfaction could be compliments or word-of-mouth referrals, while dissatisfaction could lead to complaining. An individual that has made use of the business over an accumulated time will use the performance history of the business when judging satisfaction and therefore would concentrate on a summary of all past transactions and service encounters, which could lead to a positive attitude and loyalty towards the business on the part of the customer. Very importantly, the firm's customers as a whole judge satisfaction with the company on their reputation, the quality of the product, as well as the advertising. On the whole, customers' satisfaction also centres upon the average satisfaction experienced, as well as how the company ranks alongside competitors. High satisfaction rates could lead to increased profits and share prices (Oliver, 2009:10).

Therefore, it is safe to conclude that overall customer satisfaction is a more reliable measure than measuring only customer intention and behaviour. This result is supported when analysing vertical and horizontal distinctions of satisfaction. A customer that used a company only once, has only that one transaction to base satisfaction on. A customer that has made use of the company over a period of time can fall back on previous experiences with the company and generate overall satisfaction.

It is clear that customer satisfaction has been researched extensively judging by the great deal of literature and research available on the subject (Keiningham, *et al.,*2005; Martin-Consuegra, *et al.,* 2007; Oliver, 2009; Prabhakar, 2007; Singh & Sirdeshmukh, 2000; Stock, 2005; Sun *et al.,* 2007 and Yu, 2007). Also, there are quite a few theories

on this subject, which will be explored further in this chapter. What is clear, though, is that there is definitely a mixture of factors that can influence customer satisfaction and that the entire consumption process should be taken into account. Also, it is imperative to determine from what viewpoint it is observed; what the antecedents of customer satisfaction are; where customer satisfaction is centred; and what the consequences of dissatisfaction are.

Given the role of customer expectations in some definitions and its decisive value in other definitions in the literature, this notion will be examined in more detail in the following section.

3.4.2 Definition of customer satisfaction for this study

Considering all of the definitions of customer satisfaction mentioned, the researcher will make use of the following definition for the purpose of this specific study:

Customer satisfaction is defined as the judgmental and cognitive-based response of the customer of the entire consumption experience of a specific product/service, which reflects his/her confirmation or disconfirmation of prior expectations towards the specific company/product/service. This reaction signifies the customers' perception of how the company/product/service performs from their outlook.

It is important to note that prior expectations of a company/product or service play a central role in this definition of customer satisfaction as was discussed in section 3.2.3.

3.5 The results of customer satisfaction

Managers are concerned with keeping the customer satisfied, because in reality, the customer is king. Also, managers are obligated to build long-term relationships, in other words, making sure that the customer keeps coming back (Arnould, Price & Zinkhan, 2004:758). It is significantly cheaper for the company to hang on to existing customers than to locate new ones. By keeping customers satisfied, they would keep coming back, develop a long-term relationship with the company and ultimately have a positive

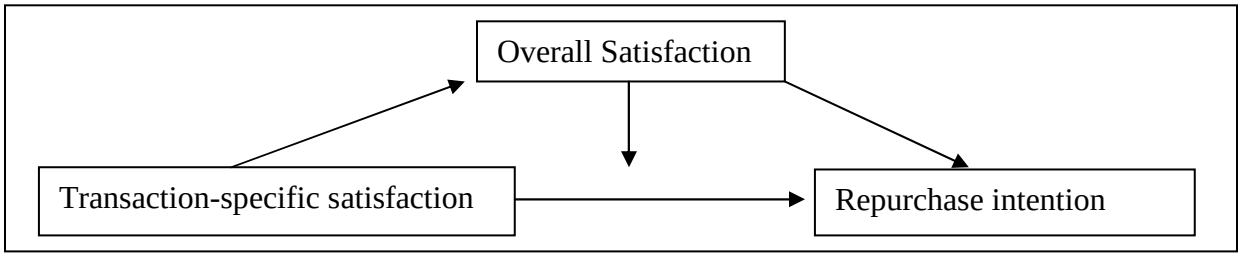
impact on the bottom-line (Sun, Wilcox & Zhu, 2007:89). According to Blackwell, Miniard and Engel (2006:213) customer satisfaction encourages repeat purchases, shapes word-of-mouth communication, lowers consumers' price sensitivity, has implications for customer recruitment and ultimately affects shareholder value. Each of these results will subsequently be explicated.

3.5.1 Customer satisfaction encourages customer loyalty

According to Gustafsson, Johnson & Roos (2005:215) the two primary reasons why individuals repeat purchases at a specific business are a lack of available alternatives (be it real or perceived by the customer) and customer satisfaction. Due to intense competition in the marketplace, customer loyalty has become a major theme in marketing research. It has been referred to as the ultimate objective of customer satisfaction (Deng, Lu, Wei & Zhang, 2010:290). Customer loyalty can be defined as "a deeply held commitment to re-buy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Arnould, Price & Zinkhan, 2004:783).

It has been found that perceived price fairness, perceived product quality, trust, as well as customer satisfaction all play a major role in forming customer loyalty (Yieh, Chiao & Chiu, 2007:281). However, it has been found that customer perceptions with regard to price and product quality, amongst others, affect how satisfied the customer would be (See Section 3.4 and 3.5). Therefore, perceived price fairness and product quality are drivers of customer satisfaction, which in turn could lead to customer loyalty. If a customer buys a product or service more than once from a business, the customer is more likely to form an opinion or attitude about the business, which can be positive or negative. This attitude then forms the basis of the customer's expectation with the next encounter with the business (Oliver, 2009:15). Figure 3.3 provides a diagrammatic representation of the relation between transaction-specific satisfaction; overall satisfaction and repurchase intention.

Figure 3.4: The link between transaction-specific satisfaction, overall satisfaction and repurchase intention



Adapted from Jones & Suh (2000:150).

It follows from Figure 3.4 that transaction-specific satisfaction has a direct impact on overall satisfaction and that both transaction-specific satisfaction and overall satisfaction will impact whether a customer has the intention to remain a customer of the particular business. Very importantly, however, overall satisfaction acts as a moderator between transaction-specific satisfaction and repurchases intention. Previous studies (Parasuraman, *et al.,* 1994 and Anderson, *et al.,* 1994) worked on the premise that transaction-specific satisfaction leads to overall satisfaction, which leads to repurchase intention. Also, it was found that even though customers might experience a service failure occasionally, they will still continue to have a high repurchase intention. The model explains this phenomenon on the basis that overall satisfaction intercedes in the event of a transaction-specific dissatisfaction (or service failure) and the customer is retained due to their overall satisfaction as a result of previous experiences. This model thus indicates that overall satisfaction is a better indicator of satisfaction than transaction-specific satisfaction, as it has a stronger influence on repurchases intention (Jones & Suh, 2000:150). The specific hypothesis was also tested by Zhao, Lu, Zhang & Chau (2012:653) and again, overall satisfaction contributed significantly more to repurchase intensions than transaction-specific satisfaction, although both are statistically significant.

Customer satisfaction is, therefore, a vital component in obtaining customer loyalty, which is required to ensure repeat purchases from customers. Also, repurchase intentions are derived from transaction-specific satisfaction, as well as from overall satisfaction, of which overall satisfaction is the better indicator of repurchase intention. The advantage of this is, thus, that a customer could experience transaction-specific

dissatisfaction, but would still frequent the company, due to overall satisfaction that weighs more (Zhao, *et al.*, 2012:653). With regard to agricultural businesses, where the customers make use of the agricultural business over long periods of time, their overall customer satisfaction plays an important role as previous experiences with the organisation will provide a basis for their satisfaction.

Customer satisfaction, as well as the perceived fairness with regard to price and product quality all lead to customer loyalty. A loyal customer would have the intention of making use of the business again. After repeated use of the product or services of the business, the customer would form a belief system or opinion of the business. This opinion on the side of the customer then forms the basis for the next encounter with the organisation. Overall satisfaction acts as a mediator between transaction-specific satisfaction and repurchase intention. This means that even if customers experience a service or product failure, overall satisfaction would step in to maintain the repurchase intention of the customer (Zhao, *et al.*, 2012:653). The two concepts 'repurchase intentions' and 'loyalty' are therefore, closely related. To summarise, loyalty can be described as the willingness of the average customer to repurchase the product/service as a result of psychological attachment and to maintain a relationship with the service provider/supplier (Rauyruen & Miller, 2007:23).

3.5.2 Customer satisfaction shapes word-of-mouth communication

Word of mouth (WOM) communication – when consumers interact about consumption-related circumstances - is perceived to be an effective and low-cost method of conquering customer resistance. Also, due to the nature of WOM, the information can be relayed quickly and effectively (Trusov, Bucklin & Pauwels, 2009:90). WOM can also be described as the voice of the customer and can be in the form of positive word of mouth (compliments) when the customer had a satisfying experience, or negative word of mouth when the customer complains about a specific performance failure on the part of the company. Generally, WOM is described as positive or negative feedback that the customer relay to other customers (Arnould, Price & Zinkhan, 2004:781).

According to Oliver (2009:76) the experience of other consumers carry a “much greater weight than other information sources due to the degree of similarity between recipient and communicator and the lack of financial motive on the part of the other person”. It has been found that the closer related the recipient is to the communicator, the more reliable the information is perceived to be. For instance, a spouse’s opinion would be perceived to be more reliable than that of a relative and a relative’s opinion would be perceived to be more reliable than that of a friend. However, the importance of word-of-mouth is still powerful, even if the referent is not that well known to the recipient. WOM has an especially big impact on new customer referrals. This is to be expected, because a customer is more likely to make a purchase decision if another person had a positive experience. Customers that have been acquired through WOM bring in twice as many new customers than those customers acquired through traditional marketing techniques (Trusov, Bucklin & Pauwels, 2009:92).

Word-of-mouth communication is thus a powerful behaviour and intention influencer that exists between a sender and a receiver, where both receive something from the exchange. The receiver gains important decision-making information from the sender that could influence his/her behaviour and choices, while the sender increases his/her confidence in the behaviour or choices made by convincing others to behave or choose the same product, service or company (Blackwell, Miniard & Engel, 2006:533). It is generally accepted that word-of-mouth marketing (WOM) is an effective, cheap and trustworthy method of acquiring and retaining customers.

In a study conducted by Luo (2009:161) it was concluded that there is a significant link between negative word-of-mouth (NWOM) and a company’s cash flows and stock prices. Essentially this means that the higher the historical NWOM a company has received, the more financial shortfalls will occur in the future cash flows of the company and the more volatile the future outlook of the stock price will be. On the other hand, the lower the historical NWOM, the smaller the financial cash flow shortfalls and less stock price volatility in future. WOM is difficult to quantify and the impact of NWOM can be long-lasting and debilitating for the company involved.

In short, word-of-mouth communication has been described as a low-cost, trustworthy and effective measure to acquire and retain customers. Also, WOM communication carries a greater weight than other information sources, because the prospective customer can relate to the communicator, who has no financial motive to endorse the company. Customers acquired through WOM communication result in twice as many customers acquired than through traditional marketing.

3.5.3 Customer satisfaction lowers consumers' price sensitivity

It is typically to be expected that the more something is perceived to be worth and important to the customer, the more that individual will be willing to pay for it. Those products or services that satisfy customers would also be regarded as products or services that are worth more. Customer satisfaction would lower price-sensitivity of a specific product or service and satisfied customers would not necessarily switch to those of a competitor when the prices increase (Blackwell, Miniard & Engel, 2006:220).

According to Stock (2005:67) price sensitivity is the level to which price-related concepts will impact customer's decision to buy or not. A customer that has a high level of price sensitivity will regularly compare prices of competitors to find the lowest price, or immediately reduce volume in case of an increase in price. In contrast, a customer with a low level of price sensitivity will not necessarily switch to a competitor or decrease volume in case of a price increase. There is an inverse relationship between customer satisfaction and price-sensitivity and this relationship could be explained by the equity theory. The equity theory states that an equitable relationship exists between the customer and the business if the customer feels that the input (cost) equals the outcome (product or service) the customer receives from the business. An inequitable relationship exists if the customer feels that the investment (cost) is higher than the product or service he/she receives. This, in turn, will lead to customer dissatisfaction and customers' price sensitivity will increase (Vogel, Evanschitzky & Rameseshan, 2008:100).

Customer satisfaction has also been found to influence price acceptance, which can be defined as the "maximum price that a buyer is prepared to pay for a product or service".

Therefore, customer satisfaction can have the advantage of developing price acceptance and consequently decreasing price sensitivity. Due to the positive relation between customer satisfaction, price acceptance and customer loyalty, “a satisfied and loyal customer is willing to pay more” for a product or service (Martin-Consuegra, Molina and Esteban, 2007:463).

Therefore, according the literature, there is an inverse relationship between customer satisfaction and price-sensitivity. This means that if the customer feels that the input (cost) is equal to the outcome (product or service) the customer receives from the business, then an equitable relationship exist. If an equitable relationship exists, this in turn will lead to customer satisfaction and the customers’ price sensitivity will decrease, which will mean that a customer with a low level of price sensitivity will not necessarily switch to a competitor or decrease volume in case of a price increase.

3.5.4 Customer satisfaction has implications for consumer recruitment

Customer recruitment is when a company uses advertising to connect with dissatisfied customers from competitors, by establishing that their company will satisfy customers where the competitors have fallen short. It is easier to “steal” customers from a company with a relatively unsatisfied customer base compared to customers that are satisfied with their current company (Blackwell, Miniard & Engel, 2006:221).

3.5.5 Customer satisfaction increases shareholder value

It is fairly easy to calculate the value of tangible assets, such as the physical assets of a company in the form of equipment, land and vehicles. However, it is a great deal more difficult to determine the value added by an intangible asset such as customer satisfaction. The reason is that it does not have a physical form and the intangible asset cannot easily be associated or linked to future cash flows (Aksoy *et al.*, 2008:105). The ultimate goal of customer satisfaction is to increase the value of the company and the wealth of the shareholders. Evidently customer satisfaction leads to repeat buying and customer retention, and low-cost word of mouth should lead to lower marketing costs. All of these factors lead to increasing future revenues and ultimately increasing shareholder value (Blackwell, Miniard & Engel, 2006:221). Consequently,

intangible assets such as customer satisfaction are regarded as a significant component of a firm's value (Aksoy *et al.,* 2008:105). As a result it is crucial to ensure that customers are retained, since a "long-term" customer has more value for a business than a new customer. The following six reasons explain why this is so (East, Hammond & Gendall, 2006:7):

- There are substantial costs involved in acquiring new customers, rather than retaining existing customers;
- It has been found that revenue grows the longer a customer remains with the business;
- Established customers becomes acquainted with the practises of the business and would eventually need less attention, thus saving cost;
- Long-term customers provide more new customer referrals (word-of-mouth) than new customers;
- Long-term customers are more loyal and therefore less sensitive to higher prices; and
- Long-term customers are less likely to defect and therefore ensure higher revenue growth.

A study done by Anderson, Fornell and Mazvancheryl (2004:183) found that organisations with high levels of customer satisfaction are rewarded with more business from buyers and with more capital from investors. The opposite would also be true for companies with low levels of customer satisfaction - the customers and investors would turn elsewhere for business.

From the literature above it is thus possible to recognise that the ultimate goal of increasing customer satisfaction is to increase the wealth of the shareholders. It follows from the phenomenon that when a customer is satisfied, he/she will keep coming back to the organisation and this long-term customer tends to add more financial value to an organisation than a new customer. The ultimate aim of keeping customers satisfied, then, is to increase the shareholders' value. Customer satisfaction leads to repeat buying, customer retention and low-cost word of mouth should lead to lower marketing costs. All of these factors lead to increasing future revenues and ultimately increasing shareholder value.

3.6 Customer dissatisfaction could lead to complaints

According to Hu, Cheng, Chui & Hong (2011:192) the consequence of customer satisfaction is a decrease in customer complaints, and could also lead to an enhancement of customer loyalty. When customer dissatisfaction occurs, one of two alternatives are available to the customer; namely voicing dissatisfaction by complaining in an attempt to receive retribution from the company or exiting and not making use of the company again and using a competitor instead. Customers tend to complain at times when they are very dissatisfied with a product, service or company. This could create a problem for the company, as customers would only lodge a complaint when something is seriously wrong. Therefore, even when customers are just somewhat dissatisfied, there will be no adequate feedback to the company to indicate a possible problem. When customers take the time to file a formal complaint, it is essential that the company takes corrective action in order to rectify the situation and gratifies the customer involved. If a customer is satisfied with the response from the company after a complaint and the initial dissatisfaction is rectified to the satisfaction of the customer, then the complaint procedure might be able to increase customer satisfaction and the customers' intention to purchase in the long run (Blackwell, Miniard & Engel, 2006:219).

Traditionally, complaint handling has been regarded as defensive, as the company has to act in a reactive manner, while customer satisfaction programmes have been regarded as offensive strategies. It is very important to manage complaints in such a manner that the customer believes the company takes his/her complaint seriously and ensures that the complaint is handled effectively and the situation is recovered (Hansen, Wilke & Zaichkowsky, 2009:7-8). Surprisingly, complaints can be perceived as something positive that provide the company with feedback. There are at least five reasons why complaints can be considered to be constructive (Zairi, 2000:332):

i. They are a way of receiving feedback from customers and therefore necessary means for putting improvement plans into action.
ii. They are a tool for preventing complacency and harnessing internal competencies for optimising products and services.

iii. They are a useful way of measuring performance and allocating resources to deal with the deficient areas of the business.
iv. They are a useful “mirror" for gauging internal performance against competition and best-in-class organisations.
v. They are a useful exercise for getting closer to customers and understanding them better.

In extreme instances of customer dissatisfaction, a company can even be sued for losses accumulated by the consumer. This could lead to negative publicity, and resulting expenses in terms of attempts to defend the company (Blackwell, Miniard & Engel, 2006:219). It is, therefore, essential that a company primarily attempts to increase customer satisfaction, but in the case of a formal or informal complaint, respond effectively in order to turn the situation around and satisfy the customer with the rectification of the problem. According to Prabhakar (2007:6) statistics show that more than half of those customers that complain will again do business with the specific company if the actual complaint is adequately resolved. If the particular complaint is resolved very quickly, this figure increases to ninety-five per cent.

Customer complaints have a stronger influence on the stock value gap than customer satisfaction. The stock value gap can be defined as “the shortfall of a firm’s actual market value from its optimal market value as measured by benchmarking best-performance competitors”. The aim of any company should therefore be to have the smallest stock value gap possible, as that means that the firm’s actual market value and optimal market value is almost identical. The results from this specific research study done by Luo and Homburg indicate that customer complaints (negative) will cause a larger stock value gap, therefore driving the company’s actual market value further away from its optimal market value, while customer satisfaction (positive) will bring the actual and optimal market value closer together. This may sound logical, but the real issue is that customer complaints will have much more power than customer satisfaction and can therefore do more harm than the benefits of customer satisfaction. It is therefore important that complaining customers be handled in the most effective manner possible (Luo & Homburg, 2008:41).

It has been found that certain economic factors influence whether customers would complain or not. If the price of a product or service decreases, so does complaining. The reason could be that it might not be worth the cost of complaining. Also, when a customer considers a product to be important, the likelihood of complaining is more likely. Very importantly, the higher the cost and effort it takes on the part of the customer to complain, the more discouraged customers would be to complain (Arnould, Price & Zinkhan, 2004:782). It is paramount that companies handle complaints effectively and have successful customer services in an effort to control the impact of negative disconfirmation on the management of customer satisfaction (Gruber, Szmigin & Voss, 2009:432).

Therefore to summarise, customer dissatisfaction could lead to complaints by customers and it is therefore important to ensure that customers are satisfied; otherwise a stock value gap emerges. A small stock value gap is desirable by companies as a stock value gap is the difference between the actual market value of the company and the optimal market value. The closer these two values are to each other, the better.

3.7 Drivers of customer satisfaction

The factors needed in the development of satisfaction of customers are perceived price fairness, perceived product quality, employee-customer interaction (personnel) and service quality that inspire trust (Yieh, Chiao & Chiu, 2007:281). The following section provides research findings in the available literature with regard to the drivers of customer satisfaction; namely, the price of the products or services, the products' quality, service quality provided by the employees, the quality of personnel, as well as the opinion customers have of the management of the organisation.

Traditional customer satisfaction research studies focus on using the well-established SERVQUAL method. However, SERVQUAL tests customers' perception with regard to mainly service quality (Chen, Yang, Lin & Yeh, 2007:163), while there are various other drivers that also influence customer satisfaction, such as perceptions with regard to

price, product, personnel and management, which will be discussed in the subsections that follow.

3.7.1 Price

When customers perceive the price of a product or service to be fair in terms of the sacrifice the customer has to make in order to obtain the said product or service, the customer might indicate an intention of repeating the purchase behaviour. However, if customers do not feel that their sacrifice warranted the specific product or service (price was unfair), then they might decide not to buy the product or service again, even though they might have been very satisfied with the product or service (Martin-Consuegra, Molina & Esteban, 2007:463).

Consumers might perceive price as an external measure of quality. Price is linked to customer satisfaction in the sense that a customer has to feel satisfied that the investment made is equal to or less than the product or service received. If customers perceive the price of a product or service as fair, then customer satisfaction will increase (Yieh, Chiao & Chiu, 2007:269). According to Martin-Consuegra, Molina & Esteban (2007:460) price fairness is related to the principle of dual entitlement. This principle states that customers believe they are entitled to a certain price, while the company is entitled to a certain profit. Customers would therefore perceive (ceteris paribus) the price of a product or service to be fair if the cost to the company correspondingly increased. However, if customers perceive the price to increase only for the purpose of increasing the company's profit, then the principle states that customers would perceive prices to be less fair for the reason that they carry the majority of the financial burden. Therefore, price fairness is judged on whether it comes from external factors (suppliers that increase cost), which will be considered to be fair, while internal factors, such as an increase in profit, would be considered to be unfair by the customer. Also, the lower the perceived price, the lower the perceived sacrifice the customer has to make to acquire the product or service. If a customer perceives a price to be unfair, negative consumer responses can occur, such as dissatisfaction, decreased purchase intentions and increased price consciousness (Martin-Consuegra, *et al.,* 2007:460). It is the opinion of the author that the dual entitlement principle might have serious consequences for the customers of agricultural businesses. If the

agricultural business exhibits a high share price, due to the profitability of the organisation, the customers/shareholders might feel that this profitability was obtained at their expense. Therefore, any price increase and an increase in the share price, might lead to customer dissatisfaction among the customers of an agricultural business.

According to basic economic theory, if prices increase, a customer would just alter his/her consumption or usage, as displayed by the well-recognised downward-sloping demand curve. Basically, a higher price means less demand for a product. When prices increase, the product or service might become less attractive to the consumer and sales might fall. These negative consequences can, however, be made less substantial if customer satisfaction was high before the price increased. In essence, when a price increase occurs, there will be a negative effect on the consumers, but this negative effect will be weaker if the customers is satisfied and stronger if the customers is dissatisfied (Homburg, Hoyer & Koschate, 2005:40). A company should thus provide a product with the right quality at the right price in an effort to make customers feel that the price is fair for the quality that they receive. Also, how the price is determined should also be conveyed to customers when the pricing structure of a particular product or service is complex, as this would increase the customers' perception of the trustworthiness of the company (Martin-Consuegra *et al.,* 2007:460). The customers' perception with regard to the product – including the quality, performance and availability of the product is discussed in section 3.5.2.

In conclusion, price fairness is related to the principle of dual entitlement, which states that customers believe they are entitled to a certain price, while the company is entitled to a certain profit. Customers would perceive the price of a product or service to be fair if the cost to the company correspondingly increased. However, if customers perceive the price to increase only for the purpose of increasing the company's profit, then the principle states that customers would perceive prices to be less fair for the reason that they carry the majority of the financial burden.

3.7.2 Products

The three critical components to creating value for the customer are product quality, service quality and value-based prices. If one of these three is not reached according to the expectations of the customer, then a company cannot create superior value for the customer, hence customer satisfaction would not be increased (Du, Jiao & Tseng, 2006:397). A decisive determinant of customer satisfaction is whether the customer perceives the performance of the product to be adequate during consumption, in other words, to be of quality. In general, the better the performance of a particular product during consumption, the more satisfied a customer would be and vice versa (Blackwell, Miniard & Engel, 2006:222). A study done by Anderson & Sullivan (1993:141) confirmed that those firms that provide a consistently good quality product should have highly satisfied customers and those customers would be more likely retained within the company. Also, the study determined that when the product is very familiar to the customer or easy to use, then the company might have a bigger responsibility to manage customer satisfaction. However, when the product is complex or the quality is difficult to identify, then the expectations of the customer will be the defining factor in analysing customer satisfaction.

Quality can be divided into an objective perception of quality and subjective perception of quality. The perception of the former is constant, measurable and unconstrained by the opinion of an individual. The latter is the individual's feelings, opinions and beliefs with regard to quality. Also, another view on quality is backward-looking quality and forward-looking quality. Backward-looking quality stems from issues such as defects, flaws and deficiencies with regard to the product, while forward-looking quality measures the ease of use or the design of the product. It has been found that it is not enough to just provide quality products in order to increase customer satisfaction; it is also important to provide products with excellent and attractive features (Prabhakar, 2007:5).

As the literature therefore suggest, a decisive determinant of customer satisfaction is whether the customer perceives the performance of the product to be adequate during consumption; in other words, whether the quality of the product is satisfactory. In

general, the better the performance of a particular product during consumption, the more satisfied a customer will be.

3.7.3 Service

Service quality is a critical concern in reaching organisational objectives. If service quality is low, customer satisfaction will also be low. Service quality as a whole can be classified as two distinct elements of the service encounter; namely, technical service quality and functional service quality. Technical service quality is regarded as the basis on which service quality is built and can informally be defined as “what you get” or the outcome from the service encounter. Examples include promptness, accuracy and individualised solutions. Functional service quality is “how you get it” or the interpersonal relational aspects of the service encounter and include friendliness, trustworthiness, courtesy and display of emotions. It has long been established that a smiling employee will generate more satisfaction from a customer than an employee that is not smiling (Söderlund & Rosengren, 2010:162). Anderson, Pearo and Widener (2008:367) refer to technical service quality as core attributes and functional service quality as peripheral attributes. Core attributes refer to the part of the service that we think about when the specific service is named. Peripheral attributes can be divided into physical and interactional attributes. The former can include everything from environmental to mechanical, while the latter refers to all interpersonal interactions during the service process.

SERVQUAL is an instrument that tests various aspects of a customers’ perception of the service quality they receive in service and retailing institutions. This instrument tests five dimensions as part of service quality, namely (Parasuraman, Zeithaml & Berry, 1994:202):

i. Tangibles: Physical facilities, equipment and appearance of personnel
ii. Reliability: Ability to perform to promised service dependably and accurately
iii. Responsiveness: Willingness to help customers and provide prompt service
iv. Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence
v. Empathy: Caring, individualised attention the firm provides its customers.

Normally, SERVQUAL is used in an effort to test customer satisfaction with regard to service quality (Chen, *et al.,* 2007:163), specifically in determining the gap between the service quality the customer expects to get and the performance the customer perceives to get from the business. However, from the points above it can be concluded that the model tests the different aspects of service only and not any other specific factors, such as the price of the product or the quality of the product and personnel. Therefore, for some time, SERVQUAL has been described as being an incomplete measure of the entire service experience. One of the main problems mentioned is that the product concept is excluded (Miller & Brooks, 2010:2). This study thus aims to include all the main drivers of customer satisfaction in order to better test customer satisfaction of an agricultural business. This is vital, specifically because agricultural businesses provide both products and services to customers and SERVQUAL as a customer satisfaction measure would therefore be lacking.

To recap, service quality can be classified into two elements, namely technical service quality ("what you get") and functional service quality ("how you get it"). If service quality is low, customer satisfaction will also be low and vice versa. In a majority of customer satisfaction studies, SERVQUAL is used to determine the satisfaction level of customers. This measure only assesses customer satisfaction of the service experience. The study currently under consideration attempts to measure not only service, but also price, product, personnel and management as components of customer satisfaction.

3.7.4 Personnel

In a study done by Yieh, Chiao and Chiu (2007:279) it was found that one of the antecedents to customer satisfaction is service quality. Three dimensions of service quality were tested; namely, tangibility, employee-customer interaction and empathy. Of these three, employee-customer interaction plays an indispensable role in the foundation of customer satisfaction. All three dimensions have a considerable impact on trust, which ultimately leads to customer loyalty. Employee satisfaction is significantly related to customer satisfaction, specifically if the employee is provided with a manageable workload, lower stress and opportunities for training and

development. If the employee is happy and performs to the best of his/her abilities, then the probability that customer would be satisfied is very high ((Brown & Lam, 2008:252). According to Aksoy *et al* (2008:107) employee satisfaction would lead to a positive relationship with customer satisfaction, loyalty, firm revenue and profitability. Therefore, a happy and contented employee may provide a high quality service to the customer, leading to increased customer satisfaction, which may result in repurchase intentions, loyalty and ultimately increase future cash flows.

Researchers have ascertained that when an employee provides a good quality service, this energises the employee, as the employee works in an environment where he/she is pushed to perform to the best of their potential and will be rewarded accordingly. As a result, there is a significant positive relationship between employee satisfaction and customer satisfaction (Brown & Lam, 2008:252). In addition to this specific finding, there is also a significant negative relationship between customer satisfaction and employee turnover (Hausknecht, Trevor & Howard, 2009:1072).

It has been determined that when customers cannot inspect a product themselves and are not able to establish the quality of a product, then quality claims made by the company is worthless, as customers would rather fall back on their relationship with the service-provider. It is essential that there must be a solid and loyal relationship built on trust between the customer and the service-provider in order for the customer to make a purchase decision (Yieh, Chiao & Chiu, 2007:268).

Therefore, the happier the employee is, the happier the customer will be, as the employee will feel challenged in his/her job and will therefore provide the best possible service.

3.7.5 Management

In Chapter 2 it was established that agricultural businesses has a unique supply chain relationship with the customers of the business as the customers are also the suppliers. In addition to being both customer and supplier, the customers are also the shareholders (owners) of the agricultural business. Due to these exceptional circumstances, agency theory will have an impact on the perception of the customer as

well (as the customer is also the shareholder). In terms of agency theory there is a relationship between an agent and a principal. In a business context, the principal is the shareholders of a company, while the agent is the management employed to ensure that the business is run and managed to the advantage of the principal. The cornerstone of agency theory is that the ambitions of the agent and the principal are distinctly different from each other. If management do not act in the interest of the shareholders, then this is referred to as agency cost (Firer, Ross, Westerfield & Jordan, 2008:11). As was established in Chapter 2, as a results of the different "hats" the customers of an agricultural business are wearing (those of customer, supplier and shareholder), the customer will have a definite perception of the management of the agricultural business. Therefore customers' perception of management is an indispensable driver of customer satisfaction to measure within this business context.
According to Ortmann and King (2007(a):55) agricultural "cooperatives experience greater principle-agent problems than proprietary firms due to 'the lack of capital market discipline, a clear profit motive, and the transitive nature of ownership'". The shareholders of an agricultural business might have a complicated relationship with the management of the agricultural business, as a high share price would indicate high profit margins made at the expense of the customers (from the viewpoint of the customer/shareholder). The unique nature of agricultural businesses thus lends itself to a more complex agency relationship than that of a traditional investor-oriented firm (IOF).

Trust plays a major part in agency theory, as explained by Singh and Sirdeshmukh (2000:163). As transactions with the business increase, either customer satisfaction or dissatisfaction (overall satisfaction) is imbedded in the consciousness of the customer and then "abstracted into cognitions of relational trust", or in the case of dissatisfaction, relational distrust. A decisive component of agricultural businesses is ensuring that agency costs are reduced and that agents act in the interest of principals. If not, this has a definitive impact on shareholder (customer) dissatisfaction (Ortmann & King, 2007(a):54). The author is of the opinion that the customers' perceived satisfaction or dissatisfaction with the performance of management can be a major driver of customer satisfaction and should, therefore, receive adequate attention, especially in agricultural businesses.

Management could have a significant influence on customer satisfaction, especially in the case of agricultural businesses, as the shareholder and the customer is the same person (Chapter 2). Since shareholders perceive agency cost to be an important component in supervising management, this view could also influence the customers of an agricultural business.

3.8 Conclusion

The intention of this chapter was to review relevant literature on the relationship management, as well as the relationship between customer satisfaction and the drivers of customer satisfaction, such as price, product, service, personnel and management. The chapter opened by discussing customer expectations and customer perceptions and relationship management. When there is a difference between what a customer expects and what the customer perceives to get, a customer gap emerges that is directly related to customer satisfaction. It is necessary to narrow the gap between expectations and perceptions in an effort to increase customer satisfaction. Before the latter part of the 1990s, customer satisfaction was only measured in terms of post-purchase satisfaction. Currently, overall satisfaction is used where previous experience satisfaction is measured, as well as satisfaction with regard to products and/or services. Customer expectations of products or services from a company form a critical part of customer satisfaction.

The importance of customer satisfaction cannot be stressed enough, as it has been shown to influence repeat buying, shapes word-of-mouth communication, lowers' consumers price sensitivity, has implications for customer recruitment, and ultimately affects shareholder value. Customer dissatisfaction could lead to complaint. Price, product, service, personnel and management are considered to be the drivers of customer satisfaction in this particular research study. Traditional customer satisfaction studies focus on the SERVQUAL method that concentrate on measuring the perceptions of customers with regard to service quality. The study under consideration

moved away from the traditional SERVQUAL method in an effort to simplify the study and test various other drivers of customer satisfaction.

The aim of Chapter 4 is to provide a review of relevant literature on the relationship between customer satisfaction, loyalty and profitability in an organisation.

CHAPTER 4

CUSTOMER SATISFACTION, LOYALTY AND PROFITABILITY

4.1 Introduction

The majority of businesses are concerned with satisfying both themselves and their customers. Customers are satisfied when they receive good quality products and services at fair prices, while the business would be satisfied if it is profitable (Helgesen, 2006:246). Customer satisfaction is dependent on the perceived value (that is, perceived quality compared to cost incurred by the customer) a customer attains from a product or service, the price of a specific product or service and also past, current and future anticipated experiences a customer might have. Traditional marketing focuses on the acquisition of customers while relationship management focuses on retaining existing customers. By retaining customers and increasing customer loyalty, customers continue making use of the products and/or services of the organisation and ultimately the organisational profitability should increase (Helgesen, 2008:51). Customer satisfaction should lead to several advantages to a business, such as increased loyalty, price inelasticity, retaining current customers by cutting them off from competitive efforts, reduced future transactions and failure costs, the enhancement of the business's reputation and a decrease in the cost of appealing to new customers (Fornell, Mithas, Morgesson & Krishnan, 2006:4). The present chapter aims to establish a correlation between customer satisfaction and achieving financial gains and growth. Firstly, customer relationship management is related to customer satisfaction and secondly customer satisfaction is correlated with customer loyalty, specifically in terms of repurchase intentions and customer retention (as an outcome of customer relationship management). Thirdly, the relationship between customer loyalty and customer profitability is explored and, after that, the progression from customer profitability to business profitability is analysed. The relationship between value and cost, share-of-wallet, as well as the various profitability measures is examined thereafter. The chapter closes with concluding remarks.

4.2 Customer satisfaction

Customer relationship management (CRM) are an important factor in establishing relationships with individual customers that would increase loyalty (Roberts-Lombard, 2011:3487). Customer relationship management therefore has an impact on how satisfied customers are and when customers are satisfied, they become more loyal, as was discussed throughout Chapter 3. According to Fornell, Mithas, Morgesson and Krishnan (2006:4), the more loyal a customer is to a particular business, the longer the customer would frequent the business and consequently the revenue would increase due to the constant support of the customer. It has been suggested in various studies that the longer a customer stays with a particular business, the more loyal that customer is and the more profitable the customer becomes to the business, as future cash flows are secured (Ranaweera, 2007:114).

4.3 Customer Loyalty

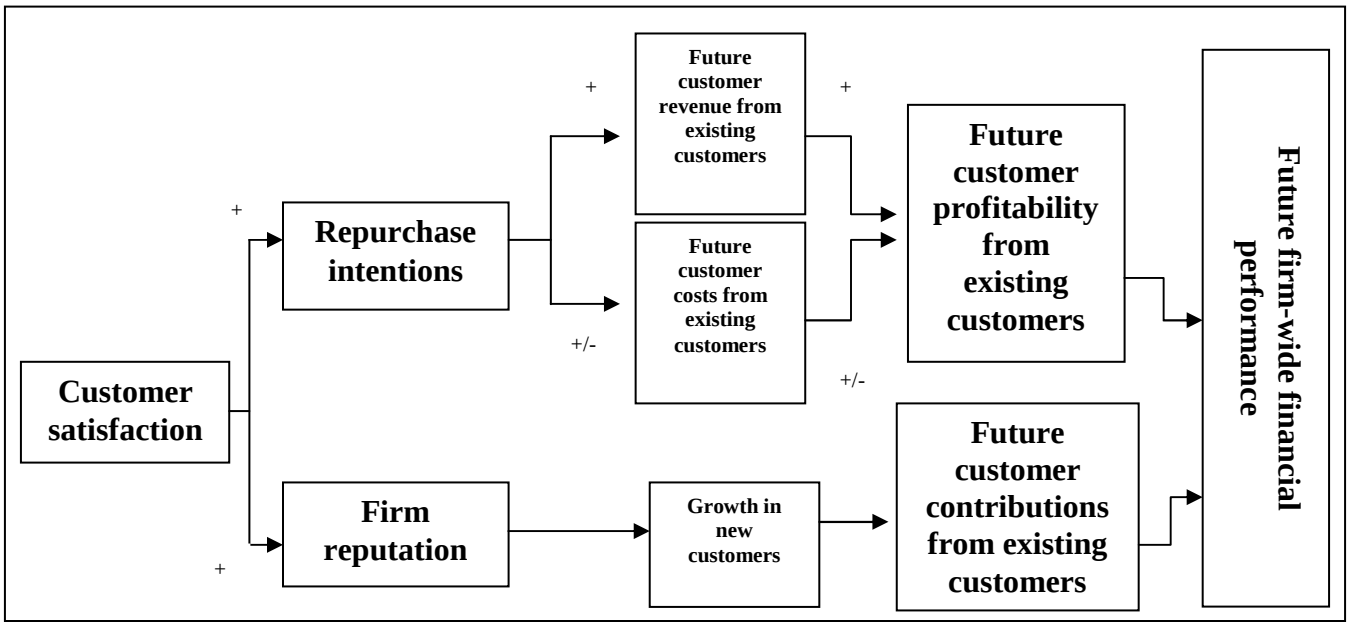
In establishing a relationship between customer satisfaction and customer loyalty, it is essential to consider repurchase intentions, as well as customer retention. These two factors are the result of effective customer relationship management. These issues were also briefly discussed in Chapter 3, but in this chapter a more detailed discussion is provided to indicate the progress from customer satisfaction to, ultimately, profitability.

4.3.1 Repurchase intentions

The more satisfied a customer is, the stronger the potential for repurchase intentions. A study done by Xerox researchers in 1996 found that customers that gave Xerox a five out of a 5-point scale on how satisfied they were, were six times more likely to use the company again compared to the individuals that marked a four on the 5-point scale. It therefore follows that the highly satisfied customers have (much) higher repurchase intentions than those individuals that are merely satisfied. This finding indicates that customer satisfaction can have a substantial impact of profitability (Zeithaml, 2000:78). The model in Figure 4.1 explains the link between customer satisfaction and financial

performance through increased repurchase intentions and enhanced business reputation.

Figure 4.1: The relation between customer satisfaction, repurchase intentions, enhanced reputation and financial performance



Adapted from Yu (2007:561).

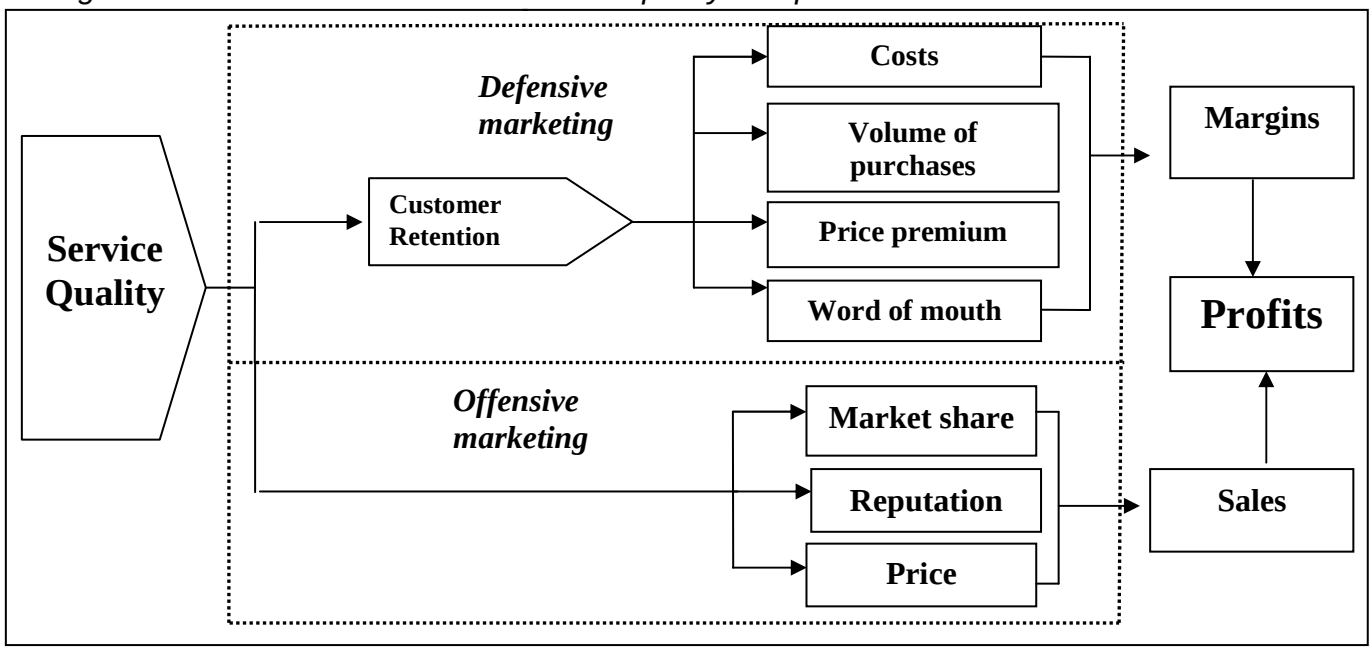
Figure 4.1 indicates that customer satisfaction leads to both an increase in repurchase intentions, as well as the reputation of the business. As repurchase intentions are improved, it also leads to an increase in the future revenues obtained from existing customers, as these customers would remain loyal to the business and support the business repeatedly. This would lead to an increase in future customer profitability and subsequently an increase in future financial performance. Also, an increase in repurchase intentions could have either a positive or negative effect on the costs associated with retaining existing customers. If customer satisfaction have an enhanced effect on repurchase intentions, this would - in the majority of cases - lead to a decrease in cost in holding on to the existing customers and when revenue increases, while costs decrease, this would lead to future customer profitability and ultimately future business profitability (Yu, 2007:561).

Customer satisfaction also has a positive effect on business reputation, which would impact efforts to reach new customers constructively. Surely, if new customers are attained due to increased business reputation, then future revenues will be acquired and this would impact positively on financial performance (Yu, 2007:561). These results are supported by Guo, Kumar and Jiraporn (2004:133), who explain that there are two ways in which customer satisfaction can affect sales. The first is that it is generally accepted that increased customer satisfaction leads to customer loyalty, while customer loyalty is assumed to lead to increased sales. Secondly, a business that has a high level of customer satisfaction would also develop a good reputation through word-of-mouth, and this could lead to acquiring new customers.

4.3.2 Customer retention

There are several ways in which customer retention could lead to increased profits. Firstly, by retaining customers a company could show a reduction in costs, as it has been established that it costs more to acquire new customers than to retain existing ones. Secondly, an increased volume of purchases is likely if the customer is satisfied with the specific business, product and or services provided. Thirdly, the business could charge premium prices if customers are loyal to the business and lastly, the retained customers could engage in increased word-of-mouth marketing. The following model is proposed by Zeithaml (2000:74) to illustrate the effect that customer retention has on profits.

Figure 4.2: The relation between service quality and profits



Adapted from Zeithaml (2000:74).

According to Zeithaml (2000:74) the model starts with a very important prerequisite for customer satisfaction, namely service quality. By providing service quality to customers, customer satisfaction is increased and this leads to customer retention. Keeping existing customers happy and retaining them are perceived to be a defensive marketing strategy. Customer retention is also a factor of customer relationship management, which is also referred to as a part of defensive marketing (Helgesen, 2008:51). On the other hand, by acquiring new customers though service quality, a business is employing an offensive marketing strategy. In an effort to link customer retention to increased profits, there are intervening factors, such as a decrease in costs to retain these existing customers, as a satisfied customer would more likely than not have the intention to return to the company. Also, the reality is that a customer that is happy with the business would very likely increase the volume of their purchases of the products or services of the business. Also, these retained customers might stay with the business even in the event of increased prices (price premiums being asked) and these retained customers are more likely to impart positive word-of-mouth messages. All four these factors could lead to increased margins, which in turn would lead to increased profits. On the offensive marketing side, by retaining customers a company could show a reduction in costs, and also lead to increased profits – as explained in

section 4.3.2 it costs more to acquire new customers than it costs to retain existing ones. Secondly, an increased volume of purchases is likely if the customer is satisfied with the specific business, product and or services provided. Thirdly, the business could charge premium prices if they are loyal to the business and lastly, the retained customers could engage in increased word-of-mouth marketing (Zeithaml, 2000:75). According to Yu (2007:556) an “enhanced reputation can further aid in introducing new products by providing instant awareness and this lowers costs of attracting new customers”. These three factors would lead to increased sales, which in turn would lead to increased profits.

Various studies have evaluated the effect of service quality on future revenues (cf. Fornell, 1992; Rust & Keiningham, 1994; Reichheld & Sasser, 1990; Anderson, 1996 and Anderson & Sullivan, 1993). It is the opinion of the author that the implication of customer satisfaction is a decrease in costs amongst other factors in an effort to increase profits. From that perspective, it is more costly to acquire new customers than to retain existing ones and the benefits obtained from increased customer satisfaction, namely increased sales, price premiums and positive word of mouth could all lead to a decrease in expenditure in an effort to attract more sales. Customer satisfaction thus leads to customer loyalty by increasing both repurchase intentions and maintaining relations with existing customers. The following section explores the relationship between customer loyalty and customer profitability.

4.4 Customer profitability

Most businesses aspire to satisfy customers to the highest degree, as it has been shown that customer satisfaction leads to customer loyalty, which in turn can lead to “increased purchase intentions, helps to secure future revenues, reduces the costs of future transactions, decreases price elasticity and minimises the likelihood that customers will defect” (Yu, 2007:557). The dominant view in research is that long-term customers (customers that have developed a relationship with the business over time) who are satisfied would be loyal to the business; they would generate more profit because (Ranaweera, 2007:113):

- They are accustomed to the service and use the service more;
- They are less price sensitive and thus, businesses can change more;
- They bring extra business through referrals; and
- They are more profitable because acquiring new customers is more costly than retaining them.

Customer profitability is also referred to as lifetime value, customer lifetime value, customer valuation, customer lifetime valuation, customer relationship value and customer equity. Customer profitability can be explained as the “net dollar contribution made by individual customers to an organisation” (Mulhern, 1999:26). In easier terms it can be said that customer profitability is the difference between the income earned from a customer, and the cost incurred by the business that is associated with the specific customer during a specified period (Pfeifer, Haskins & Conroy, 2005:14). Helgesen (2006:246) points out that the relationship between “satisfaction and profitability is perceived to be so self-evident that it is taken for granted by many”. It has been found that customer loyalty do indeed have a positive relationship to customer profitability, at a decreasing rate. This result can be explained by stating that customer loyalty has to be over a certain level before it will have a measurable impact on the profitability contributed by a specific customer (Helgesen, 2006:258).

4.5 Business profitability

Research done by Anderson, Fornell and Mazvancheryl (2004:181) found that there is indeed a strong positive relationship between customer satisfaction and shareholder value, indicating that an increase in customer satisfaction would lead to an increase in shareholder wealth. In more exact terms, a longitudinal study done by Gruca & Rego (2005:127) found that on average a 1-point increase (on a 10 point Likert-scale) in customer satisfaction relates to a $55 million in operating income for the following year. This specific study measured customer satisfaction in more than 200 companies of the Fortune 500 group and were represented in more than 40 industries, making this specific study a representative sample of the United States. Furthermore, the 1-point increase also results in a variance reduction of 4% in the future cash flows, leading to more stable cash flows, and therefore less risk. This result, therefore, indicates a

definite relationship between customer satisfaction and financial performance, as the primary goal of financial management is to increase wealth maximisation of the shareholders, measured in terms of the current share price (Firer, Ross, Westerfield & Jordan, 2008:10). To increase the current value of the share price, it is necessary to either increase future dividends, decrease risk or increase growth as illustrated in Formula 4.1 (Firer *et al.,* 2008:230):

$$P0 = D1 / (r - g) \qquad (4.1)$$

where

P0 = Current share price

D1 = Next dividend

r = required return

g = growth rate

The author is of the opinion that an attempt to increase the share price (and increase shareholders' wealth) at least one of the three variables had to change, namely an increase in future dividends - which relates directly to an increase in profit, a decrease in the required return which is directly related to the risk and an increase in the growth rate, which could be directly related to increased growth through increased volume of sales or new customers. Therefore customer satisfaction could increase shareholders' wealth, which is supported by the study done by Gruca & Rego (2005) that indicates that customer satisfaction leads to stable cash flows and less risk. Also, the studies (amongst others) done by Yu (2007) and Ranaweera (2007), which state that customer satisfaction leads to an increase in profits due to less price sensitivity of customers, increased referrals and a reduction in costs, could lead to both an increase in profit (and therefore dividends) and growth. In an effort to relate customer profitability and business profitability, it is necessary to discuss the relationship between value and cost, as well as share-of-wallet and the various profitability measures available.

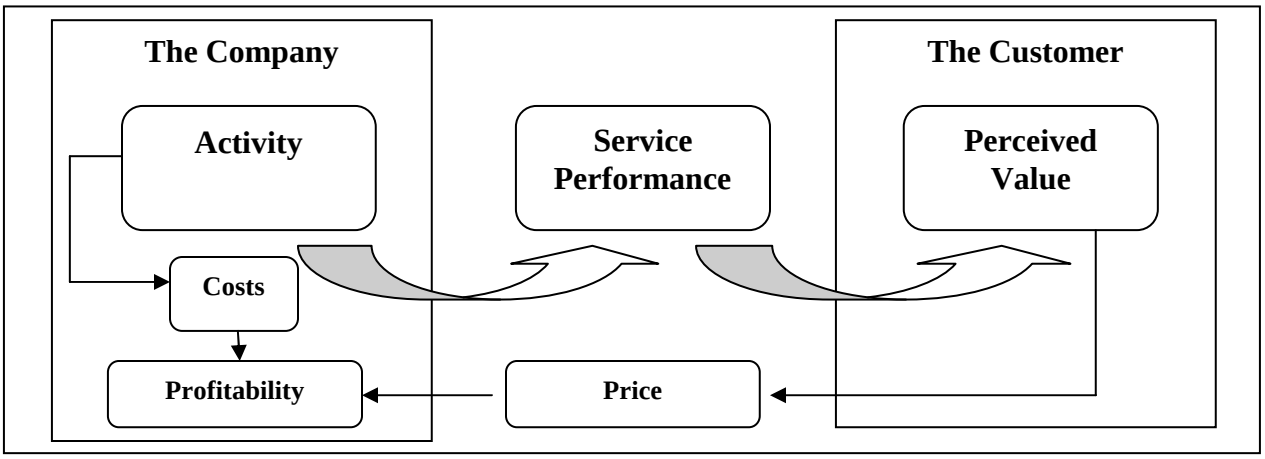
4.5.1 The relationship between value and cost

It has already been established that increased service quality leads to customer satisfaction, which in turn could decrease costs and increase profits (Zeithaml, 2000:74). However, it was also found that a business with a high level of customer satisfaction that has acquired new customers and have an increased level of revenue due to the increased customer satisfaction would need to invest more resources into the business in order to maintain the level of customer satisfaction. The need for increased resources could be due to (Guo *et al.,* 2004:134):

- A need for increased number of employees to offer the same level of services to the increased number of customers.
- A need to provide more product or service variations to meet the more diverse needs of the increased number of customers.

There are two simultaneous developments in the determination of business profitability. Firstly, the relationship between the perceived value the customer derives from the specific product or service the business provides and the price that the customer is willing to pay for this specific product or service according to the specific attributes (Kuo, Wu & Deng, 2009:888). Secondly, the business compares the price determined for the specific product or service and evaluates the cost-effectiveness of the activities the business has to perform in order to deliver the product or service to the customer: (Bechwati, Sisodia & Sheth, 2009:764).

Figure 4.3: The relationship between value and costs



Adapted from Guo, Kumar & Jiraporn (2004:132).

Figure 4.3 can be explained as follows: The business offers, for instance, a specific service to customers that would have a specific cost associated with it. The business provides the service from which the customer obtains a certain level of performance. The customer has attached a perceived value to the service provided to him/her compared to the price charged for the service. The customer might perceive the service to have a high value compared to the price paid (perceived performance is higher than price) or the customer can perceive the service to be of a lower value compared to the price paid (price is higher than perceived performance). Irrespective of how the business chooses to satisfy customers, the business would have to incur cost to implement and maintain customer satisfaction levels, such as “adding features to a product, improving performance of a product on various attributes, offering more services to customers, or offering better quality services”. There are two theories with regard to the link between customer satisfaction and costs. One theory postulates that it costs money to satisfy customers, while the other postulates that customer satisfaction leads to a reduction in costs (Guo, Kumar & Jiraporn, 2004:132).

These two theories, however, are not contradictory, as the initial expenses would be of a short-term nature, while the reduction in costs would only become apparent after a period of time has passed. Therefore, an important conclusion drawn is that satisfaction programmes is expensive for a business in the short-term, but that the long-term effects is financially beneficial (Guo, Kumar & Jiraporn, 2004:132). It can

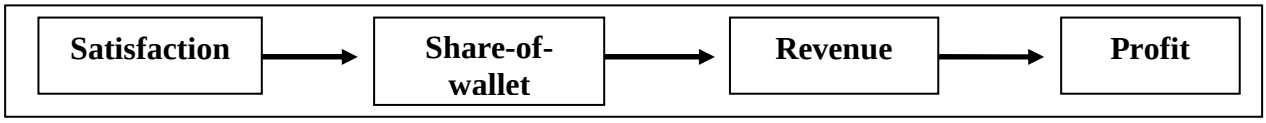
therefore be deduced that for the business to be profitable, the price the customer pay would have to be more than the cost incurred in offering the product or service. The customer would also keep on buying the product or service if he/she perceives the value to be high enough to justify the price. The customer therefore has to be satisfied with the perceived value.

4.5.2 Share-of-Wallet (SOW)

A term that has gained a great deal of research attention (Mägi, 2003; Keiningham, Perkins-Munn & Evans, 2003; Baumann, Burton & Elliott, 2005) is share-of-wallet (SOW). Share-of-wallet can be defined as the amount of business (percentage or share) of customers' expenses that goes to the business that is selling the product or service. It stands to reason that businesses want share-of-wallet to be as large as possible. Research has found that in most cases, a customer would rather change his/her spending with a particular business due to dissatisfaction than leave the business altogether. Therefore customer loyalty cannot be measured by only looking at customer retention. It is, thus, of great importance to businesses to ensure that customers spend their maximum share-of-wallet and this goal could be more important than simply retaining customers (Keiningham, Perkins-Munn, Aksoy & Estrin, 2005:173). There is thus a need for firms to focus on their relationships with customers (CRM), in an effort to create repurchase intentions and customer loyalty, which would lead to more spending by customers (Helgesen, 2008:51).

Research has mainly focused on customer satisfaction and the link to retaining customers. However, it seems that a key determinant of business profitability is retaining customers. It has been established that customer retention alone does not necessarily result in "loyal customers costing less to serve, paying higher prices for the same bundle of services, or marketing the company through word-of-mouth". To ensure profitability by retaining customers is reinforcing share-of-wallet spending by customers (Cooil, Keiningham, Aksoy & Hsu, 2007:68). Keiningham *et al.* (2005:174) propose that the link between customer satisfaction and profitability can be demonstrated conceptually as follows:

Figure 4.4: The conceptual model of customer satisfaction on customer profitability through share-of-wallet



Adapted from Keiningham *et al.* (2005:174).

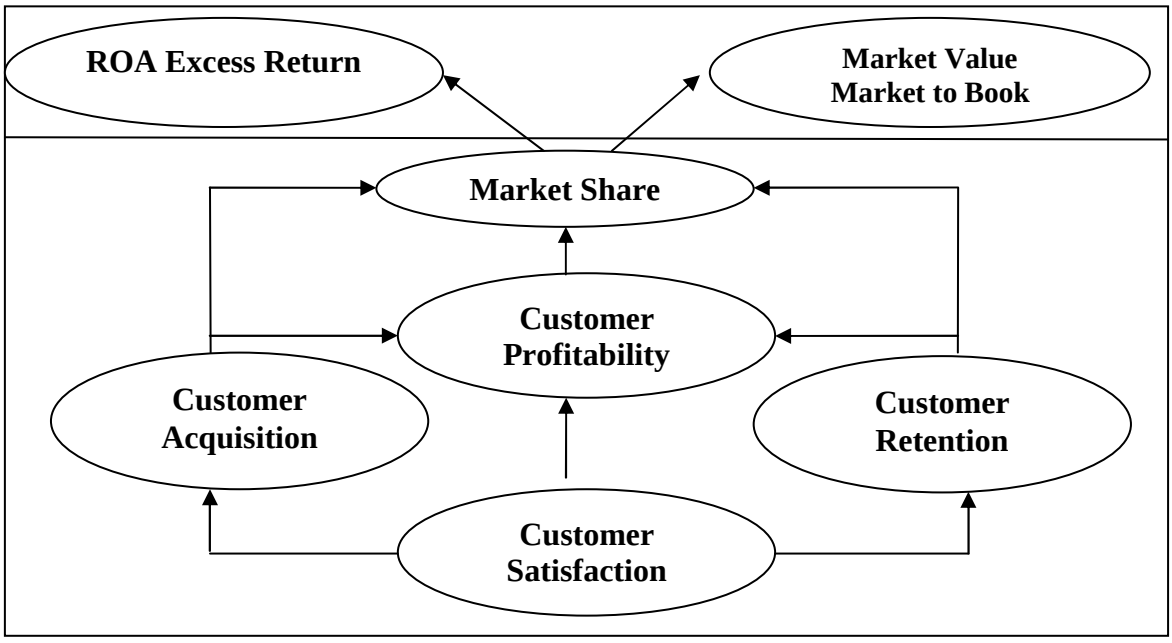
The results of their study showed that there is a distinct relationship between customer satisfaction and customer revenue through the mediating role of the customers' share-of-wallet. That means that if customer satisfaction increases, share-of-wallet will increase and consequently revenue. Also, there is a significant relationship between SOW and the company's profitability through the mediating role of revenue, which indicates that when share-of-wallet increases, revenue would increase and so would the profitability of the business. However, this is only true when it comes to profitable customers. An interesting result in this study indicates that when profitable and unprofitable clients were tested separately, an increase in revenue from profitable customers would lead to an increase in profitability, while an increase in revenue from unprofitable customers would actually decrease profitability of the business (Keiningham *et al.,* 2005:179). The implication of this result is that there is a definite positive relationship between satisfaction and share-of-wallet, but that the relation of SOW to profitability depends on the customer segment under consideration. It is therefore important to be able to distinguish between profitable and unprofitable customers, as an effort to increase revenue from unprofitable customers would only decrease the business's profitability. It is therefore important that companies do not treat all customers as equal, but are conscious of their share-of-wallet (profitability) behaviour. In a study done by Meyer-Waarden (2007:234) it was found that loyalty cards held by customers has a positive influence on SOW, meaning that possession of a loyalty card would have a positive effect on the company's share of wallet of that specific customer. When looking at an agricultural business where the customer is also the shareholder of this specific business, would ownership of the agricultural business not establish loyalty at a much higher level than a mere loyalty card? The study under consideration tested the customers of the agricultural business according to their

contribution (in Rands) in business to the agricultural business, therefore taking SOW into account.

According to Anderson, Fornell and Mazvancheryl (2004:173) customer satisfaction ensures customer retention, which in turn leads to the following outcomes:

- It secures future revenues.
- It reduces the costs of future customer transactions (such as one's associated with communication, sales and service).
- Net cash flows increase.
- A more stable customer base providing a relatively predictable level of future revenues.
- Customers keep returning to the business; and
- Shareholder value is positively affected as volatility and risk associated with future revenues are reduced.

Figure 4.5: Customer satisfaction as a leading indicator of financial performance



Adapted from Leo, Gani & Jermias (2009:344).

Figure 4.5 indicates that, eventually, customer satisfaction would lead to new customer acquisitions, as well as the retention of existing customers. In addition, these two factors would lead to an increase in customer profitability and also an increase in market share as existing customers are kept and new customers are acquired.

Increased market share leads to an increase in sales revenue and ceteris paribus, this would lead to an increase in profitability such as an increase in Return on Assets (ROA). The study did find that the relationship between customer satisfaction and an increase in ROA was statistically significant, but could not find statistical proof of a relation between customer satisfaction and the market value of the business (Leo, *et al.,* 2009:355).

SOW is, thus, an important factor to consider in connecting customer satisfaction with profitability. However, it is important to know your customers and whether they are profitable or not, because this positive relationship only pertains to profitable customers. Also, customer satisfaction leads to customer retention and acquisition which would lead to customer profitability and in due course business profitability. Apart from ROA, there are various other measures that assess financial profitability and/or performance.

4.5.3 Profitability Measures

There are various measures that can be used to calculate business profitability and/or performance. The measures that will be discussed in more detail are the ROA, Economic Value Added (EVA), growth in revenue, as well as the contribution to profit.

- ROA

It has been shown that if a business has a high level of customer satisfaction, this would increase the business's return on assets (ROA) in the next period. The ROA ratio measures net income to assets, therefore to increase the ROA it is necessary to increase net income relatively more than an increase in total assets. However, it is important to note that an increased investment in resources is necessary to maintain a high level of customer satisfaction, but the net income should increase to a higher degree compared to assets (Guo *et al.,* 2004:141).

The agricultural business under consideration has various business units that form part of the "umbrella" company. Although it was possible to obtain the net income of each

business unit, it was difficult to exactly allocate assets to the various business units, as some assets were shared between business units. The author is therefore of the opinion that ROA as a measure of profitability did not suit this particular research study.

- Economic Value Added (EVA)

According to Sharma and Kumar (2010: 201) EVA is any residual that is left, after the total cost of capital (debt and equity) is deducted from the return earned. The EVA thus indicates the total additional shareholder wealth created during a specific period. EVA can simply be described as the difference between the return on the total value of capital invested and the total cost of the capital invested. The formula is as follows:

EVA = Net operating profit – WACC x (Assets – Current Liabilities) (4.2)

WACC is the weighted average cost of capital, i.e. the cost (interest) associated with obtaining capital for the specific company (Chmelíková, 2008:56). For this specific research study, it was possible to obtain the net operating profit for the individual business units, as well as the WACC of the entire company; it would however be difficult to allocate certain assets and current liabilities to specific business units, as it is shared in certain cases. For this reason, EVA was not used as a profitability measure in this study.

- Growth in revenue/sales

The model proposed by Zeithaml (2000:74) indicates that the offensive marketing component of service quality leads to an increase in sales and ultimately more profit. Also, Keiningham *et al.* (2005:174) effectively illustrate the relation between customer satisfaction, share of wallet and an increase in revenue, which would ultimately lead to profitability. The third measure of profitability is therefore growth in revenue or sales during a specified period. The study under consideration did not make use of this specific measure as the particular industry is unstable and dependant on various external factors such as weather and harvest success.

- Contribution to net profit

Net profit can be described as gross profit minus expenses and any financing expenses (Firer, Ross, Westerfield & Jordan, 2008:55). It is the viewpoint of the author that due to the unique nature of the industry, the business units operating under a large “umbrella” company, and the different sizes of the various business units, it was decided to calculate each business units’ average contribution towards net profit for a five year period and assess whether there was a relationship to the various business units’ level of customer satisfaction.

4.6 Conclusion

The aim of the chapter was to confirm an association between customer satisfaction and business profitability. This was done by establishing a relationship between customer satisfaction and customer loyalty, which was verified by having a positive effect on repurchase intentions and customer retention. It was found that when a customer is loyal the profitability the customer provides to the firm would increase (customer specific revenues would be less than customer specific costs). It was found that an initial outlay of expenses would be needed in order to increase customer satisfaction, but that in the long run costs due to customer satisfaction would decrease. Customer profitability ultimately leads to business profitability, as can be explained by the relationship between the perceived value of a product or service and the cost the business has to surrender in order to keep the customer satisfied. Also, the link between customer profitability and business profitability is established by confirming that a business has to maximise share-of-wallet of each customer in an effort to increase profitability and that SOW is positively related to businesses with loyalty programmes. Firm profitability can therefore be increased by maximising customer satisfaction, which, in turn, will lead to customer loyalty, customer profitability and in due course business profitability. Chapter 5 provides details with regard to the method used in the research study.

CHAPTER 5

RESEARCH METHODOLOGY

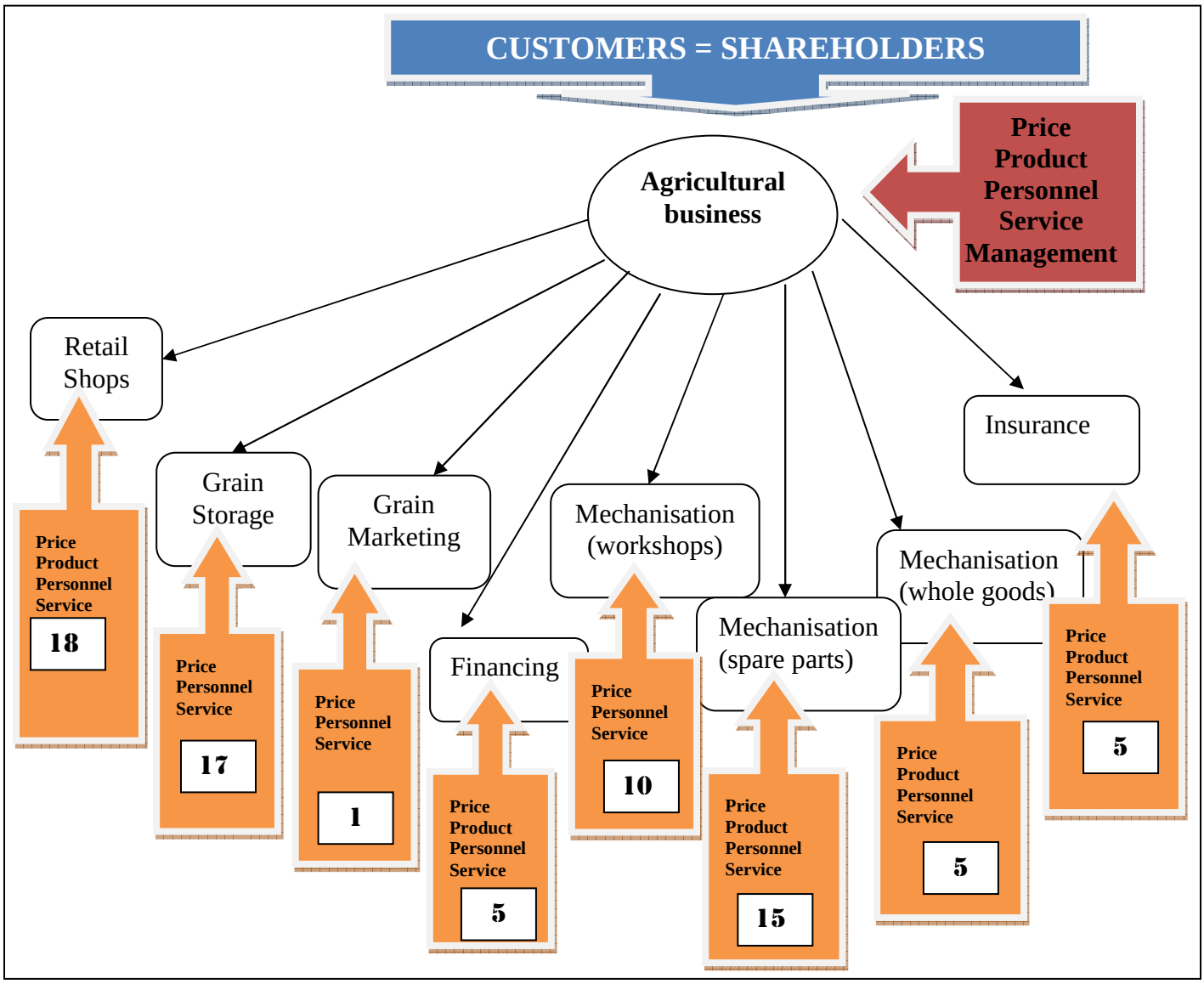
5.1 Introduction

Research will be defined here as a scientific method of investigating the truth about a certain subject, problem or phenomena and is accurate and objective (Zikmund, Babin, Carr & Griffen, 2010:5). The research process is systematic and methodical and the main aim is to increase knowledge. The chapter opens with a graphical representation in section 5.2 of the variables tested in the study. This chapter further aims to provide specific and relevant information on the research process undertaken, with specific reference to the various steps taken in conducting the research. The chapter closes with concluding remarks.

5.2 Graphical Representation

Figure 5.1 provides a graphical representation of the research study under consideration. The core of the study is the agricultural business and the customers of this business that make use of the various business units and their satisfaction with the business units individually, as well as the business collectively. This specific agricultural business consists of various business units that form the agricultural business as a whole. Each of these business units has several drivers of customer satisfaction innate to the unit. For the majority of the business units, these drivers are price, product, personnel and service - except in the case of *grain storage*, *grain marketing* and *mechanisation (workshops)* where there are no products evident, only service. The customers of the agricultural business will therefore have a level of satisfaction that relates to the various business units, as well as to the drivers of the business units.

Figure 5.1: The agricultural business with various business units and drivers of customer satisfaction



Also, the customers would have a level of satisfaction pertaining to the overall business, of which there are several drivers of customer satisfaction. These drivers are the same as that of the business units, although management of the agricultural business is also included as a driver of customer satisfaction. The graphical representation also indicates the customers (shareholders) of the agricultural business as the ultimate owners at the top. This is a unique opportunity to test the customer satisfaction of a group of customers that are also the shareholders of the business and in some cases also supply the organisation with various outputs (for instance, grain).

Very importantly, each business unit in this agricultural business is managed as a business on its own that is part of this big “umbrella” organisation. The customers make use of the various business units to varying degrees, but the pool of customers remain the same. Also, each business unit consist of numerous branches or trade points that form part of the overall business unit. For instance, this specific agricultural business has 18 retail shops throughout their service area.

The customers using the business units are also business owners of their own (farms), and therefore operate on a business-to-business basis. The result, therefore, is that farming businesses (the customers) make use of the various business units (operated as distinct business) that forms part of a larger, overarching company.

The various business units (for the purpose of this study) can be defined as follows:

- Retail shops (18 service points): trade points that provide a variety of agricultural products such as animal feeds, seeds, fertilizer, building materials, general hardware, equipment, gardening equipment and agricultural supplies.

- Grain storage (17 service points): the business unit stores grain on behalf of the producers in concrete silos. The grain is graded, sifted, dried and stored and then kept in quality condition until such time as it is sold.

- Grain marketing (one general service point): the business unit trades with grain on behalf of the producer to ensure price stability, marketability and insurance of the product and the transportation of the grain to the buyer. The brokers in these business units enter into contracts and facilitate transactions on behalf of the producer.

- Financing (5 service points): this business unit provides customers with services such as monthly loans for smaller purchases, production and live stock financing to assist the customer in producing a crop or purchasing live stock, as well as instalment and other loans to customers to assist them in their farming operations.

- Mechanisation (workshops) (10 service points): the workshops provide services to the customers to assist them with the repair and maintenance of essential agricultural implements, equipment and vehicles by trained mechanics.
- Mechanisation (spare parts) (15 service points): this business unit sells essential spare parts of agricultural implements, equipment and vehicles to customers.
- Mechanisation (whole goods) (5 service points): this business unit supplies the customers with new as well as second-hand agricultural mechanical needs, such as tractors, implements and equipment.
- Insurance (5 service points): the insurance services and products include crop insurance, multi-risk insurance, as well as medical, life and short-term insurance for customers.

5.3 Business Research

Business research is research that primarily aims to solve problematic issues within areas such as accounting, finance, management and marketing. This specific research study focuses on customer perceptions of and/or satisfaction with various business units in the agricultural business, as well as the link to profitability. The study therefore, will mainly be focussing on the marketing and, to a lesser extent, the finance field within business research. Business research is a process of “idea and theory development, problem definition, searching for and collecting information, analyzing data, and communicating the findings and their implications” (Zikmund *et al*., 2010:5). Business research uses scientific methods to explain events or trends within a business environment. The business research process is discussed in the next section.\

5.4 The Business Research Process

Various authors (Hussey & Hussey, 1997; Sekaran, 1992; and Zikmund et al., 2010) disagree somewhat on the number of steps within the business research process, as well as the steps themselves. Mostly, the specific steps refer to the same topic, but

some topics are incorporated into one step, while other authors would rather provide each topic with its own step. According to Zikmund *et al.* (2010:63) there are six simplified steps that deal with the entire process. From Figure 5.2 the following stages in the research process can be identified, namely:

Stage 1: Problem discovery and definition

Stage 2: Planning the research design

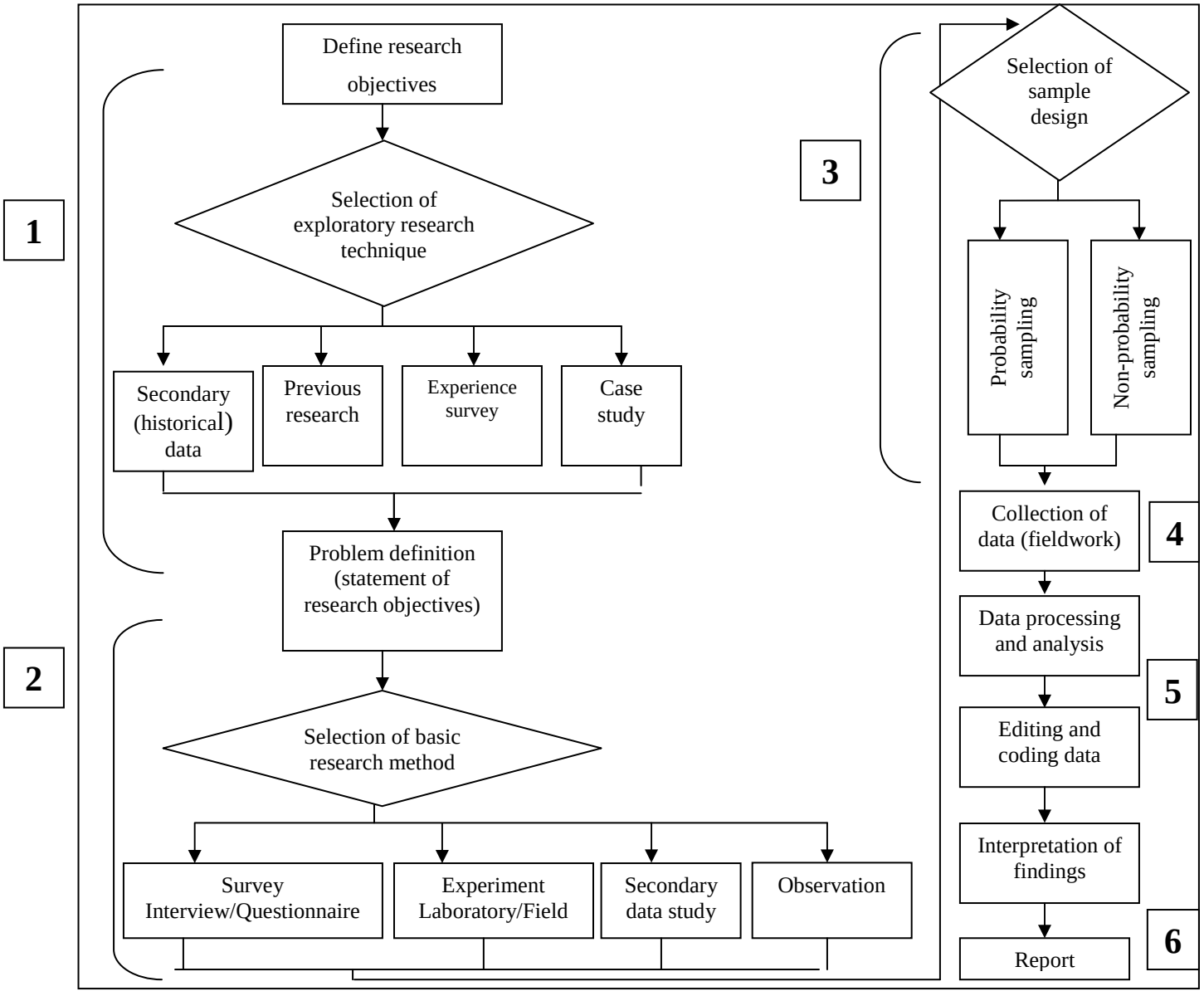
Stage 3: Sampling

Stage 4: Data gathering

Stage 5: Data processing and analysis

Stage 6: Drawing conclusions and preparing report

Figure 5.2: Zikmund's research process



This research study will be described according to the stages of Figure 5.2

5.5 Stages in the Business Research Process

The following section will consider the six steps in the business research process.

5.5.1 Stage 1: Problem discovery and definition

The first stage in the business process is ascertaining the research objectives by stating or defining the problem or issue that will be researched.

5.5.1.1 Problem Statement

Given that this study is of a quantitative nature, it is essential that the design of the problem statement is also quantitative in nature. It is therefore necessary to identify the variables inherent within the specific research study (both dependent and independent variables), the measurement (survey, experiment, etc.) with which the variables will be tested, as well as the intent of using the variables (to relate, compare, etc.) (Bryman & Bell, 2007:356). The focal point of the problem statement of this specific research study is the understanding that within a business there are various drivers of customer satisfaction such as price, product, service, personnel and management. In an agricultural business with various business units and customers that are also the shareholders of the company, the value of customer satisfaction is amplified. It is, therefore, imperative to determine the relationship between the drivers of customer satisfaction, the business units and the agricultural business and the link with profitability.

5.5.1.2 Research Objectives

The primary objective of this research study is to determine the relationship between the drivers of customer satisfaction (price, product, service, personnel and management) of various business units and the profitability of these units, and to determine the impact of these variables on the customer satisfaction of the company. The secondary objectives support the primary objective and are as follows:

- To conduct a literature review on the background of the agricultural industry in South Africa with specific reference to the unique supply chain relationship between the agricultural businesses and farmers.
- To conduct a literature review on customer relationship management and the drivers of customer satisfaction, such as price, product, service, personnel, management and business units within an organisation.
- To conduct a literature review on the relationship between customer satisfaction, loyalty and profitability.
- To determine which of the drivers of customer satisfaction have the biggest impact on customer satisfaction of the overall company.
- To determine whether the best performing or the worst performing business units have the biggest impact on overall satisfaction.
- To determine if the frequency of the use of the different business units affect the overall satisfaction of the agricultural business.
- To determine whether the perception of performance of customers of the business units has an influence on profitability.
- Develop a framework from the above results in order to aid in enhancing customer satisfaction in agricultural businesses.

Due to the unique nature of the research study and the need for a theoretical contribution on customer satisfaction of agricultural businesses and their business units, the study also aim to evaluate the following hypotheses:

Hypothesis Statement Number 1:

H0: There is no single business unit that can significantly influence overall customer satisfaction of an agricultural business.
H1: There is one or more business unit(s) that can significantly influence overall customer satisfaction of an agricultural business.

Hypothesis Statement Number 2:

H0: There is no single driver of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business.
H1: There is one or more driver(s) of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business.

Hypothesis Statement Number 3:

H0: There is no single driver of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.
H1: There is one or more driver(s) of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.

Hypothesis Statement Number 4:

H0: There is no significant relationship between the frequency with which business units are used and the satisfaction of customers.
H1: There is a significant relationship between the frequency with which business units are used and the satisfaction of customers.

The second step in the business research process is to choose and plan a research design that will assist in providing a solution to the problem statement and achieving the research objectives.

5.5.2 Stage 2: Planning a research design

Hussy & Hussey (1997:9) propose that research can be classified according to four criteria namely, the purpose of the research, the research process, the logic of the research and the outcome of the research. The following table provides a summary of the various bases of classification and the type of research associated with that specific basis:

Table 5.1: Bases of classification of the research design

Basis of classification	Type of research
Purpose of the research	Exploratory, descriptive, analytical, predictive research
The research process	Quantitative or qualitative research
Logic of the research	Deductive or inductive research
Outcome of the research	Applied or basic research

Adapted from Hussey & Hussey (1997:10).

A descriptive research study aims to determine and describe the different characteristics of the variables within a specific study (Ethridge, 2004:24); for instance, the age, gender, race or educational level of a particular group of people, such as, the employees in a company. Analytical research is an extension of descriptive research, as the researcher aspires to analyse or explain why a certain issue or problem occurs (Collis & Hussey, 2009:6). An important part of analytical research is to identify and/or control the variables within a particular research study, to determine the causal link between the different variables (Girod-Séville & Perret, 2001:19). Due to the nature of this specific research study, it can be classified as analytical/explanatory research.

5.5.2.1 The research process

The research process can be classified as either quantitative or qualitative. A quantitative approach in research involves a method of testing or researching events or trends from an objective perspective, by making use of numerical data (Thomas, 2004:19). This type of research consists of data that are generally generated by making use of questionnaires (Bryman & Bell, 2007:159). This specific research study made use of questionnaires with Likert-scale type questions to test the perspectives of the customers and therefore the research is quantitative in nature. Also, financial statements of the respective business units are used to compare with the satisfaction of the customers, which is also deemed as quantitative.

5.5.2.2 The logic of the research

Deductive research is research where researchers derive a specific hypothesis from an existing theory and then collect relevant data to test the hypothesis (Hair, Bush & Ortinau, 2000:290). It can therefore be said that the deductive method can be used when “moving from the general to the particular” (Collis & Hussey, 2009:8). Therefore, by using previous studies on general customer satisfaction and literature, it is possible to focus specifically on agricultural businesses and the agricultural industry. The specific industry has not received a great deal of research with regard to this subject and the researcher is of the opinion that due to the unique nature of the industry and the supply chain relationship, that this study is vital in understanding the management of agricultural businesses and their customers. This study can be classified as being deductive, as relevant data is collected to test a theory, albeit a well researched theory, but from a different view-point.

5.5.2.3 The outcome of the research

The outcome of the research can be either applied or basic research. Applied research is when researchers try to find solutions to a specific problem or question (Ethridge. 2004:20). Applied research aims at “finding solutions to specific concerns or problems facing particular groups of people, by applying models or theories developed through basic social research”. Basic research, on the other hand, has the purpose to contribute to human knowledge on a particular subject by increasing and advancing understanding (Bless & Higson-Smith, 2000:153). The research study under consideration can be characterized as applied research.

5.5.2.4 Research method

There are various research methods or techniques available to collect relevant data. These include experiments, observation, interviews, action research, case studies, secondary data studies and questionnaires (surveys). The chosen method should be directly related to the type of research undertaken (Bless & Hison-Smith, 2000:100).

A case study can be described as an intensive investigation into a certain organisation, setting or phenomena where the researcher provides an in-depth clarification of the

specific situation and/or circumstances (Bryman & Bell, 2007:63). A definite advantage of case studies is that it provides a great amount of precise detail about a certain situation, group or organisation. The major disadvantage of this method of research, however, is that sometimes these findings cannot be generalised, as it is only applicable to that specific case. This specific research study is not being classified as a case study, even though one organisation is intensively investigated. The reason is that the customers (farmers) making use of the various business units, which operate as businesses themselves. Therefore, the total response of 345 customers is regarded as businesses that deal with the various business units. It is therefore the opinion of the researcher that the business units are regarded to be smaller businesses that operate under one “parent” organisation and therefore the study is not considered to be a case study method of research, but rather a large collection of business-to-business research.

Secondary information is basically information that has been gathered and communicated at least once before. Researchers use secondary information sources to reinterpret the information and apply it to their current situation, problem or hypothesis (Hair *et al.,* 2000: 57).

This research study did make use of secondary data for the literature review. A literature review is necessary to explore and analyse the “existing body of knowledge” on the specific subject (Collis & Hussey, 2009:10). The secondary sources used in the literature study consisted of relevant books, articles, journals, published report, unpublished PhD theses and internet sources.

A survey normally consists of questionnaires with a list of questions aimed at collecting relevant data from the selected sample of respondents. (Bryman & Bell, 2007:56). According to Hair *et al.* (2000:440) a questionnaire is a formalised “set of questions and scales” with the purpose to provide the researcher with primary raw data. When deciding on a specific method of distributing questionnaires, one of the important aspects to consider is the cost aspect. There are various distribution channels a researcher can follow with its own strengths and weaknesses:

Table 5.2: Strengths and weaknesses of distribution channels

Method	Strengths	Weaknesses
By post	Relatively inexpensive, easy to administer	Low response rate
By telephone	Some personal contact, high response rate	Biased towards people with a telephone
Face-to-face	High response rate, can ask complex questions	Expensive, time consuming

Adapted from Hussey and Hussey (1997:163).

This particular research study made use of mailed questionnaires. The advantages of this particular method also include the fact that a large proportion of the population can be reached, relatively easily and cheaply. Also, respondents can remain anonymous and therefore would be more honest in their answers. On the other hand, the disadvantages should also be taken into consideration. It could be difficult to interpret some respondents' answers and it is almost impossible to determine whether the respondents understood the questions in the questionnaire. Also, some respondents do not make the effort to complete the questionnaire (low response rate) and those filling in the questionnaire might be interested in the specific topic and not representative of the population (response bias) (Bless & Higson-Smith, 2000:112).

In summary, the purpose of the research is explanatory; the research process is quantitative; the logic behind the research is deductive and the outcome of the research is applied research. The research method used to collect primary data is a mailed questionnaire, while secondary sources are used to develop the literature review.

5.5.3 Stage 3: Sampling

The population of a research study is the specific group that is of interest to the researcher. However, in most cases, to test the total population would be too time-consuming and expensive, therefore it is needed to select a representative sample of the specified population (Bryman & Bell, 2007:182). This particular research study did not employ any of the various sampling methods, but instead it was decided to use the

entire population that provide more than R100 000 volume of business to the agricultural business, therefore, the census approach was used. The entire population was approached by way of mailed questionnaires. The population in this study was all active customers of a major agricultural business in central South Africa. The total population was 963 customers and a total of 345 useable questionnaires were received. The response rate was thus 35.8% of the total population. The reason why only one agricultural business was chosen was that the “umbrella” organisation consist of several business units (managed and administered as independent businesses) that is used by the same pool of customers (to varying degrees). These customers are also businesses (farms), therefore the same pool of customers (businesses) make use of varying businesses within the “parent” organisation. From that perspective it is clear that it is not just one business being investigated, but a host of business-to-business analyses.

5.5.4 Stage 4: Data gathering

In this study a pilot study was first undertaken. To gain familiarity with the problem, preliminary research needs to be done before a model or design can be developed to investigate and understand the occurrence or trend completely (Sekaran, 1992:95). The pilot study involved the completion of questionnaires of the top 20% of individuals/farmers from another major agricultural business in the Free State. These individuals are responsible for approximately 80% of the revenue of the business. The objectives of the pilot study were to test the questionnaire to determine if adequate information was obtained from the respondents and to ensure that all the respondents interpret and understand all the questions in the same manner.

As mentioned in section 5.5.3, this specific research study made use of mailed questionnaires to collect the relevant raw data needed to answer the research objectives. This section will discuss the questionnaire design as well as the procedure followed in gathering the primary data.

5.5.4.1 Questionnaire Design

The questions used in the research study followed from the objectives and were aimed at obtaining information on the customers (farmers) of a particular agricultural business with regard to their perceptions, satisfaction and views toward the company, the various business units and the drivers of customer satisfaction. All of the respondents were active customer of the agricultural business that make use of the facilities regularly and the researcher are therefore of the opinion that they would have adequate knowledge and perceptions to answer the questions effectively. All of the principles in compiling an effective questionnaire (Mellville & Gooddard, 1996:43, Hussey & Hussey, 1997:165, Hair *et al.,* 2000:443, Cooper & Schindler, 2006:378) were followed in the development of the questionnaire.

The main types of questions asked in a questionnaire can either be open-ended or close-ended questions. Open-ended questions are questions where respondents answer in their own words, while close-ended questions give the respondent a choice (predetermined alternatives), either on assigning a numerical score or ranking (Melville & Goddard, 1996:43). Close-ended questions are a convenient way to collect quantitative raw data and this data can be analysed more easily than in the case of open-ended questions (Bryman & Bell, 20077:260). The majority of the questions asked in this research study were closed-ended questions; and the table below provides more information on the various types of closed-ended questions.

Table 5.3: Types of closed-ended questions

Questions	**Description**
Multiple choice	The respondents must select their answer from a list of predetermined responses or categories. A drawback of this type of question is that sometimes the answers do not accurately represent the opinion of the respondent and the respondent must choose the answer closest resembling their own.
Likert-scales	The question is turned into a statement and the respondent has to indicate on a scale how much he or she agrees or

	disagrees with the specific statement.
Ranking	Respondents are asked to rank a list of items in order of importance. This question could be a difficult question to answer as some respondents might not understand what is expected of them.
Classification	This type of question is normally asked to provide information with regard to the respondents' age, gender, occupation, etc.

Adapted from Hussey and Hussey (1997:171).

The following table provides more information with regard to the types of questions asked in the research study:

Table 5.4: Types of questions in research study

Question	**Type of Question**
Question 1	Multiple-choice question
Question 2 – 5	Classification question
Question 6	Multiple-choice question
Question 7 - 16	9 point Likert-scale question. Alternatives ranged from very bad to very good.
Question 17 and 18	9 point Likert-scale. Alternatives ranged from not very important to very important

From the table above it is clear that the majority of questions used in the case study were Likert-scale close–ended questions. The reason behind using a 9 point Likert-scale is to divide the answers into three broad categories, namely *poor, average* and *good*. Within each broad category, the respondent had a choice of three possible answers.

The sequence of questions should encourage the respondent to "commit" to the questionnaire and ultimately complete it to the best of their ability. It is therefore essential that earlier questions are not personal or ego-threatening. If so, then the respondent might decide to discontinue or terminate the process (Cooper & Schindler,

2006:378). There were no sensitive questions present in the questionnaire, but general classification questions were asked first. Thereafter Likert-scale questions were asked relating to the respondents satisfaction with regard to the various business units, the overall company and the drivers of customer satisfaction within each business unit.

The questionnaire was titled “Satisfaction Survey: XXX Clients” and the layout of the questionnaire was as follows:

Question 1: was a multiple choice question where respondents had to indicate their main farming activity.

1. What type of farming activities do you practice? Choose one option from the list.	
1(a). Grain only	
1(b). Mainly grain with live-stock (cattle, sheep, stut, game, milk, etc.)	
1(c). Live-stock only (cattle, sheep, stut, game, milk, etc.)	
1(d). Mainly live-stock (cattle, sheep, stut, game, milk, etc.) with grain	
1(e). Even split between grain and live stock	

Question 2 – 4: consisted of classification questions on farming experience, age, specific ward number, as well as the town/branch that the respondent belongs to.

Question 5: was a multiple choice question where respondents had to indicate how often they visit a specific business unit, if at all. The format looks as follows:

5. Please indicate how often you use the following XXX services.				
	Not available	Often	Sometimes	Never
5(a). Shops (retail)				

Question 6 – 16: were Likert-scale type questions where respondents had to indicate their satisfaction level with regard to various business units and factors. Firstly, question 6 aimed to determine the satisfaction level of the respondents towards each business unit. The format looked as follows:

6. How would you rate the overall performance of the following divisions? A 1 means very poor and a 9 means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N.A
6(a). Shops (retail)										

The purpose of Question 7 was to measure the satisfaction level of each of the various drivers of customer satisfaction for the overall company, namely price, product, personnel, service and management. Questions 8 to 16 request the respondent to indicate his/her satisfaction with regard to specific questions related to each business unit. For instance:

SHOPS (RETAIL)										
8. The following statements deal with the service you say you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. A 1 means very poor and a 9 means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N.A
8(a). Competitiveness of XXX prices										
8(b). Availability and quality of products										
8(c). Competence of staff										
8(d). Effectiveness of service (fast, friendly, correct)										
8(e). Effectiveness of shop manager										

Respondents had the choice of a 9 point Likert scale for Questions 5 to 16, where they could indicate whether they perceived the performance of the specific business unit or driver as poor, average or good. Each classification was also divided into three options, providing the respondent with a bigger choice.

The last two questions (Question 17 and 18) were also Likert-scale questions. The only difference was that respondents had to indicate what they thought the goals of the agricultural business should be (Question 17), as well as what the goals of the agricultural business currently is (Question 18). The choices available for the respondents varied from *not important* to *average* to *very important*. Again, each classification was divided into three options as presented below:

What, in your opinion, SHOULD the goals of XXX be? Please rate to what extent the goal should be part of XXX. A 1 means not important at all and a 9 very important.									
	Not important			**Average**			**Very important**		
	1	2	3	4	5	6	7	8	9
1. Sustainable return on the share price									
2. To provide competitive services to the farmer (quality and price)									

3. To maximise the profit									
4. To improve the profitability of the farmer on the farm									
5. To provide affordable and quality products									
6. Involvement with the community									

5.5.4.2 Primary Data Collection Procedure

The following steps were taken to collect the primary data:

- The Board of Directors of the agricultural business were contacted and a meeting was set up to discuss the project. During this meeting the purpose of the research was reviewed and permission was obtained to conduct the research study with the customers of the specific agricultural business
- A list was obtained from the agricultural business with the names and contact details of all the active customers that contribute R100 000 and more to the agricultural business. These customers were then grouped into three distinctive groups namely small customers (contributing between R100 001 and R250 000), medium customers (contributing between R250 001 and R650 000) and big customers (contributing more than R650 001).
- A covering letter from the CEO of the agribusiness to explain the relevance of the study and to ensure complete anonymity, a questionnaire, as well as a return envelope was sent to each of the 963 active customers. A small modification was made on each of the three main groups' questionnaires to be able to distinguish between small, medium and big customers when the questionnaires were returned.
- Each of the different ward directors were contacted to encourage the customers to complete the questionnaires and return it.

The following table provides the responses from the three main groups:

Table 5.5: Three main group responses

Size of the business	Number	Percentage
Small (R100 000 – R250 000)	134	38.8%
Medium (R250 001 – R650 000)	115	33.3%
Big (R650 001 +)	96	27.8%
TOTAL	**345**	**100%**

The total responses received from the 963 active customers were 345. This study thus had a total response rate of 35.8%. As can be observed from the table above, the three groups are relatively equally represented. The original pilot study only examined the customer satisfaction of the top 20% customers.

5.5.5 Stage 5: Data processing and analysis

Data analysis is the process of determining if there are any consistent patterns in the data (Bless & Higson-Smith, 2000:137). Due to the nature of this research study (quantitative), the focus will be on exploratory data analysis. Data analysis forms a major part of a research study and the data should therefore be interpreted correctly and edited in such a way that the raw data provides the reader with the essence of the research (Thomas, 2004:204). The process of analysing the data took place as follows:

- The questionnaires were edited by the researcher to ensure the completeness of the questionnaires in order to certify that all the relevant questions have been answered accurately (Bless & Higson-Smith, 2000:120).
- The questionnaires were then coded, whereby a numerical score for each answer was given to ensure the uniformity of the data being keyed into a computer programme.
- All of the relevant questionnaires (with each questions' numerical answer) were entered into Windows Excel and once completed, copied into SPSS (Statistical Software Programme).
- The reliability and validity of the research instrument were tested by making use of Cronbach's alpha coefficients for the former and an exploratory factor analysis for the latter.

- The frequencies and percentages of the demographics (type of customer, the size of the customer, number of years' experience and the age of the customer) of the respondents were calculated.
- The descriptive part of the analysis focussed on providing frequencies and percentages of each question in the questionnaire. Also, cross-tabulation calculations were drawn between each question in the questionnaire and the size of the customers (small, medium and small) and the different types of farmers (mainly grain and mainly live-stock).
- The secondary objectives were reached by calculating the Pearson correlation coefficient (r), as well as the coefficient of determination (R^2) to determine firstly the correlation between variables and secondly, to determine the impact the variables have on each other.
- Linear regressions were computed by making use of the Beta coefficient to determine which of the independent variables have the biggest influence on the dependent variables.
- T-tests were used to determine if there were any statistically significant differences between two groups of variables. This specific test is used when the means of two groups are compared to each other.
- A one-way ANOVA-analysis was conducted to compare two or more means by using the F-distribution.
- Tukey's post hoc tests were used in conjunction with the ANOVA calculation to determine if means are statistically significant from each other.
- Quantitative data from the financial statements of the various business units were used to compare their average contribution over four years' and thereafter the average perceived performance of the business units were compared. The results were compiled into a graph.

It was also essential to determine the reliability and validity of the research study, which will be discussed next in detail, as well as the types of statistical analyses used to reach the objectives of the study.

5.5.5.1 Reliability

Reliability refers to whether a specific measuring instrument will provide the same results if it is used repeatedly (Drucker-Godard, Ehlinger & Grenier, 2001:201). Two techniques for reliability will be discussed.

- Test-retest approach

By administering the same instrument or measure to the same group of subjects at a later period would constitute the test-retest reliability approach. If the results are closely related between the two tests, then the instrument would be highly reliable (Mellville & Goddard, 1996:42). The answers of the two tests are correlated with each other (correlation coefficient) (Collis & Hussey, 2009:204).

- Internal consistency

Internal consistency is a technique used to determine whether a specific measure will provide the same answers every time the measure (questionnaire) is administered. Cronbach's alpha is generally used to measure the coherence of each question and is calculated when all of the respondents' answers are combined to form an overall score. The alpha will then indicate whether the instrument is reliable or not (Bryman & Bell, 2007:163). A calculated score (alpha) will generate an answer between 1 and 0, where 1 is perfect internal reliability, while 0 is no internal reliability. Care should be taken when interpreting Cronbach's alpha, as the more items tested, the higher the internal consistency would be (Kent, 2007:143). The following table provides the Cronbach's alpha of the research study under consideration:

Reliability statistics for the entire questionnaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.982	.977	96

The result indicates that Cronbach's alpha is very close to 1 (0.982), which indicates that the questions and questionnaire as a whole has a very high internal consistency and therefore are highly reliable. The results for the reliability of the main questions are illustrated below:

Reliability Statistics for the main questions (Q6 – Q8)

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Question 6	.726	.742	11
Question 7	.897	.902	12
Question 8	.892	.895	7

The results indicate that although Question 6 has a comparably low Cronbach's alpha (0.726), both the other two questions have very high alphas, indicating high reliability. Due to the fact that the various business units play such a central role in the study, the internal consistency of each business unit was also determined. The results are as follows:

Reliability Statistics for the business units

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Retail shops	.896	.897	10
Grain storage	.906	.915	7
Grain marketing	.930	.932	4
Financing	.885	.893	5
Mechanisation (workshops)	.942	.942	6
Mechanisation (spare parts)	.930	.932	8
Mechanisation (whole goods)	.953	.954	8
Insurance	.965	.966	7

The Cronbach alpha results indicate that each of the business units (as constructs) display high internal consistency, as all of the constructs have a value of very close to 1. The lowest value is 0.885.

5.5.5.2 Validity

Validity can be defined as "the extent to which the research findings accurately represents what is really happening in the situation". Validity is therefore not about the tests itself, but rather the results of the tests (Thomas, 2004:31). There are two forms of

validity innate to this particular study; namely, content validity and construct validity (Cooper & Schindler, 2006:319). Each one will be discussed shortly.

- Content validity

This form of validity involves detecting if the content of the measuring instrument measures what it is suppose to measure. To increase content validity, it is necessary to ask expert opinions of whether each question measures what it is suppose to, as well as whether the questions as a whole are valid (Thomas, 2004:218). Also, content validity measures whether a particular instrument has adequate coverage of all aspects pertaining to the subject of interest (Cooper & Schindler, 2006:318). In other words, the instrument (or questionnaire) has to adequately cover all relevant aspects of the particular subject. In the case of this study, agricultural executives (experts) had full input into the aspects (questions) added to the questionnaire and all major elements of each business unit and the agricultural business as a whole was incorporated into the questionnaire.

- Construct validity

When considering construct validity, it is necessary to contemplate both the theory as well as the measuring instrument (in this research study the questionnaire) (Cooper & Schindler, 2006:321). Construct validity is seen as the most important and most used validity techniques available. If a measuring instrument can be closely linked to the known theory, then the instrument has high construct validity (Bless & Higson-Smith, 2000:133). The theory in this specific research study indicated that the drivers of customer satisfaction are price, product, personnel, service and management (for the overall agricultural business). Due to the fact that only the business units questions were developed as constructs, the basic variables in the questionnaire were correlated to measure whether the same results are obtained as the grounded theory. The results are observable in Chapter six, where the correlation coefficients and coefficients of determinations were calculated for all the major elements in the questionnaire. Table 6.30 illustrates the coefficients between the overall drivers of customer satisfaction and the drivers inherent in each business unit. The results indicate that all of the drivers inherent in every business unit are positively correlated with the overall driver. For

instance, satisfaction towards price in the retail shops is positively correlated with satisfaction towards price of the overall organisation. Table 6.32 demonstrate the coefficients between the overall drivers of customer satisfaction with the satisfaction towards the company as a whole. All of the overall drivers of customer satisfaction have a positive statistical significant relationship with the overall satisfaction towards the company when these variables were tested individually. This is to be expected, for as the satisfaction towards a specific driver increases, the customers' satisfaction of the *performance* of the overall company should also increase. The results in Table 6.35 display the correlation between the drivers within each business unit with the overall performance of the business unit. All of the coefficients are positive, indicating that as the satisfaction towards a particular driver in a particular business unit increases, the overall satisfaction towards that particular business unit will also increase. Lastly, Table 6.37 provides an overview of the correlation between the overall performance of each business unit with the performance of the company as a whole. All of the coefficients are positive and significant, indicating that as the satisfaction towards a business unit increase, so would the satisfaction towards the company as a whole. The results provide the same results as grounded theory with regard to customer satisfaction. To test the validity of the questions that were developed as constructs, the Kaiser-Meyer-Olken (KOM) and Bartlett's test for item validity were used. The results are as follows:

	Kaiser-Meyer-Olkin (KMO)	Bartlett's test for item validity (Sig)
Retail shops	.861	0.000
Grain storage	.853	0.000
Grain marketing	.788	0.000
Financing	.820	0.000
Mechanisation (workshops)	.867	0.000
Mechanisation (spare parts)	.901	0.000
Mechanisation (whole goods)	.882	0.000
Insurance	.859	0.000

The results indicate that the KMO is very high for each question (all above 0.788) and the results are all statistically significant, therefore the validity is very high.

5.5.5.3 Types of statistics

There are two types of statistics, namely, descriptive statistics and inferential statistics, both of which are used in the case of quantitative data studies. The former aims to summarise and display quantitative data, while the latter aims to use information from a sample to draw conclusions about a population (Mbengue, 2001:224). The following types of statistics were made use of during the course of this research study to be able to answer the research objectives:

- Frequency distributions

The term frequency refers to the number of observations for a specific variable; a frequency distribution is a summation of all the data values in a particular variable. To calculate a frequency percentage, the number of observations is expressed as a number out of 100 and can be calculated as follows (Collis & Hussey, 2009:230):

Percentage frequency = $(f / \sum f) \times 100$

where

f = frequency

$\sum$ = the sum of

This study made use of frequency distributions as it helps to organise and provide context to the data.

- Cross-tabulations

A cross-tabulation is used when two variables are compared to one another; generally this technique is used to compare demographic variables with specific target variables. For instance, comparing the two different genders and their satisfaction towards a specific variable, a cross tabulation will provide two columns and two rows that would indicate the frequency with which males provided a specific answer, as well as females provided a specific answer (Cooper & Schindler, 2006:482). This statistical method was

employed in this study, as it was needed to compare difference in data between the various size customers and the various types of farmers.

- Means

The mean can be defined as the arithmetic average of specific variables in a data set. The mean value can be calculated by dividing the sum of the observations by the number of observations (Mendenhall & Sincich, 1996:19):

$$\text{Mean} = \sum x / n$$

where

$\sum$ = the sum of

n = number of observations

Means were used in this study to provide a broad overview of the general level of satisfaction towards the various business units, the drivers and the organisation as a whole. A Likert scale of 9 were used, therefore any mean above 5 would constitute a satisfied result, while any mean value below 5 would constitute a dissatisfied result.

- Correlation coefficient (r)

The correlation coefficient provides additional information about the association between two variables. Firstly, the coefficient indicates the direction of the association and secondly the strength of the association (Collis & Hussey, 2009:267). A very important assumption being made when using the correlation coefficient is that the relationship between the two variables are linear and can therefore provide an indication towards the relationship between the two variables (Hair *et al.,* 2000:563). The calculated value could therefore mean the following (Thomas, 2004:210):

r = 1 represents a perfect positive linear association

r = 0 represents no linear association

r = -1 represents a perfect negative association

Values would generally not be perfectly 1, 0 or -1, but the association will be determined by how close these values are to the respective numbers. Correlation coefficients were applied in the study, as it was necessary to determine the relationship/correlation certain variables had to one another. For instance, it was necessary to determine whether an increase in the satisfaction level of retail shops price, would lead to an increase in the overall satisfaction level of price (for the organisation as a whole).

- Coefficient of determination (r^2)

The coefficient of determination is r squared. The purpose of calculating the coefficient of determination is to be able to interpret how much of the change in variable Y can be explained by variable X. It thus tells the researcher how well the linear model fits the data (Cooper & Schindler, 2006:554). The coefficient determination was used in this study in conjunction with the correlation coefficient to demonstrate the strength of the relationship between two variables. For instance, when the correlation is tested between the overall level of satisfaction towards the organisation as a whole and the various drivers inherent in the organisation, it is possible to use the coefficient of determination to determine which variable have the effect on the dependant variable (overall satisfaction).

- Linear regression (β)

The term linear regression suggests the use of a straight line. This statistical technique provide the researcher with an indication of whether a independent variable will be able to predict a dependant variable if there is a linear relationship between the two variables. The equation can be denoted as follows:

$$Y = \alpha + \beta x + \epsilon$$

where

α = alpha (the intercept)

β = beta (the slope of the line)

ϵ = epsilon (a random error)

In the equation one of the variables is a dependent variable (Y), while the other is an independent (X) variable. The use of this statistical technique is thus to measure with how much Y would change met X change with 1 unit. It is used in this study as it is a powerful way of demonstrating relationships between variables. SPSS output provides a Beta coefficient, as well as significance value. When the significance value is less than .05, then the relationship is significant, while the Beta coefficient indicates which independent variable has the biggest impact on the dependent variable. The higher the particular value the bigger the impact.

- Statistical significance tests

Statistical significance tests, as part of inferential statistics, are used to reach conclusions about data that does not only include the sample, but will be able to generalise the data (Hair *et al.,* 2000:492). These tests are mainly used to determine if there is a difference between variables (Collis & Hussey, 2009:262). The null hypothesis (*H0*) states that there is no association between the two variables (independent from each other); while the alternative hypothesis (*H1*) states that the variables are dependent on each other.

The chi-square test is one of the most popular used techniques to test whether there is a significant difference “between the *observed* distribution of data among categories and the *expected* distribution based on the null hypothesis” (Cooper & Schindler, 2006:507). This specific test is primarily aimed at measuring differences between various variables and also the strength of the association between variables. The formula is as follows (Hussey & Hussey, 1997:232):

$$\chi^2 = \sum [(O - E)^2 / E]$$

where

O = observed frequencies

E = expected frequencies

$\sum$ = the sum of

This value should then be compared to the degrees of freedom which are calculated by $(r - 1)(c - 1)$,

where

r = rows

c = columns

By using probability tables, the degrees of freedom can be used to determine a critical value that correspond to the probability of $\alpha = 0.05$. If the critical value found is less than the calculated χ^2, then the null hypothesis should be rejected and the alternative hypothesis would be true. If the critical value is more than the χ^2, then the null hypothesis would be accepted (Melville & Goddard, 1996:80). T-tests, F-values and ANOVA all depend on the construct of a probability value (*p)*, which will provide the researcher with the means to be able to make conclusions about the dependence and association between variables. If the probability is smaller than 0.05 ($p < 0.05$) this result would indicate that the relationship between the variables is statistically significant and that a conclusion can be drawn from it (Ellis & Steyn, 2003:51).

These specific statistical measures were selected due the fact that the data is normally distributed and therefore parametric statistical tests should be used to test the hypotheses. All of the statistical measures mentioned above are parametric statistical methods.

5.5.5.4 Skewness and Kurtosis

It is necessary after data processing to determine the skewness and kurtosis of the data, also known as the distribution (symmetry and shape) of the data. Skewness refers to the symmetry of the data, while kurtosis refers to the shape (Cooper & Schindler, 2006:466). It is necessary to calculate both these values, as it proves whether a distribution of data is normal or close to normal. Distribution of normality is a prerequisite in being able to determine whether parametric or non-parametric statistics will be used to test the necessary hypotheses. According to West, Finch & Curran (1995:79) skewness of between -2 and 2 are acceptable and considered normal, while kurtosis of between -7 and 7 are considered acceptable. The results for the skewness

and kurtosis of each of the major questions are presented in Appendix B. All of the values fall within the acceptable skewness and kurtosis ranges, therefore, the distribution of data are normally distributed and parametric tests will be used to test the hypotheses in the study.

5.5.6 Stage 6: Drawing conclusions and preparing the report

The final step in completing a dissertation or research report is drawing the necessary conclusions and presenting the findings in a written report. The findings of the research study will be presented in the results chapter, while conclusions and recommendations based on the study will be summarised in the conclusion chapter (Collis & Hussey, 2009:305).

5.6 Conclusion

This chapter provided a detailed overview of the research methodology undertaken during the course of this research to answer the relevant research objectives. This study aims to determine the customer satisfaction of the customers of a major agricultural business in central South Africa with various different business units, and how perceptions of these business units and individual drivers of customer satisfaction will influence the customers' satisfaction of the business as a whole. Also, the financial performance of each business unit is compared to the customers' satisfaction in an effort to link customer satisfaction with profitability. It was found that the research study under consideration are explanatory (purpose of the research), quantitative (research process), deductive (logic behind the research) and applied (outcome of the research). The research method used to collect primary data was a mailed questionnaire, together with the financial statements of the respective business units, while secondary sources are used to develop the literature review. This study did not make use of sampling, as the entire population was used in an effort to provide a comprehensive picture of the research problem. Most of the questions asked in the questionnaire were Likert-scale type questions. The procedure used to gather the primary data was also discussed in detail. Chapter six will provide the analysis of the data and results from the quantitative questionnaire and financial statements.

CHAPTER 6

DISCUSSION OF RESEARCH RESULTS

6.1 Introduction

Customer satisfaction can be determined by various drivers such as price, product, personnel, service and management. Agricultural businesses have various business units which have an influence on the satisfaction of the customer of the overall business. It is therefore essential to determine which of the drivers of customer satisfaction, as well as the various business units, act as drivers or destroyers of customer satisfaction of the overall company and whether there is a relationship between the satisfaction of customers of the business units and the profitability of the units. A graphical representation is presented in Chapter 5 (Figure 5.1) that illustrates the study under consideration.

This chapter is dedicated to determine the relationship between the drivers of customer satisfaction, such as *price, product, service, personnel* and the *management* of different business units versus the customer satisfaction of the company as a whole. Also, it is necessary to determine if there is a relation between the level of customer satisfaction of the different business units and what the impact is on the satisfaction of customers on the overall company and whether the best or the worst *performing* business units impact the most on overall customer perception of a major agricultural business in South Africa. In the rest of the chapter the term *performance* refers to the level of satisfaction customers perceive to have from a certain business unit, driver (such as price or service) or the organisation as a whole. Firstly, the sample selection will be discussed and secondly, the methodology used to attain the data. The major part of the chapter will be dedicated to discussing the respondents' profile, basic data and the primary and secondary empirical objectives' results.

6.2 Sample Selection

The entire active customer base of the agricultural business that provide more that R100 000 volume of business (sales) per annum to the agricultural business was used to take part in the study. Therefore this study is referred to as a census. The respondents were classified according to the size of their farming operation by the volume of business they provide to the agricultural business. Respondents that provide sales between R100 000 and R250 000 are classified as small customers, respondents that provide between R250 001 and R650 000 is regarded as medium-sized customers and respondents that provide more than R650 001 volume of business are regarded as big customers (by the agricultural business). A total of 963 questionnaires were sent out to respondents and 345 usable questionnaires were sent back. The response rate is therefore 35.8% of the total population.

The specific agricultural business that was examined has a variety of business units that aim to support customers. The agricultural business spans an area of more than 13 million hectares and incorporates three South African provinces within central South Africa. The main business units available (which can also be found in the majority of agricultural businesses in South Africa) are *retail shops*, *grain marketing, grain storage, financing, mechanisation (workshops), mechanisation (spare parts), mechanisation (whole goods)* and *insurance*. Additional services to support the farmer are services such as *agricultural support services, milling exchange services* and *fuel farm delivery services*. These three services will not be discussed in detail as it is not part of the core services of the agricultural business.

The agriculture environment provided a unique opportunity to examine all of the customers of an agricultural business that make use of more than one of the business units available to customers. These business units are managed as smaller businesses within the greater agricultural business. Consequently, the customers remain the same, but they make use of different business units (businesses) within the agricultural business. As the customers of an agricultural business are farmers that manage their own businesses (farms), the conclusion can therefore be made that this

specific study tests business-to-business satisfaction levels within a greater umbrella organisation.

Table 6.1: Calculation of respondents using one and more business units

Number of units (total of 11 units)	Number	Percentage	Cumulative %
11 units	17	4.9%	4.9%
10 units	24	7.0%	11.9%
9 units	35	10.1%	22.0%
8 units	35	10.1%	32.1%
7 units	50	14.5%	46.6%
6 units	58	16.8%	63.4%
5 units	33	9.6%	73.0%
4 units	32	9.3%	82.3%
3 units	31	9.0%	91.3%
2 units	14	4.1%	95.4%
1 unit	16	4.6%	100.0%
TOTAL	**345**	**100.0%**	

Table 6.1 provides information with regard to how many respondents make use of one and more than one business unit. From the table it follows that 73% of the respondents use five and more business units within the greater agricultural business and this creates an unique opportunity to test the drivers of customer satisfaction, as well as the business units that drive customer satisfaction.

6.3 Method Used

The method used to obtain the relevant data from respondents was through the use of quantitative mail surveys. The questionnaires were mailed to the respondents with an enclosed envelope in an effort to increase responses and to promote and ensure confidentiality. The questions asked in the questionnaire were related to the farmers' perception of their satisfaction with regard to the agricultural business overall, as well as each individual business unit within the agricultural business and the various drivers of customer satisfaction of the total business and all business units. The questionnaire aimed to determine the relationship between the drivers of customer satisfaction, the business units and the company as a whole. The majority of the questions in the questionnaire consisted of Likert scale questions where respondents had to rate the

business and business units on a scale from one to nine. There are two types of statistical significance procedures available namely parametric, as well as nonparametric statistics. Parametric statistics were used to analyse the data in this study. When the data is normally distributed (as discussed in Chapter 5), the sample size are large and the data are either interval or ratio scaled, then parametric statistics are the most appropriate to use. The majority of the questions in the questionnaire were Likert scale questions (interval), therefore parametric tests are more powerful in analysing data (Zikmund, Babin, Carr & Griffen, 2010:517). The profitability of the various business units and the overall company were calculated by using the necessary financial statements of the company and each individual business unit.

6.4 The Empirical Results, Analysis and Discussion

The empirical results will determine the relationship between the drivers of customer satisfaction, the business units and the overall company. The demographic profile of the respondents, the basic data and then specific data pertaining to the primary and secondary empirical objectives will be discussed.

6.4.1 Demographic profile of the respondents

It is essential to illustrate and evaluate the following demographics of the participating respondents. The respondents were asked to indicate the farming activity they are mainly involved in, the total years' of farming experience they have, as well as their age. There may be underlying differences in the perception of the following demographic groups, namely the type of farmer, the size of the customer, years' experience and age.

Table 6.2: Various types of farmers

Type of farmer	Number	Percentage
Grain only	13	3.8%
Mainly grain with live stock	141	41.2%
Even split between grain and live stock	82	24.0%
Live stock only	56	16.4%
Mainly live stock	50	14.6%
TOTAL	**342**	**100.0%**
Mainly grain	154	45.0%
Even split	82	24.0%
Mainly live stock	106	31.0%
TOTAL	**342***	**100.0%**

** Three respondents did not answer this specific question*

The top part of Table 6.2 presents the five different types of farmers. It is clear that the largest percentage of respondents is farmers that farm with *mainly grain with live stock* (41.2%), while 24.0% of the respondents indicated that their farming operation is an *even split* between grain and live stock. It was decided to divide the respondents into three main groups namely respondents that farm with *mainly grain* (including the *grain only* and *mainly grain with live stock* groups), respondents that farm with *mainly live stock* (including the *live stock only* and *mainly live stock with grain* groups) and then a group that indicated that there is an *even split* between their grain and live stock operations. The bottom part of Table 6.2 illustrates the results for the three main groups, where the overall majority of the respondents were *mainly grain* farmers (45.0%), while a lesser percentage (31.0%) are *mainly live stock* farmers and the remaining 24.0% an *even split.*

Table 6.3: Size of the business

Size of the business	Number	Percentage
Small (R100 000 – R250 000)	134	38.8%
Medium (R250 001 – R650 000)	115	33.3%
Big (R650 001 +)	96	27.8%
TOTAL	**345**	**100%**

In Table 6.3 the respondents were classified according to the size of their contributions to the agricultural business into small customers (between R100 000 and R250 000 volume of business), medium customers (between R250 001 and R650 000 volume of

business) and big customers (more than R650 001 volume of business). The three groups were roughly equally distributed with small customers being the biggest group (38.8%), while 33.3% were medium customers' respondents and 27.8% small customers' respondents.

The following table provides an indication of the years' farming experience the respondents have.

Table 6.4: Years' experience

Years' experience	Number	Percentage
0 – 5 years	9	2.6%
6 – 10 years	24	7.0%
11 – 15 years	28	8.1%
16 – 20 years	39	11.3%
21 – 25 years	34	9.9%
26 – 30 years	**66**	**19.1%**
31 – 35 years	38	11.0%
36 – 40 years	34	9.9%
41 years and longer	73	21.2%
TOTAL	**345**	**100.0%**

Respondents were asked to indicate the number of years that they have been farming to give an indication of their experience. The majority of the respondents (21.2%) have more than 41 years' experience, while a minority of 2.6% has less than 5 years' experience. It was found that the average years' experience is 29.4 years, which falls within the 26 – 30 years category. It could therefore be assumed that the respondents have adequate knowledge with regard to agricultural businesses.

Table 6.5: Age

Age	Number	Percentage
21 – 25 years	2	0.6%
26 – 30 years	4	1.2%
31 – 35 years	13	3.8%
36 – 40 years	27	7.9%
41 – 45 years	26	7.6%
46 – 50 years	51	15.0%
51 – 55 years	**66**	**19.4%**
56 – 60 years	48	14.1%
61 – 65 years	50	14.7%
66 years and older	54	15.8%
TOTAL	**341***	**100.0%**

* Four respondents did not answer this specific question.

As can be seen from Table 6.5 the majority (79%) of the respondents are above the age of 46. The average age of the respondents was established to be 53.6 years and falls within the 51 to 55 years category. It is worth noting that less than 2% of the respondents are 30 and younger. This could be an indication that younger people might be avoiding farming as a career choice or that the younger customers are not yet big enough to contribute R100 000 and more volume of business to the organisation.

Demographics with regard to this research study indicate that approximately 45% of the respondents are *mainly grain* farmers with the remaining percentage of respondents farming *mainly* with *live stock* or have farming operations with an *even split* between grain and live stock. Almost 40% of the respondents are small customers, while 33% are medium customers and the remaining 27% are big customers (as classified by the agricultural business). The respondents have an average of more than 29 years' experience, while the average age for the respondents is 53 years.

The following section provides descriptive data with regards to the frequency of use of the various business units offered by the agricultural business, the respondents' perception of *performance* of those specific business units as a whole, as well as how the respondents perceive the drivers of customer perception. Lastly, the section will discuss the descriptive data with regard to each individual business unit.

6.4.2 Descriptive data

The business units used by the respondents consist of pure services (services that do not include a physical product, but a service rendered to the customer) and also business units that provide customers with a physical product, as well as service. Pure services include *grain storage*, *grain marketing*, *mechanisation workshops*, *agricultural support services* and *milling exchange services*. Business units that provide a physical product is *retail shops*, *financing, mechanisation* (*spare parts* and *whole goods*), *insurance* and *fuel farm delivery services*. It is important to note that these services are used by the same population, just to a different extent, as will be indicated in Table 6.6.

6.4.2.1 Frequency of use of business units

Table 6.6 provides the necessary details with regard to the frequency that the respondents use each business unit provided by the agricultural business. Respondents had to indicate if they use each particular business unit often, seldom or never. The fifth column indicates the percentage of respondents of the total number of respondents (345 respondents) that use that particular business unit, it being often or seldom, while the last column indicates which of the business units are used most.

Table 6.6: Frequency of use of business units

Business units	Often	Seldom	Never	% of total that use	Rank
Retail shops	91.6%	7.0%	1.4%	98.6%	1
Grain storage	51.5%	22.7%	25.9%	74.2%	3
Grain marketing	29.7%	23.6%	46.6%	53.3%	5
Financing	26.0%	20.5%	53.5%	46.5%	7
Mechanisation (workshops)	17.0%	31.3%	51.7%	48.3%	6
Mechanisation (spare parts)	55.7%	33.5%	10.8%	89.2%	2
Mechanisation (whole goods)	17.0%	38.4%	44.6%	55.4%	4
Insurance	20.4%	15.6%	64.1%	36.0%	9
Agricultural support services	5.6%	21.7%	72.7%	27.3%	10
Milling exchange services	33.9%	11.4%	54.7%	45.3%	8
Fuel farm delivery services	37.7%	15.5%	46.8%	53.2%	5

It is important to note that the main agricultural business units for this specific agricultural business (and the majority of agricultural businesses in South Africa) are

retail shops, *grain storage* and *marketing, financing, mechanisation (workshops, spare parts* and *whole goods*) and *insurance*. Therefore the discussions with regard to the business units will mainly focus on these business units. Consequently *agricultural support services, milling exchange services* and *fuel farm delivery services* will not be discussed in detail. Table 6.6 indicates that the unit used most by respondents is *retail shops*. Almost 99% of the respondents make use of it, while approximately 92% of the respondents use this business unit often. More than 89% of the respondents make use of the *mechanization (spare part*s) business unit, while almost 75% of the respondents make use of *grain storage*. This is to be expected as the majority of respondents are grain farmers. Business units that are used less often are *grain marketing*, *financing, mechanization (workshops), mechanization (farm equipment)* and *insurance*. The table also indicates that more than 50% of respondents do not make use of the following main agricultural services, such as *financing, mechanisation (workshops), agricultural support services, milling exchange services* and *insurance*.

The tables that follow display the results of the frequency with which the various business units are used (either often or seldom) compared to the two main types of farmers (*mainly grain* and *mainly live stock*), as well as the three different size farming operations (small, medium and big customers). This was done to establish whether there is a statistically significant difference between the frequencies with which these two types of farmers and the three different size customers use the various business units. The tables below indicate the cross tabulation between the various groups, as well as the Pearson Chi-square to indicate if the results are statistically significant.

Table 6.7 shows the results of the frequency of the use of the various business units in relation to the two types of farmers. It is important to note that the responses of the respondents that indicated that there is an even split between their grain and live stock operations were eliminated from the following cross-tabulations.

Table 6.7: Cross-tabulation between the frequency of the use of the business units with the two main types of farmers

Business Unit	Mainly Grain		Mainly Live stock		Total %	Chi-Square
	N	%	N	%		
Retail shops						0.016
Use often	132	87.4%	101	96.2%	91.0%	
Use seldom	19	12.6%	4	3.8%	9.0%	
Grain storage						0.000
Use often	96	79.3%	20	34.5%	64.8%	
Use seldom	25	20.7%	38	65.5%	35.2%	
Grain marketing						0.000
Use often	67	67.7%	5	23.8%	60.0%	
Use seldom	32	32.3%	16	76.2%	40.0%	
Financing						0.046
Use often	57	60.6%	11	39.3%	55.7%	
Use seldom	37	39.4%	17	60.7%	44.3%	
Mechanisation (workshops)						0.694
Use often	29	33.3%	11	29.7%	32.3%	
Use seldom	58	66.7%	26	70.3%	67.7%	
Mechanisation (spare parts)						0.000
Use often	104	72.2%	28	35.0%	58.9%	
Use seldom	40	27.8%	52	65.0%	41.1%	
Mechanisation (whole goods)						0.001
Use often	90	68.7%	41	31.3%	51.2%	
Use seldom	61	48.8%	64	51.2%	48.8%	
Insurance						0.000
Use often	61	75.3%	20	24.7%	31.9%	
Use seldom	88	50.9%	85	49.1%	68.1%	

Table 6.7 indicates that the cross-tabulations between the frequency with which the various business units are used compared to the two types of farmers are statistically significant ($p < 0.05$) for all of the business units except for *mechanisation (workshops).* From Table 6.7 it is clear that *mainly grain* farmers use *mechanisation (spare parts), mechanisation (whole goods)* and *insurance* more frequently than *mainly live stock* farmers. All three these relationship are statistically significant, which indicate that these specific business units are used more frequently by *mainly grain* farmers, while *mainly live stock* farmers use *mechanisation (spare parts), mechanisation (whole goods)* and *insurance* not that often. On the whole it was found that the majority of the business units are used more often by *mainly grain* farmers, whereas the *mainly live stock* farmers use the business units seldom.

From Table 6.6 it was already established that *retail shops* are one of the most popular business units used by customers of the agricultural business and this is also clear

from Table 6.7. Both *mainly grain* and *mainly live stock* farmers use *retail shops* more often compared to seldom. However, approximately 96% of the *mainly live stock* farmers make use of *retail shops* compared to only 87% of *mainly grain farmers.* Because the results are statistically significant, we can deduce that the variables are indeed dependant on each other and that there is a relationship between the frequency with which *retail shops* are used and the type of farmer that use the service. It can be deduced that *mainly live stock* farmers use *retail shops* more often than *mainly grain* farmers.

It is to be expected that *mainly grain* farmers will use *grain storage* more often, as it resulted in Table 6.7. The results are statistically significant ($p < 0.05$), indicating that there is indeed a relationship between the variables and that they are dependent on each other. It can therefore be assumed that a *mainly grain* farmer would use *grain storage* more often than seldom, while a *mainly live stock* farmer would use the business unit more seldom than often.

The result for the frequency with which *grain marketing* is used is almost the same as the results for *grain storage*. Again, the *mainly grain* farmers make more often use of *grain marketing*, while a majority of *mainly live stock* farmers use *grain marketing* seldom. The Pearson chi-square also indicates that the results are statistically significant, therefore a clear relationship exist between the variables. As was expected, *mainly grain* farmers use *grain marketing* (just as *grain storage*) more often than *mainly live stock* farmers, while the latter use this particular service seldom.

Financing is used more often by *mainly grain* farmers than it is used by *mainly live stock* farmers. The majority of the *mainly live stock* farmers rarely use this particular service. The result again is statistically significant, which indicates that there is a definite relationship between the variables and that they are dependent on each other ($p < 0.05$). Therefore, just like *grain storage* and *grain marketing, financing* is used more often by *mainly grain* farmers, while *live stock farmers* use this business unit seldom.

The Pearson chi-square for *mechanisation (workshops*) indicates that this specific cross tabulation are not statistically significant ($p > 0.05$), therefore no statistical inferences can be made about this specific relationship. This specific agricultural business however, use this business unit less often, while *mainly grain* farmers use *mechanisation (workshops)* slightly more often than *mainly live stock* farmers. There is no considerable difference between the two main types of farmers.

Table 6.8 provides the outcome of the cross-tabulation between the various size customers and the frequency with which the business units are used.

Table 6.8: Cross-tabulation between the frequency of the use of the business units with the three different size customers

Business Unit	Small		Medium		Big		Total %	Chi-square
	N	%	N	%	N	%		
Retail shops								0.983
Use often	123	93.2%	106	93.0%	87	92.6%	92.9%	
Use seldom	9	6.8%	8	7.0%	7	7.4%	7.1%	
Grain storage								0.024
Use often	49	58.3%	66	73.3%	62	76.5%	69.4%	
Use seldom	35	41.6%	24	26.7%	19	23.5%	30.6%	
Grain marketing								0.010
Use often	24	42.1%	33	54.1%	45	69.2%	55.7%	
Use seldom	33	57.9%	28	45.9%	20	30.8%	44.3%	
Financing								0.075
Use often	21	43.8%	25	55.6%	43	65.2%	56.0%	
Use seldom	27	56.2%	20	44.4%	23	34.8%	44.0%	
Mechanisation (workshops)								0.000
Use often	41	24.8%	64	38.8%	60	36.4%	48.2%	
Use seldom	91	51.4%	50	28.4%	36	20.3%	51.8%	
Mechanisation (spare parts)								0.129
Use often	113	37.0%	106	34.6%	87	28.4%	89.2%	
Use seldom	20	54.1%	9	24.3%	8	21.6%	10.8%	
Mechanisation (whole goods)								0.066
Use often	63	33.3%	70	37.1%	56	29.6%	55.4%	
Use seldom	69	45.4%	43	28.3%	40	26.3%	44.6%	
Insurance								0.000
Use often	29	23.8%	38	31.1%	55	45.1%	36.0%	
Use seldom	103	47.5%	75	34.6%	39	17.9%	64.0%	

The only relationships found to be statistically significant at the 0.05 level was *grain storage, grain marketing, mechanisation (workshops)* and *insurance.*

The Pearson chi-square indicates that the frequency with which the different size customers use *retail shops* are used is not statistically significantly ($p > 0.05$). The cross tabulation for these two sets of variables for this specific agricultural business indicates that for all three different size customers, *retail shops* are more often used than not. This is to be expected seeing that *retail shops* are the most popular business unit used by 98.6% of the total respondents (Table 6.6).

From Table 6.8 it follows that the bigger the customer, the more often *grain storage* is used. Also, the smaller the customer, the more infrequently this specific service is used. The Pearson chi-square also indicates that this specific outcome is statistically significant, therefore it can be expected that the bigger the customer, the more often *grain storage* will be used and the smaller the customer, the more seldom *grain storage* is used.

The result for *grain marketing* is the same as that for *grain storage*. The bigger the customer, the more *grain marketing* will be used. Again, it can also be seen that the smaller the customer the more rarely *grain marketing* will be used. These findings are also statistically significant; therefore it can be assumed that these variables are dependent on and related to each other. The results for *grain storage* and *grain marketing* are very similar; the bigger the customer, the more often *grain storage* will be used and it is used more often by *mainly grain* farmers. Therefore, the conclusion that can be drawn from this result, is that the *mainly grain* farmers typically do more business with the agricultural business and therefore they would be bigger customers than the *mainly live stock* farmers.

The Pearson chi-square for *financing* is not statistically significant ($p > 0.05$), therefore the results from the cross tabulation can only be explained by chance and are therefore independent of each other. The results for this particular agribusiness, however, indicates that the majority of the bigger customers make use of *financing* more often, while the majority of the smaller customers rarely use this business unit. For this specific company, it seems that the bigger the customer, the more often *financing* is used.

The frequency with which the different size customers use *mechanisation (workshops)* was found to be statistically significant. It appears as if the medium and big customers use *mechanisation (workshops)* more often, while the smaller customers use the business unit less frequently. This is to be expected as the bigger the customer, the more farming equipment could be needed and the bigger the need might be for farm equipment repairs.

The frequency with which *mechanisation (spare parts)* and *mechanisation (whole goods)* are used compared to the various size customers were found to be not statistically significantly related ($p > 0.05$). Also, there seems to be no significant difference between the different size customers, except for the fact that small customers use these two business units less frequently than medium and big customers, which use it more often than seldom.

A statistically significant relationship was found between the frequency with which *insurance* is used as a business unit and the different size customers. Big customers use *insurance* more often, while medium customers can be divided in relatively equal parts of using the business unit often and seldom. Small customers use this business unit less frequently. Due to the Pearson chi-square value of 0.000, it can be assumed that the size of the customer and the frequency of use of *insurance* variables are dependent on and related to each other.

Table 6.9 provides information with regard to the cross-tabulation between the three different size customers and the three main types of farming activities.

Table 6.9: Cross-tabulation between size and type of farming activities

Types of farmers	Small	Medium	Big	Chi-Square
Mainly grain	20.1%	39.0%	40.9%	
Even split	40.2%	28.1%	31.7%	
Mainly live stock	63.2%	30.2%	6.6%	**0.000**

The relationship between the farming activities undertaken and the size of the customer were found to be statistically significant ($p > 0.05$) and this result indicates that the size of the customer is dependent on the type of farming operations undertaken by the

customer. The majority of *mainly grain* farmers are either medium or big customers, while the biggest majority of *mainly live stock* farmers (63.2%) are mainly small customers and only 6.6% are considered to be big customers by the agricultural business. This outcome could be a sign that grain farmers tend to be the bigger customers of the agricultural business and most of the business units (services) provided by the agricultural business aimed at grain farmers. This could have a definite influence on the satisfaction levels of grain farmers compared to live stock farmers.

Of the main agricultural business units, *retail shops*, *grain storage* and *mechanisation (spare parts)* were found to be the most frequently used business units, while *insurance* were used the least. When the two different types of farmers were cross-tabulated with the frequency with which the business units are used, it was found that the relationships are statistically significant ($p < 0.05$) for all of the business units except for *mechanisation (workshops),* indicating that the type of farmer would influence whether a business unit is used frequent of seldom. *Mainly grain* farmers use *mechanisation (spare parts), mechanisation (whole goods)* and *insurance* more frequently than *mainly live stock* farmers. On the whole it was found that the majority of the business units are used more often by *mainly grain* farmers, whereas the *mainly live stock* farmers use the business units seldom. The bigger the customer, the more often *grain storage* and *grain marketing* is used. Also, the smaller the customer, the more infrequently this specific service is used. Medium and big customers tend to use *mechanisation (workshops)* and *insurance* more often. Grain farmers tend to be the big customers of the agricultural business and most of the business units (services) provided by the agricultural business aimed at grain farmers. Section 6.4.2.2 provides satisfaction of customers towards the different business units.

6.4.2.2 Perception of performance of business units

Respondents were asked to indicate their level of satisfaction with regard to the *performance* of the various business units provided by the agricultural business on a nine point Likert scale, where 1 - 3 is regarded as poor *performance*, 4 - 6 as average *performance* and 7 - 9 as good *performance*. The table below gives an indication of the percentage of respondents that indicated whether they perceived the business unit to

perform poorly, average or good. The last column gives an indication of the order of business unit *performance* according to the mean value. The mean were calculated according to the values of the Likert scale (1 - 9); therefore the nearer to 9, the better the *performance* of the business unit with 5.00 as the middle value.

Table 6.10: Satisfaction of performance of business units

Business units	Poor	Average	Good	Mean	Rank
Retail shops	3.8%	33.1%	63.0%	6.7278	6
Grain storage	2.0%	17.6%	80.4%	7.3333	1
Grain marketing	6.8%	33.7%	59.5%	6.5895	7
Financing	7.9%	23.6%	68.5%	6.7879	5
Mechanisation (workshops)	10.9%	44.6%	44.6%	5.9657	11
Mechanisation (spare parts)	12.7%	38.8%	48.5%	5.9799	10
Mechanisation (farm equipment)	11.0%	33.1%	55.8%	6.2652	9
Insurance	2.4%	30.2%	67.5%	6.9206	3
Agricultural support services	11.7%	29.8%	58.5%	6.3723	8
Milling exchange services	5.1%	25.5%	69.4%	6.9108	4
Fuel farm delivery services	0.6%	31.7%	67.7%	7.2426	2

It is important to note that all the business units have mean values above the middle value of 5.00, indicating that all units' *performance* are above average to good. *Grain storage* performed the best of all of the business units with a mean of 7.3333. This is due to the fact that 80.4% of the respondents indicated that this business unit *performs* well. This is also a good result as the majority of the respondents (almost 75%) make use of this specific business unit. *Fuel farm delivery service* and *insurance* are respectively in second and third place. It is, however, important to note that only 36% of the respondents make use of *insurance*. All three *mechanisation* business units (*workshops, spare parts* and *farm equipment*) *performed* the worst of all the services provided by the agricultural business and these three business units also have the highest percentage of respondents indicating that they perform poorly. This could be a concern as *mechanisation (spare parts)* is used by almost 90% of the total sample. *Financing* and *insurance* both *performed* relatively well since approximately 68% of the respondents that make use of these business units have the perception that they *perform* well.

Table 6.11 gives an indication of how the respondents rated the agricultural business' *performance* as a whole. The results indicate a very good satisfaction level of *performance* by the majority of the respondents (81.7%). The mean is high (6.9354) in comparison to the majority of the services provided, therefore it can be assumed that the respondents regard the company as a whole to *perform* well above average. When the average of the 11 means of the business units provided by the agricultural business are calculated; an average of 6.64505 are obtained. The agricultural business's *performance* by way of a mean is therefore higher than the average of all the business units' means calculated.

Table 6.11: Satisfaction of performance of the agricultural business

	Poor	Average	Good	Mean
Agricultural business as a whole	4.1%	14.2%	81.7%	6.9354

The following tables display the cross-tabulation between the satisfaction with regard to the *performance* of the various business units and the overall company with the two main types of farmers, as well as the three different size farming operations.

Table 6.12: Independent T-test between the performance of the business units with the two main types of farmers

Business Unit	Mainly Grain		Mainly Live stock		Sig
	Mean	N	Mean	N	
Retail shops	6.6887	151	6.5481	104	0.488
Grain storage	7.2131	122	7.2500	56	0.883
Grain marketing	6.3689	103	6.5600	25	0.667
Financing	7.0217	92	6.3548	31	0.083
Mechanisation (workshops)	5.6747	83	6.2105	38	0.162
Mechanisation (spare parts)	5.7466	146	5.8919	74	0.615
Mechanisation (whole goods)	6.1684	95	6.2000	35	0.937
Insurance	6.8571	63	6.9130	23	0.895

None of the T-test values indicate a statistically significant relationship between how the different types of farmers perceive the *performance* of the business units. Table 6.12 indicates that there is no significant difference between how *mainly grain* farmers and *mainly live stock* farmers perceive the *performance* of *retail shops*, *grain storage*, *grain marketing*, *financing, mechanisation (spare parts)*, *mechanisation (whole goods)* and *insurance*. It is, however, important to note that on average, *mainly grain* farmers

perceive only *retail shops* and *financing* as slightly better than the other business units. The rest of the business units are perceived to *perform* better by the *mainly live stock* farmers. For this specific agricultural business it is also noteworthy that a higher percentage of *mainly grain* farmers experienced the *performance* of *mechanisation (workshops)* as poor, while the majority of the *mainly live stock* farmers considered this business unit to *perform* well.

Table 6.13: Independent T-test between the performance of the overall company with the two main types of farmers

	Mainly Grain		Mainly Live stock		Sig
	Mean	N	Mean	N	
Agricultural business	6.9524	147	6.9719	96	0.364

Table 6.13 provides information with regard to the cross-tabulation of the differences between the satisfaction of different types of customers of the overall company. The p-value indicates that the relationship is not statistically significant (*p > 0.05),* therefore no generalisations can be made. There seem to be no substantial differences between the different types of farmers in their perception of the *performance* of the company as a whole.

Table 6.14: Non-parametric tests between the performance of the business units with the three different size farmers

Business Unit	Small		Medium		Big		Sig
	Mean	N	Mean	N	Mean	N	
Retail shops	6.7557	131	6.5702	114	6.8817	93	0.344
Grain storage	7.6667	84	7.2809	89	7.0488	82	0.031
Grain marketing	6.5690	58	6.6129	62	6.5857	70	0.969
Financing	6.5745	47	6.4118	51	7.2239	67	0.129
Mechanisation (workshops)	6.2407	54	5.7576	66	5.9455	55	0.637
Mechanisation (spare parts)	6.0935	107	6.1619	105	5.6207	87	0.205
Mechanisation (whole goods)	6.4386	57	6.3857	70	5.9259	54	0.632
Insurance	6.8857	35	6.6905	42	7.1429	49	0.326

There are no statistically significant relationships of how the different size farmers perceive the *performance* of the various business units available to them, except in the case of *grain storage* (*p = 0.031),* and the result indicate that the bigger the customer, the lower their perception of *performance*. A greater number of the big customers perceive *financing* and *insurance* to *perform* well in comparison to the small and

medium customers. For *mechanisation (spare parts)* and *mechanisation (whole goods),* the big customers perceive these two business units to *perform* poorly compared to the small and medium customers.

Table 6.15: Non-parametric tests between the performance of the overall company with the three different size farmers

	Small		Medium		Big		Sig
	Mean	N	Mean	N	Mean	N	
Agricultural business	6.8780	123	6.8331	112	7.1000	90	0.399

No generalisations can be made, because the p-value indicates that the relationship is not statistically significant (*p > 0.05).* There is no substantial difference between the different size farming operations in their perception of the performance of the company as a whole. However, the big customers perceive the organisation to *perform* better than the small and medium customers.

All of the business units have mean values above the middle value of 5.00, indicating that all units' *performance* are above average to good. *Grain storage performed* the best of all of the business units with a mean of 7.3333. All three *mechanisation* business units (*workshops, spare parts* and *farm equipment*) *performed* the worst of all the services. The mean of the *performance* of the company as a whole is high (6.9354) in comparison to the majority of the services provided; therefore it can be assumed that the respondents regard the company as a whole to *perform* well above average. There are no significant differences between how *mainly grain* and *mainly live stock* farmers perceive the various business units. Although, *mainly grain* farmers perceive the *performance* of *retail shops and financing* to be slightly better that the *mainly live stock* farmers, while *mainly live stock* farmers perceive the *performance* of all of the rest of the business units to be slightly better compared to the *mainly grain* farmers. There is no statistically significant relationship (*p > 0.05)* between how the different size customers perceive the *performance* of the business units and big customers seem to perceive the organisation as better, compared to the small and medium customers.

Section 6.4.2.3 provides information with regard to how the respondents perceive the *performance* of the drivers of customer satisfaction.

6.4.2.3 Perception of performance of the drivers of customer satisfaction

Respondents were asked to indicate how they perceive the agricultural business to *perform* according to the various drivers of customer satisfaction. The drivers that were tested were *price*, *product*, *personnel*, *service* and *management*.

Table 6.16 presents the results for the *performance* of the five drivers of customer satisfaction, namely *price*, *product*, *personnel*, *service* and *management*. The average mean for each driver were calculated and the last column indicates in rank order the *performance* of the various drivers.

Table 6.16: Perception of the performance of the drivers of customer satisfaction

Drivers	Poor	Average	Good	Mean	Rank
Price	14.3%	54.8%	31.0%	5.4940	5
Product	2.6%	60.2%	37.2%	6.0310	4
Personnel	0.9%	17.9%	81.2%	7.4164	1
Service	1.8%	23.6%	74.6%	7.1829	3
Management	3.5%	15.0%	81.4%	7.3363	2

The *performance* of the *personnel* of the agricultural business scored the highest with roughly 81% of the respondents indicating that the *personnel perform* well. *Management* of the agricultural business scored the second highest, while *service* came third and *product* came fourth. *Price* scored the lowest, with more than 14% of the respondents indicating that they perceive *price* to be poor, almost 55% indicating that *price* are perceived as average and only 31% perceive *price* to be good. Even though *price* is rated well below the other drivers, it is still above the average of 5 (on a 9 point Likert scale). It is also important to note the relative gap between the means of *personnel*, *service* and *management* (all rated with a mean of above 7) and *price* and *product* (means of approximately 5 and 6 respectively). *The means of personnel*, *service* and *management* lie relatively close to each other, while the means of *price* and *product* are comparatively further away.

The following two tables will provide cross-tabulations between the perception of the *performance* of the various drivers and the different types of farmers, as well as the different size farmers.

Table 6.17: Independent T-test between the perceptions of performance of the drivers of customer satisfaction with the two main types of farmers

Drivers	Mainly Grain		Mainly Live stock		Sig
	Mean	N	Mean	N	
Price	5.5600	150	5.3366	101	0.315
Product	6.0511	150	5.9218	98	0.459
Personnel	7.4641	153	7.1456	103	0.058
Service	7.2450	151	6.9029	103	0.065
Management	7.4533	150	7.1250	104	0.082

There are no significant differences between how the different types of farmers perceive *price*, *product*, *personnel*, *service* or *management*, as the p-values indicate ($p > 0.05$). However, it is interesting to note that on average the *mainly grain* farmers are more satisfied with the drivers of customer satisfaction compared to the *mainly live stock* farmers.

Table 6.18 provides information with regard to how the different size farmers perceive the various drivers of customer satisfaction.

Table 6.18: Non-parametric tests between the perceptions of performance of the drivers of customer satisfaction with the three different size farmers

Drivers	Small		Medium		Big		Sig
	Mean	N	Mean	N	Mean	N	
Price	5.3256	129	5.4159	113	5.8191	94	0.097
Product	5.9869	127	5.9315	112	6.2092	94	0.325
Personnel	7.4848	132	7.3043	115	7.4574	94	0.236
Service	7.3106	132	7.0442	113	7.1702	94	0.076
Management	7.3534	133	7.2679	112	7.3936	94	0.436

Again, there seem to be no discernible and statistically significant differences between the different size farming operations versus the drivers of customer satisfaction. It is, however, evident that the big customers perceive *price* to *perform* better than small and medium customers.

In conclusion, Table 6.16 indicates that the *performance* of the *personnel* of the agricultural business scored the highest, *management* scored the second highest, while *service* came third and *product* came fourth. *Price* scored the lowest, but even though *price* is rated well below the other drivers, it is still above the average of 5 (on a 9 point Likert scale). There are no significant differences between how the different types of farmers or the different size customers perceive *price*, *product*, *personnel*, *service* or *management*, as the p-values indicate ($p > 0.05$).

6.4.2.4 Perception of driver performance in the various business units

The following eight tables (Table 6.19 to Table 6.26) provide details with regard to the *performance* of each of the eight major business units provided by the agricultural business with specific reference to the drivers of customer satisfaction. It is important to note that only four of the five drivers of customer satisfaction are tested (*price*, *product*, *personnel* and *service*). *Management* (of the overall agricultural business) as a driver of customer satisfaction does not have a direct influence on the satisfaction of customers for the various business units provided. Business units such as *grain storage*, *grain marketing* and *mechanisation (workshops)* do not have products and therefore only *price*, *personnel* and *service* as drivers of customer satisfaction were tested.

Table 6.19: Retail shops

Retail shops	Poor	Average	Good	Mean	Rank
Price	15.50%	54.40%	29.90%	5.4545	4
Product	10.20%	51.80%	38.00%	5.8129	3
Personnel	1.80%	22.20%	76.00%	7.2632	1
Service	6.00%	35.80%	58.20%	6.5336	2
Gap between best and worst *performing*:					**1.8087**

Retail shops, which is used by almost 99% of the respondents (Table 6.6 and 6.10), are rated as the sixth best *performing* business unit. The driver of customer satisfaction that scored the highest for *retail shops* is *personnel*, with 76% of the respondents indicating that *personnel* perform very well. *Service* is regarded as the second best driver, while *product* is third and *price* is last. There is a 1.8087 difference between the means of the best and the worst *performing* drivers within *retail shops*. It is interesting to note that the ranking order of the drivers of *retail shops* (excluding *management*)

was exactly the same as that of the overall company (see Table 6.16). This could be an indication that, due to the fact that almost the entire sample makes use of this specific business unit, *retail shops* could be perceived as the "blue print" for the entire company.

Table 6.20: Grain storage

Grain storage	Poor	Average	Good	Mean	Rank
Price	10.40%	55.00%	34.70%	5.7207	3
Product	-	-	-	-	-
Personnel	1.20%	10.80%	88.00%	7.5270	1
Service	1.40%	19.50%	79.10%	7.1955	2
Gap between best and worst *performing*:					**1.8063**

Grain storage does not have a physical product as part of the business unit; therefore only *price*, *personnel* and *service* are tested as drivers of customer satisfaction. *Personnel* scored the highest, with service second and *price* last. *Price* performs substantially worse (5.7207) than both *personnel* and *service* (the means are well above 7). Also, more than 10% of the respondents that make use of this business unit indicated that *price performs* poorly. There is a 1.8063 difference between the means of the best and the worst *performing* drivers within *grain storage.*

Grain marketing also does not have a physical product on offer to customers; therefore only three drivers are tested in Table 6.21.

Table 6.21: Grain marketing

Grain marketing	Poor	Average	Good	Mean	Rank
Price	4.30%	45.70%	50.00%	6.3118	3
Product	-	-	-	-	-
Personnel	3.60%	28.50%	67.90%	6.9896	1
Service	7.20%	23.20%	69.60%	6.8814	2
Gap between best and worst *performing*:					**0.6778**

The three drivers scored in the same order as *grain storage* with *personnel* first, *service* second and *price* third. In terms of the means, it is important to note that the means for

grain marketing personnel and *service* are considerably lower than *grain storage*. This can be expected due to the fact that *grain storage* is regarded as the best *performing* business unit according to the respondents. Also, the relative gap between *price* and the other two drivers are not as evident as it is with *grain storage*, given the difference between the best and worst *performing* drivers inherent in *grain marketing* is only 0.6778.

Table 6.22: Financing

Financing	Poor	Average	Good	Mean	Rank
Price	3.60%	46.40%	50.00%	6.3750	4
Product	2.30%	41.70%	56.00%	6.5886	3
Personnel	1.00%	20.10%	78.90%	7.3454	2
Service	1.10%	21.00%	78.00%	7.4086	1
Gap between best and worst *performing*:					**1.0336**

In the case of *financing*, *service* scored the highest as a driver of customer satisfaction, with *personnel* a close second. *Product* was third and *price*, again, was last. Even though *price* and *product* scored the lowest, the means were relatively high, with more than 50% of the respondents' perception indicating that *price* and *product performed* well. There is a 1.0336 difference between the means of the best and the worst *performing* drivers within *financing.*

Table 6.23 provides information with regard to the results of *mechanisation (workshops).* This business unit provided by the agricultural business does not have a product on offer to customers; therefore only *price*, *personnel* and *service* were tested.

Table 6.23: Mechanisation (workshops)

Mechanisation (workshops)	Poor	Average	Good	Mean	Rank
Price	14.70%	57.60%	27.70%	5.4463	3
Product	-	-	-	-	-
Personnel	8.80%	33.10%	58.10%	6.2818	1
Service	9.80%	40.50%	49.70%	6.0784	2
Gap between best and worst *performing*:					**0.8355**

Unsurprisingly, *price performed* the worst with *personnel* and *service* the highest and second highest respectively. It is striking that both *personnel* and *service performed* inferior to the *personnel* and *service* of the previous business units provided by the agricultural business. This is an indication why *mechanisation (workshops)* as a business unit scored the lowest (Table 6.10). Also, there is a 0.8355 difference between the means of the best and the worst *performing* drivers within this business unit.

Table 6.24: Mechanisation (spare parts)

Mechanisation (spare parts)	Poor	Average	Good	Mean	Rank
Price	15.80%	52.60%	31.60%	5.5000	3
Product	22.30%	47.80%	29.90%	5.2006	4
Personnel	7.30%	32.20%	60.50%	6.5382	2
Service	7.00%	31.30%	61.70%	6.6454	1
Gap between best and worst *performing*:					**1.4448**

Mechanisation (spare parts) also *performed* badly in comparison with the rest of the business units (10th of 11 business units). Interestingly, the results for this particular business unit differ from previous business units in the sense that the *performance* of *product* is poorer than that of *price*. In all of the preceding tables of the business unit drivers (Table 6.19 – Table 6.23), *price performed* the worst compared with the other drivers. This is a concern, as the main part of this business unit is to provide spare parts (i.e. products) to customers. Almost 23% of the respondents that make use of this business unit (almost 90% of the total respondents) perceive *product* to perform poorly. A relatively large difference of 1.4448 is reflected between the best and the worst *performing* drivers within *mechanisation (spare parts).*

Table 6.25 below provides a detailed description of the drivers of *mechanisation (whole goods).*

Table 6.25: Mechanisation (whole goods)

Mechanisation (whole goods)	Poor	Average	Good	Mean	Rank
Price	8.60%	53.50%	37.80%	5.8649	4
Product	7.40%	45.70%	46.80%	6.0106	3
Personnel	3.70%	29.40%	66.80%	6.7326	1
Service	4.80%	30.90%	64.40%	6.6702	2
Gap between best and worst *performing*:					**0.8677**

Personnel, *service* and *product* scored relatively the same as the majority of the business units with *personnel* first, *service* second, *product* third and *price* last. There is a 0.8677 difference between the means of the best (*personnel*) and the worst (*price*) *performing* drivers within *mechanisation (whole goods).*

Table 6.26: Insurance

Insurance	Poor	Average	Good	Mean	Rank
Price	1.70%	27.00%	71.30%	6.9739	2
Product	3.30%	37.70%	59.00%	6.5492	4
Personnel	3.10%	25.00%	71.90%	7.0312	1
Service	5.20%	30.20%	64.70%	6.7672	3
Gap between best and worst *performing*:					**0.4820**

Table 6.26 points out that even though *personnel* remain the best scoring driver of customer satisfaction, *price* is second. This is interesting considering that *price* were perceived to be the worst *performing* driver for the majority of the business units, as well as the overall company. *Insurance* as a whole were recognised as one of the best *performing* business units. It is, however, important to note that only 36% of the respondents make use of this particular business unit. The smallest gap (0.4820) between the means of the best and the worst *performing* drivers within a business unit is observed here.

The majority of the business units scored *personnel* first; *service* second and *price* last. This was the case for *grain storage, grain marketing* and *mechanisation (workshops). Retail shops (because of the added product measurement) scored personnel* first; *service* second, *product* third and *price* last. In the case of *financing*, *service* scored the

highest as a driver of customer satisfaction, with *personnel* a close second. *Product* was third and *price*, again, was last. Interestingly, *mechanisation (spare parts)* differs from the other business units in the sense that the *performance* of *product* is poorer than that of *price*. In all of the preceding tables of the business unit drivers (Table 6.19 – Table 6.23), *price performed* the worst compared with the other drivers. *Insurance* showed that even though *personnel* remain the best scoring driver of customer satisfaction, *price* is second. This is interesting considering that *price* were perceived to be the worst *performing* driver for the majority of the business units, as well as the overall company.

6.4.2.5 Perception of agricultural business objectives

In lieu of the reality that the customers of the agricultural business are also the shareholders of the business, a section of the questionnaire aimed to establish how the respondents perceive the objectives of the agricultural business. In Chapter 2 the objectives of the various stakeholders in the organisation was discussed. Corporate-centred goals versus farmer-centred goals were examined and the unique situation highlighted that in traditional agricultural businesses, the shareholder and the customer are the same person. This could create conflict of objectives, as the company's main goal is to create wealth for the shareholder in the form of dividends and an increased share price (corporate-centred approach), while the farmer might want to obtain goods and services at lower prices, as was the agricultural cooperative objective (farmer-centred objective).

Six objectives were provided to the respondents, of which some were objectives of a cooperative and some were objectives of an investor-oriented firm. The respondents had to indicate on a 9 point Likert scale the importance of the different objectives currently to the agricultural business, as well as what they feel should be the priorities of the agricultural business. The purpose of this question was to determine which of the objectives they perceive to be a current priority of the agricultural business, as opposed to which of the objectives they feel should rather be a priority of the agricultural business.

*Table 6.27: The perception of **current** goals of an agricultural business*

Current goals	Not important	Average	Very important	Mean	Rank
1. Sustainable return on the share price	3.1%	40.2%	56.7%	6.6687	2
2. To provide competitive services to the farmer (quality and price)	9.5%	44.2%	46.3%	6.2165	4
3. To maximise the profit	3.1%	26.8%	70.2%	7.1538	1
4. To improve the profitability of the farmer on the farm	16.6%	41.1%	42.3%	5.9663	5
5. To provide affordable and quality products	8.3%	38.8%	52.9%	6.4585	3
6. Involvement with the community	14.1%	45.6%	40.3%	5.8656	6

Table 6.27 provides information with regard to what the respondents perceive to be the current goals of the agricultural business. The mean values for each objective were calculated and according to the mean values a rank were awarded to each. It is clear that more than 70% of the respondents feel that, currently, the number one goal of the agricultural business is to maximise profits. The mean of this specific objective is also very high compared to the other objectives. The second highest rated objective is a sustainable return on the share price, while to provide affordable and quality products are third. The objectives to improve the profitability of the farmer on the farm and involvement with the community were rated the lowest. As discussed in Chapter 2, agricultural cooperatives were established in order to provide competitive services to the farmer, to improve the profitability of the farmer on the farm, as well as to provide affordable and quality products (goals 2, 4 and 5 respectively). These cooperatives were converted into investor-oriented firms (IOFs) and the primary objectives of these two types of business forms differ greatly. IOFs should provide a sustainable return on the share price and maximise profit (goals 1 and 3 respectively). Table 6.27 therefore indicates that the respondents perceive the current goals of the agricultural business to be mainly corporate-centred.

Table 6.28 presents the perceptions of the respondents of what they think the goals of the agricultural business *should be.*

*Table 6.28: The perception of what the respondents feel **should be** the goals of an agricultural business*

Should be the goals	Not important	Average	Very important	Mean	Rank
1. Sustainable return on the share price	5.8%	39.1%	55.1%	6.5846	4
2. To provide competitive services to the farmer (quality and price)	0.6%	6.6%	92.8%	8.2239	2
3. To maximise the profit	10.9%	48.0%	41.0%	5.9574	6
4. To improve the profitability of the farmer on the farm	1.2%	7.8%	91.0%	8.1916	3
5. To provide affordable and quality products	0.6%	5.4%	94.0%	8.2553	1
6. Involvement with the community	9.6%	33.1%	57.2%	6.5030	5

According to the results obtained in Table 6.28, the results are almost exactly opposite of what was provided in Table 6.27. The three most important objectives according to the respondents are to provide affordable and quality products, to provide competitive services to the farmer and to improve the profitability of the farmer (goals 5, 2 and 4 respectively). These are the goals associated with an agricultural cooperative. The goals that are perceived to be the two most important current goals of the agricultural business, namely to provide a sustainable return on the share price and to maximise profit, are perceived to be not as important (ranked fourth and sixth respectively). It is also interesting to note that for goal 2, 4 and 5, more than 91% of the respondents indicated that they perceive these objectives to be very important, compared to only 55.1% (sustainable return on the share price) and 41.0% (to maximise profit). It is therefore clear that although the business form has changed from an agricultural cooperative to an IOF, the respondents still expect the IOF to be managed and run as an agricultural cooperative. Figure 6.1 provides a comparison of what they perceive the goals to be currently, versus what they feel it should be.

Figure 6.1: Comparison between current goals and what it should be

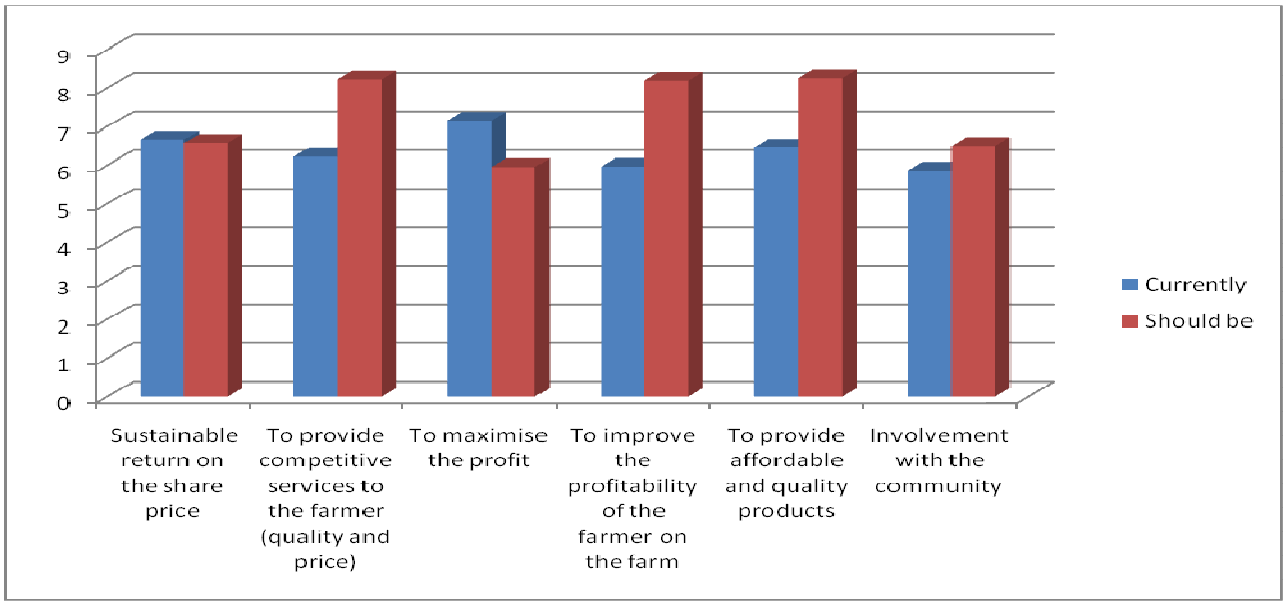


Figure 6.1 provides a graphical presentation of a comparison between what the goals currently is and what the respondents feel it should be. There are large discrepancies between providing competitive services to the farmer, improving the profitability of the farmer on the farm and providing affordable and quality services. Also, the respondents feel that all three of these objectives should be more important than they currently are to the agricultural business. The only other discrepancy between what the goals currently are and what it should be is the objective to maximise profit. This is the only objective with a large variance where respondents feel that the objective is more important to the agricultural business and not that important to the respondents.

Table 6.29 provide the results a paired sample t-test to illustrate any significant relationships.

Table 6.29: Testing the significance between the perceptions of what the respondents feel should be the goals of an agricultural business (paired sample t-test)

Goals	Currently mean	Should be mean	Mean difference	Sig
1. Sustainable return on the share price	6.6635	6.5429	-0.12063	0.292
2. To provide competitive services to the farmer (quality and price)	6.2202	8.2171	1.99694	0.000
3. To maximise the profit	7.1661	5.9467	-1.21944	0.000
4. To improve the profitability of the farmer on the farm	5.9537	8.1852	2.23148	0.000
5. To provide affordable and quality products	6.4596	8.2547	1.79503	0.000
6. Involvement with the community	5.8931	6.5472	0.65409	0.000

Table 6.29 show the mean of what respondents perceive to be the current goals of the organisation, while the column next to it shows the mean of what the respondents feel should be the goals of the agricultural business. The fourth column provides the difference between the two means (*currently* and *should be*). A negative difference means that currently the goal is more important than it should be (according to the respondents) and a positive difference indicates that the goal should be more important than it currently is in the organisation (according to the respondents). The last column indicates whether the relationship between the variables is statistically significant ($p < 0.05$).

All of the goals were found to be statistically significant, except for the corporate-centred goal of achieving a sustainable return on the share price. There was no significant difference between how important the goal currently is and what it should be. The results point out that management should place more emphasis on goals 2, 4, 5 and 6 than they currently do. Therefore, to provide competitive prices to the farmer, to improve the profitability of the farmer on the farm, to provide affordable and quality prices and to be involved in the community are perceived to be more important to the respondents than are currently the case within the agricultural business. All of these goals (2, 4, 5 and 6) can be consigned to be farmer-centred goal (cooperative goals). The only significant goal that provides a negative answer is goal 3, to maximise the profit. The answer indicates that the respondents perceive this goal to be currently more important in the organisation than it should be. The results therefore indicate that

the respondents feel that the business should still be run as a cooperative and not as an IOF, which in reality it is.

More than 70% of the respondents feel that currently the number one goal of the agricultural business is to maximise profits. The second highest rated objective is a sustainable return on the share price, while to provide affordable and quality products are third. The results of calculating the means of what the goals should be is almost exactly opposite of what it currently is according to the respondents. The three most important objectives according to the respondents are to provide affordable and quality products, to provide competitive services to the farmer and to improve the profitability of the farmer. These are the goals associated with an agricultural cooperative. To provide competitive prices to the farmer, to improve the profitability of the farmer on the farm, to provide affordable and quality prices and to be involved in the community are perceived to be more important to the respondents than are currently the case within the agricultural business. To maximise the profit as a goal is perceived to be currently more important in the organisation than it should be.

6.4.3 Objectives

Section 6.4.3 aims to firstly achieve the secondary objectives established in Chapter 1 and in doing so, realising the primary objective of the research. The primary objectives of the study are to determine the relationship between the drivers of customer satisfaction of the various business units to the profitability of these units, and to determine the impact of these variables on the customer satisfaction of the agricultural business.

The empirical objectives are stated as follows:

- To determine which of the drivers of customer satisfaction have the biggest impact on customer satisfaction of the overall company.
- To determine which of the business units have the biggest impact on overall customer satisfaction.

- To determine if the frequency of the use of the different business units affect the overall customer satisfaction of the agricultural business.
- To determine whether the perception of performance by customers of the business units has an influence on profitability.
- Develop a framework from the above results in order to aid in enhancing customer satisfaction in agricultural businesses (will be discussed in Chapter 7).

The following subsection intends to fulfil the first empirical secondary objective.

6.4.3.1 Empirical Secondary Objective 1

The aim of the first empirical secondary objective is to determine which of the drivers of customer satisfaction have the biggest impact on customer satisfaction of the overall company. This first empirical objective is determined by considering the following steps:

- Step 1: Determining which drivers (*price*, *product*, *personnel* or *service*) of the various business units have the biggest impact on the overall drivers of satisfaction.
- Step 2: Determining which of the overall drivers of customer satisfaction has the biggest influence on the satisfaction of the overall company.

The results will be discussed step by step.

Step 1: Determining which drivers within the business units have the biggest impact on the satisfaction towards the overall drivers

Table 6.30 indicates each individual business unit's drivers of customer satisfaction (*price*, *product*, *personnel* and *service*), by presenting the Pearson correlation of the drivers of customer satisfaction, as well as the coefficient of determination (R^2). The coefficient of determination is a measure used to indicate how two variables change together. The bigger the coefficient of determination percentage between two variables, the bigger is the impact they have on each other. Another way of explaining it is that the R^2 percentage is the 'variance that is accounted for by the variance in the other variable' (Salkind, 2008:85). It is important to note that 'product' of *grain storage*, *grain marketing* and *mechanisation (workshops)* could not be measured due to the fact that

these business units do not have physical products on offer, but rather services. These three business units' drivers of customer satisfaction therefore consisted of only *price*, *personnel* and *service*.

Table 6.30: Correlation between the overall drivers of customer satisfaction with the drivers inherent in each business unit

Drivers within the business units	Overall Price		Overall Product		Overall Personnel		Overall Service	
	Sig	R^2	Sig	R^2	Sig	R^2	Sig	R^2
Retail shops drivers	0.00	75%	0.00	62%	0.00	56%	0.00	35%
Grain storage drivers	0.00	32%	---	---	0.00	11%	0.00	19%
Grain marketing drivers	0.00	17%	---	---	0.00	7%	0.00	8%
Financing drivers	0.00	18%	0.00	17%	0.00	19%	0.00	11%
Mechanisation (workshops) drivers	0.00	38%	---	---	0.00	18%	0.00	18%
Mechanisation (spare parts) drivers	0.00	54%	0.00	44%	0.00	25%	0.00	31%
Mechanisation (whole goods) drivers	0.00	38%	0.00	36%	0.00	22%	0.00	25%
Insurance drivers	0.00	26%	0.00	33%	0.00	17%	0.00	22%

All of the correlations between the variables (drivers of customer satisfaction inherent in each business unit) and the overall drivers were found to be positive (although not presented in Table 6.30). This indicates that if the *performance* of the drivers of customer satisfaction in the various business units increase, it would lead to an increase in the satisfaction of the overall drivers of customer satisfaction. The Pearson correlation coefficient is significant for each variable with a p value of less than 0.05. The coefficient of determination (R^2) is calculated by using the Pearson correlation coefficient and computing the square. From the table above it can be deduced that a change in the satisfaction of customers of the agricultural business overall *price* can be explained to a great extent (75%) by *retail shop price*. It can therefore be said that if the customers changed their satisfaction with regard to *price* of the agricultural business, 75% of that change can be explained by how satisfied they are with *retail shop price*. The *product* and *personnel* of *retail shops* also have a big influence on the satisfaction of *product* and *personnel* of the agricultural business.

When it comes to *grain storage*, *grain marketing* and *mechanisation (workshops, spare parts* and *whole goods),* the *price* of these business units is the driver that would have the biggest effect compared to the other drivers. The results from *financing* showed that *personnel* have the biggest influence of all the drivers, with *price* and *product* close behind. The drivers of customer satisfaction of *insurance* indicated that *product* has the biggest influence. According to the results, it can be assumed that if the variables are looked at individually (Pearson correlation and coefficient of determination), then the *price*, *product*, *personnel* and *service* of *retail shops* have the biggest impact of all the business units on the agricultural business's overall level of satisfaction of *price*, *product*, *personnel* and *service* respectively. This could be an indication that *retail shops* and the drivers present in *retail shops* have a big influence on how costumers perceive the agricultural business as a whole.

Correlation focuses on the relationship between individual variables, while regression places all the variables together to specify the relationship between the dependant variable (agricultural business's overall drivers of customer satisfaction) and the independent variables (drivers of customer satisfaction of each business unit). Tables 6.31 to 6.34 show the results of the linear regressions of each overall driver of customer satisfaction of the agricultural business with the corresponding drivers of all the business units. It is important to note once again that *grain marketing*, *grain storage* and *mechanisation (workshops)* do not have a physical product; therefore the satisfaction of the customers towards *product* of these business units could not be tested.

The following tables indicate the regression analysis of all the independent variables (*price*, *product*, *personnel* and *service*) with the dependant variable (individual business units). The method used to calculate the regression analysis is *Stepwise Regression.* The decision to use this specific method was due to the fact that stepwise regression is the "most popular procedure used to obtain the best prediction equation" (Myers & Well, 1995:518). This specific search procedure adds or deletes an *X* variable at every step, while developing the regression model and the procedure ends with the provision of a single regression model that suits the variables best (Kutner, Nachtsheim, Neter & William, 2005:364).

Due to the fact that SPSS deletes all questionnaires that have missing values (for certain statistical calculations), the total number of useable questionnaires were reduced to insufficient numbers to make statistical inferences. The reason for the missing values was that not all of the respondents make use of all of the business units. Therefore, the respondents that do not make use of a particular business unit could not answer a question related to the business unit. The missing values were consequently due to non-use and not as a result of incomplete questionnaires. There are various solutions to this specific problem:

Method 1: Listwise deletion

Listwise deletion is also known as the complete case approach. This is a default manner in which to deal with missing values (Acock, 2005;1015). This approach includes only those questionnaires with complete data, therefore deleting all the other observations. The major disadvantage with this approach is that it leads to an extreme reduction in the sample size (Hair, Black, Babin, Anderson & Tatham, 2006:6). As a result of this disadvantage, this method could not be used.

Method 2: Mean substitution

This method replaces any missing values with the mean for that specific variable. The reason why this specific method was not used was due to the following disadvantages posed by Hair *et al.* (2006:60):

- It understates the variance estimates
- The distribution of values is distorted
- It depresses the observed correlation because all missing data has a single constant value.

Method 3: Pairwise deletion

This is known as the all-available approach. This method is mainly used to maximise the data that is utilised and also to overcome the problem of an entire dataset being deleted due to a single missing value (Hair *et al.,* 2006:60). Pairwise deletion can be defined as using “all available information in the sense that all participants who answered a pair of variables are used to estimate the covariance between those variables regardless of whether they answered other variables”. The major advantage

of this approach over the default approach is that all observed information is included (Acock, 2005:1016). Pairwise deletion was used in an attempt to maximise the information available.

Tables 6.31 to 6.34 indicate the standardised beta coefficient. This value indicates which of the independent variables (for instance satisfaction of *price* of *retail shops*) have the biggest influence on the dependent variable (for instance satisfaction of overall *price* of the agricultural business). Due to stepwise regression analysis, only the variables with statistical significant values are shown. These significance values indicate that there are statistical significant relationships between the dependent and independent variables and therefore the independent variables, as well as the Beta value can be used to predict the dependent variable.

Table 6.31: Linear regression between overall drivers and the drivers of the various business units

DRIVERS	Beta Coefficients	t	Sig.
PRICE			
Retail shops	0.649	6.805	0.000
Mechanisation (spare parts)	0.219	2.293	0.025
PRODUCT			
Retail shops	0.437	5.259	0.000
Mechanisation (spare parts)	0.364	4.585	0.000
Insurance	0.209	2.949	0.004
PERSONNEL			
Retail shops	0.635	7.525	0.000
SERVICE			
Retail shops	0.310	2.940	0.005
Grain storage	0.230	2.683	0.009
Mechanisation (spare parts)	0.285	2.246	0.028

It is important to observe that the drivers of customer satisfaction (*price, product, personnel* and *service*) of *retail shops* have a significant relationship with all of the overall drivers of customer satisfaction. This is to be expected as the majority of respondents make use of this specific business unit and are in direct contact with *retail shops*. *Mechanisation (spare parts)* also has a significant relationship with the majority of the drivers of customer satisfaction (except for *personnel*).

Table 6.31 indicates that there are significant relationships between the satisfaction of overall *price* of the agricultural business and the satisfaction of *price* of *retail shops* and *mechanisation (spare parts).* The beta coefficient specifies that the *price* satisfaction of *retail shops* have the biggest influence on overall satisfaction of *price*. The satisfaction of *mechanisation (spare parts) price* will still increase overall satisfaction of *price*, but to a lesser extent than satisfaction towards of *retail shops price*. It is thus clear that the satisfaction of *price* as an overall driver of customer satisfaction is to a greater degree influenced by the satisfaction of the *price* of *retail shops*. It is therefore possible to predict the satisfaction towards *price* by using *retail shop price*, as well as *mechanisation (spare parts) price.* The beta coefficient indicates the slope of the line and therefore the highest beta value denotes the biggest change in *price.* Any 1 unit change in satisfaction towards retail shops price will have a 0.649 change in satisfaction towards overall price.

The *product* of *retail shops, mechanisation (spare parts)* and *insurance* are the only variables that have a statistical significant relationship with the *product* of the agricultural business as a whole The standardised beta coefficient indicates that *retail shops' product* have the biggest impact on overall satisfaction of *product*, denoting a higher beta value than the other two variables. *Mechanisation (spare parts)* and *insurance* also have an influence on the overall satisfaction of *product,* but not as much as that of *retail shops*. It is also important to note that *insurance* is only used by approximately 36% of the total respondents. Bear in mind that there are no *product* for *grain storage*, *grain marketing and mechanisation (workshops)*, therefore these three business units were excluded from the analysis.

A linear regression analysis of the overall satisfaction of agricultural *personnel* (dependant variable) and all of the *personnel* of the various business units indicate that the only significant variable that has a statistical influence on overall satisfaction of *personnel* is the personnel of *retail shops*.

The service of retail shops, *grain storage* and *mechanisation (spare parts)* have a statistical significant relationship with overall *service* of the agricultural business. Again, *retail shops' service* has the strongest relationship with the overall satisfaction of

service, then *mechanisation (spare parts)* and to a lesser extent *grain storage*. It is interesting to note that *retail shops*, *grain marketing* and *mechanisation (spare parts)* are the business units used most by the respondents.

The coefficient of determination and the standardised beta coefficient provided approximately the same results. It has been determined that the drivers of *retail shops* have the biggest influence on all of the overall drivers of customer satisfaction of the agricultural business. From the results above it can therefore be deduced that according to linear regression, the overall *price* satisfaction of customers of the agricultural business are influenced for the most part by the satisfaction of *price* of *retail shops*, overall satisfaction of *product* are predominantly influenced by *product* of *retail shops* and overall satisfaction of *personnel* is significantly influenced by the satisfaction towards *personnel* of *retail shops*. The business unit driver that influences overall satisfaction of *service* also to a large extent is the satisfaction of *retail shops service*, but also *mechanisation (spare parts) service*.

Step 2: Determine which of the overall drivers of customer satisfaction has the biggest influence on the satisfaction of the overall company

Table 6.32 provides information with regard to the correlation of each of the overall drivers of customer satisfaction towards the satisfaction the customers have of the satisfaction towards (*performance)* of the company as a whole.

Table 6.32: Correlation between the overall drivers of customer satisfaction with the satisfaction towards the company as a whole

Overall satisfaction	**Overall satisfaction towards company**		
	Sig	**R^2**	**Rank**
Price	0.000	14%	5
Product	0.000	28%	1
Personnel	0.000	21%	3
Service	0.000	20%	4
Management	0.000	22%	2

The results indicated (although not reflected in Table 6.32) that all of the overall drivers of customer satisfaction have a positive statistical significant relationship with the overall satisfaction towards the company, when these variables were tested individually. This is to be expected, for as the satisfaction towards a specific driver increases, the customers' satisfaction of the *performance* of the overall company will also increase. The coefficient of determination indicates the strength of the relationship between the two variables, or rather the percentage of variance in one variable (for instance the satisfaction of customers towards the *performance* of the overall company) that is accounted for the variance in another variable (for instance any one of the overall drivers of customer satisfaction). In other words, a change in the perception of *price* will account for a 14% change in the overall satisfaction towards the company *performance*. Or it can be said that if the satisfaction of the overall company changed, 14% of this change can be explained by a change in their satisfaction of *price*. The results indicate that a change in the satisfaction towards *product* will account for 28% of the change in satisfaction towards the overall company. *Management* seems to be the second most influential variable, with *personnel* and *service* close behind. *Price* is the variable that accounts for the least amount of change in the overall satisfaction of the company.

When these five variables are tested together to determine the relationship with overall satisfaction towards the agricultural business, the results are as follows (due to stepwise regression analysis, only the variables with statistical significant values are shown):

Table 6.33: Linear regression between overall satisfaction towards the agricultural business and overall drivers of customer satisfaction

Overall satisfaction towards company	Beta Coefficients	t	Sig.
Product	0.449	9.112	0.000
Service	0.142	2.276	0.024
Management	0.240	3.893	0.000

Of all the overall drivers of customer satisfaction (*price, product, personnel, service* and *management*) tested, the only three that have a statistically significant relationship with customers' satisfaction towards the *performance* of the company as a whole are *product, service and management*. The variable with the biggest influence on the

overall satisfaction towards the company is *product*. In second place, *management* and thirdly *service* also shows an influence on the overall satisfaction of the customers.

The information provided by Table 6.33 established that the satisfaction towards *product* has the biggest impact on the overall satisfaction to the agricultural business. Table 6.31 confirmed that *retail shop product* has the biggest influence on the overall satisfaction towards *product* of the agricultural business. Also, it has been proven that satisfaction towards overall *product* of the business have the biggest influence on overall satisfaction towards the business as a whole. It can therefore be deduced that the satisfaction of customers towards *retail shops product* has the biggest influence on overall product of the agricultural business and an improvement in customers' satisfaction towards *retail shops product* will have a direct improvement on the overall satisfaction towards the business as a whole. Also, as *personnel* of *retail shops* has the biggest impact on *personnel* overall (Table 6.31), it can also be construed that *personnel* of *retail shops* have a direct impact on the satisfaction of customers of the agricultural business as a whole (but to a lesser extent as that of *retail shops product*).

The following table offers data that provides information with regard to the relationship between the customers' satisfaction of the *performance* of the agricultural business as a whole and all of the drivers within all of the business units. This is done to provide a better picture of which drivers within which business units have the biggest influence on the overall satisfaction towards the company.

Table 6.34: Linear regression between overall satisfaction towards the agricultural business and all the drivers of customer satisfaction within the various business units

Overall satisfaction towards company	Beta Coefficients	t	Sig.
Retail shops (product)	0.284	2.643	0.010
Grain marketing (price)	0.225	2.153	0.035

The results from Table 6.34 provide the similar information with regard to the satisfaction towards *retail shops product* than Table 6.31. It is also very interesting that the satisfaction towards *grain marketing price* also has a statistical significant relationship with customers' satisfaction towards company *performance*. These two drivers within *retail shops* and *grain marketing* have a direct positive statistically

significant relationship with overall company *performance* when all the drivers within all the business units are tested together.

There are significant relationships between the satisfaction of overall *price* of the agricultural business and the satisfaction of *price* of *retail shops* and *mechanisation (spare parts).* The *product* of *retail shops, mechanisation (spare parts)* and *insurance* are the only variables that have a statistical significant relationship with the *product* of the agricultural business as a whole, while the only significant variable that has a statistical influence on overall satisfaction of *personnel* is the personnel of *retail shops*. *The service of retail shops*, *grain storage* and *mechanisation (spare parts)* have a statistical significant relationship with overall *service* of the agricultural business. Of all the overall drivers of customer satisfaction (*price, product, personnel, service* and *management*) tested, the only three that have a statistically significant relationship with customers' satisfaction towards the *performance* of the company as a whole are *product, service and management*. It has been found that the satisfaction of customers towards *retail shops product* has the biggest influence on overall *product* of the agricultural business and an improvement in customers' satisfaction towards *retail shops product* will have a direct improvement on the overall satisfaction towards the business as a whole. Satisfaction towards *grain marketing price* also has a statistical significant relationship with customers' satisfaction towards company *performance*. These two drivers within *retail shops* and *grain marketing* have a direct positive statistically significant relationship with overall company *performance* when all the drivers within all the business units are tested together.

The first empirical secondary objective aimed to establish which of the drivers of customer satisfaction have the biggest impact on customer satisfaction towards the overall company. In summation it can be reasoned that the drivers of the *retail shops* (*price, product, personnel* and *service*) all have a big impact on the overall satisfaction towards the drivers of the company as a whole. When tested together, however, it was found that the *retail shops product* and *grain marketing price* have the biggest impact on the customer satisfaction towards the overall company. Section 6.4.3.2 will provide analyses to resolve the second empirical secondary objective.

6.4.3.2 Empirical Secondary Objective 2:

The aim of the second empirical secondary objective is to determine which of the business units has the biggest impact on overall satisfaction. This second empirical objective is determined by considering the following steps:

- Step 1: Determining which drivers of customer satisfaction (*price*, *product*, *personnel* or *service*) within the various business units has the biggest impact on the satisfaction towards the *performance* of the business units.
- Step 2: Determining which of the business units has the biggest influence on the satisfaction towards the overall company.

The results will be discussed step by step.

Step 1: Determining which drivers of customer satisfaction (*price, product, personnel* or *service*) within the various business units has the biggest impact on the satisfaction towards the *performance* of the business units.

The first step demands the verification of which driver (*price, product, personnel* and *service*) within each business unit has the biggest impact on the customers' satisfaction towards the *performance* of that specific business unit. It is therefore necessary to determine the correlation between the individual drivers within each business unit and the *performance* of that specific business unit (Table 6.35). It is also crucial to determine the relationship of those drivers with the overall *performance* of the business unit collectively to determine which driver has the biggest influence on the *performance* of the business unit (Table 6.36).

Table 6.35: Correlation between the drivers within each business unit with the overall performance of the business unit

Performance of business units	Price in business unit		Product in business unit		Personnel in business unit		Service in business unit	
	Sig	**R^2**	**Sig**	**R^2**	**Sig**	**R^2**	**Sig**	**R^2**
Retail shops	0.00	31%	0.00	46%	0.00	32%	0.00	32%
Grain storage	0.00	21%	---	---	0.00	35%	0.00	34%
Grain marketing	0.00	55%	---	---	0.00	46%	0.00	50%
Financing	0.00	35%	0.00	44%	0.00	31%	0.00	37%
Mechanisation (workshops)	0.00	35%	---	---	0.00	43%	0.00	37%
Mechanisation (spare parts)	0.00	32%	0.00	53%	0.00	45%	0.00	45%
Mechanisation (whole goods)	0.00	29%	0.00	30%	0.00	44%	0.00	42%
Insurance	0.00	47%	0.00	50%	0.00	38%	0.00	61%

The results indicate that all the drivers within each of the business units correlate positively with the overall satisfaction of *performance* of the specific business unit (correlation is significant at the 0.01 level). The coefficient of determination of each variable with the overall level of satisfaction (*performance*) is described by R^2. This indicates the percentage of variance that a change in satisfaction of for instance *retail shops price*, could cause in the satisfaction of *performance* of *retail shops* as a whole. For *retail shops* as a whole, *retail shop product* seems to have the biggest influence. A change in the satisfaction of *grain storage price* will have a 55% influence on the satisfaction of the *grain marketing business* unit. *Mechanisation (spare parts)* is influenced the most by a change in the perception of *mechanisation (spare parts) product* (53%).

Table 6.36 illustrates the results of the relationship between the overall level of satisfaction of *performance* of each business unit with the drivers of customer satisfaction within each business unit when all of the variables are tested together and not individually. It is important to note that *grain storage*, *grain marketing* and *mechanisation (workshops)* do not have any physical *product* to test; therefore only *price, personnel* and *service* are tested for these three business units.

All four of the drivers (*price*, *product, personnel* and *service)* have a statistical significant relationship with the overall *performance* of *retail shops*. The beta coefficient

indicates the strength of the relationship and therefore it can be seen that *personnel* has the biggest influence on the satisfaction of customers on the overall satisfaction on the *performance* of *retail shops*. *Product* and *service* are second and third respectively, with *price* the last variable that has the smallest influence (but still significant) on the overall satisfaction of *retail shops*.

Only two of the three variables have a statistically significant relationship with the overall satisfaction of the *performance* of *grain storage*. The satisfaction towards *grain storage personnel* has the strongest relationship with overall satisfaction of *grain storage*, with the satisfaction of *grain storage price* second.

Again only three drivers were tested to determine the relationship with overall *grain marketing performance*. *Price* and *personnel* are the only two drivers that have a statistically significant relationship with the overall *performance* of *grain marketing*, the same result as *grain storage*. In the case of *grain marketing*, however, the satisfaction towards of *grain marketing price* has the biggest impact on the overall satisfaction towards *grain marketing*, with *personnel* second.

Table 6.36: Linear regression between the overall satisfaction towards the business units with the drivers of the specific business units

BUSINESS UNITS	Beta Coefficients	t	Sig.
RETAIL SHOPS			
Price	0.152	2.709	0.007
Product	0.255	4.279	0.000
Personnel	0.278	5.425	0.000
Service	0.211	3.870	0.000
GRAIN STORAGE			
Price	0.224	3.609	0.000
Personnel	0.360	5.803	0.000
GRAIN MARKETING			
Price	0.478	6.275	0.000
Personnel	0.233	3.060	0.003
FINANCING			
Price	0.236	2.584	0.011
Product	0.240	2.529	0.013
Service	0.268	3.443	0.001
MECHANISATION (WORKSHOPS)			
Price	0.401	4.668	0.000
Personnel	0.290	3.376	0.001
MECHANISATION (SPARE PARTS)			
Price	0.150	2.909	0.004
Product	0.259	4.398	0.000
Personnel	0.194	3.097	0.002
Service	0.276	4.451	0.000
MECHANISATION (WHOLE GOODS)			
Product	0.237	3.274	0.001
Service	0.486	6.701	0.000
INSURANCE			
Personnel	0.271	3.376	0.001
Service	0.561	6.988	0.000

The only driver that does not have a statistical significant relationship with the overall *performance* of *financing* is *personnel*. *Service* seems to have the biggest impact on *financing* as a whole, with *product* and *price* a close second and third respectively.

Mechanisation (workshops) price seems to have the biggest impact on the business unit as a whole, with *personnel* second. A change in the satisfaction level towards *mechanisation (workshops) price* will have the biggest impact on the level of satisfaction of customers towards *mechanisation (workshops).*

All four of the drivers have a statistically significant relationship with *mechanisation (spare parts)* as a whole. *Service* and *product* seem to be the drivers that have the

largest impact on *mechanisation (spare parts)* as a whole. A change in the level of satisfaction towards *mechanisation (spare parts) price* has the smallest impact on the customers' satisfaction towards *mechanisation (spare parts)* as a whole.

Of all four drivers, only *product* and *service* have a significant relationship with *mechanisation (whole goods). Service* is the most important factor and therefore has the biggest influence on *mechanisation (whole goods).*

Personnel and *service* are the only two drivers with a significant relationship with the *insurance* business unit. *Service*, however, has a very large impact on this specific business unit and are therefore the most significant relationship.

The second step to achieve the secondary empirical objective is to determine which of the eight main business units' overall satisfaction towards *performance* has the biggest impact on the customers' satisfaction of the *performance* of the agricultural business as a whole.

Step 2: Determining which of the business units has the biggest influence on the satisfaction of the overall company.

Table 6.37 provides detail with regard to the correlation between the customers' satisfaction of the overall company with each individual business unit, as well as the coefficient of determination. The relationship between each business unit and the overall company are therefore tested on an individual basis.

Table 6.37: Correlation between the overall performance of each business unit with the performance of the company as a whole

Overall perception	Overall performance of company		
	Sig	R^2	Rank
Retail shops	0.000	32%	1
Grain storage	0.000	7%	6
Grain marketing	0.000	10%	5
Financing	0.000	12%	4
Mechanisation (workshops)	0.000	20%	2
Mechanisation (spare parts)	0.000	20%	2
Mechanisation (whole goods)	0.000	20%	2
Insurance	0.000	19%	3

The results indicated that the *performance* of every business unit correlated positively (and significantly) with the *performance* of the overall company. It can therefore be said that an improvement in the satisfaction of customers of any business unit will (to a greater or lesser extent) also improve the overall satisfaction towards the company. The coefficient of determination (R^2) measures the strength of the correlation and the percentage indicates the change in the satisfaction of the overall company that can be accounted for by a change in the *performance* of the specific business unit. It is therefore clear that a change in the satisfaction towards of *retail shops* will have the biggest impact on the overall company or to put it differently, when there is a change in the overall level of satisfaction towards the company, 32% of that change will be explained by a change in the level of satisfaction towards *retail shops*. All three *mechanisation* business units (with a R^2 of 20%) are second and *insurance* third most influential. The following table indicates the results of linear regression between the overall level of satisfaction towards the company with all of the business units together.

Table 6.38: Linear regression between overall level of satisfaction towards each business unit with the performance of the company as a whole

Overall performance of company	Beta Coefficients	t	Sig.
Retail shops	0.583	6.921	0.000
Mechanisation (workshops)	0.218	2.503	0.015
Insurance	0.239	2.687	0.010

The results almost correspond with the correlation between the overall level of satisfaction and the *performance* of the different business units, with *retail shops* having the biggest impact on overall satisfaction; *insurance* second and *mechanisation (workshops)* third. Therefore, to improve the overall level of satisfaction of customers towards the company as a whole, it is imperative to improve the level of satisfaction towards these three business units of which retail shops would have the biggest impact.

Table 6.36 proved that all of the drivers of *retail shops* have an impact on the level of satisfaction towards *retail shops* as a whole. However, *personnel* and *product* has the biggest impact on the overall *performance* of retail shops.

From Table 6.34 it is clear that, when all of the drivers present in all of the eight main business units are tested against the overall level of satisfaction towards the company, *retail shops product* have the biggest influence on the overall level of satisfaction towards the company. Therefore, it seems that if this agricultural business wants to improve the overall level of satisfaction of the company as a whole, the first place to start would be the retail shops product.

Section 6.4.3.3 will provide analyses to resolve the third empirical secondary objective.

6.4.3.3 Empirical Secondary Objective 3:

The aim of the third empirical secondary objective is to determine if the frequency of the use of the different business units affects the overall satisfaction towards the agricultural business. This third empirical objective is determined by considering the following steps:

- Step 1: Determining whether the frequency with which the various business units is used has an impact on the *performance* of the specific business unit.
- Step 2: Determining which of the business units' frequency has the biggest influence on the overall satisfaction towards the agricultural business as a whole.

The results will be discussed step by step.

Step 1: Determining whether the frequency with which the various business units are used has an impact on the *performance* of the specific business unit.

The first step in determining if the frequency of use of the various business units affects the satisfaction of customers towards the overall agricultural business, is to determine if there is a statistically significant relationship between the frequency with which a specific business unit is used and the overall *performance* of that specific business unit. Therefore the Levine's test for equality of variances was used to determine which t-test to use to determine the p-value (significance) of each specific relationship.

Table 6.39 provides the number of respondents that indicated their frequency of use (N), the mean value of their relative perception of *performance* (Mean), as well as the standard deviation (Std.Dev). The t-value for the test is also supplied, as well as the degrees of freedom (df), and most importantly the p-value (Sig) that indicates the statistical significance of the relationship. The p-value column indicates that all of the t-tests were found to be statistically significant, apart from that of *retail shops*. The mean value indicates whether the respondents perceived the *performance* to be better or worse between the group that use the business unit often and the group that use it seldom.

Table 6.39: T-test between the overall performance per business unit with the frequency with which each business unit is used

	N	Mean	Std.Dev	T-test for equality of means		
				t	df	Sig
Retail shop						
Often	313	6.7827	1.52461			
Seldom	23	6.0870	2.06514	1.584	23.795	0.126
Grain storage						
Often	176	7.5511	1.29071			
Seldom	73	6.9452	1.41314	3.279	247	0.001
Grain marketing						
Often	101	7.2574	1.44674			
Seldom	69	6.1449	1.75126	4.516	168	0.000
Financing						
Often	83	7.5181	1.36472			
Seldom	54	6.4630	1.55057	4.189	135	0.000
Mechanisation (workshops)						
Often	54	6.5370	1.71247			
Seldom	91	5.9231	1.64810	2.137	143	0.034
Mechanisation (spare parts)						
Often	183	6.2678	1.83955			
Seldom	103	5.4660	2.09020	3.367	284	0.001
Mechanisation (whole goods)						
Often	52	7.2500	1.65535			
Seldom	108	6.0648	1.65350	4.245	158	0.000
Insurance						
Often	67	7.6418	1.05459			
Seldom	40	6.4500	1.44914	4.534	63.793	0.000

The results indicate that there is a definite statistically significant relationship between the frequencies with which customers use the various business units, except in the case of *retail shops* ($p > 0.05$). Interestingly, all of the means indicate (excluding *retail shops*) that those individuals using the business units often are more satisfied with the business unit being used, compared to those individuals using the business unit seldom. Respondents that make use of *grain storage* more often, have a higher opinion

of the *performance* of this specific business unit. The same is true for all of the other business units. *Retail shops* also shows an indication that the respondents that use the business unit more often have a more positive view than those that use it less regularly, although this is the only difference that is not significant. Table 6.39 thus provide an indication that farmers that use the business units more often will have a more positive attitude towards the performance of the business units. It has already been established that an increase in the satisfaction of customers towards the various business units will have a positive effect on the satisfaction of the customers on the overall company *performance* (Table 6.37). It can therefore be deduced that the more often business units are used within an agricultural business, the higher the perception of *performance* will be with regards to the agricultural business as a whole.

Step 2: Determining which of the business units' frequency has the biggest influence on the overall satisfaction towards the agricultural business as a whole.

Table 6.40 provides detailed information to illustrate the relationship between the frequency with which the various business units are used and the overall *performance* of the agricultural business. This is done by way of a one-way ANOVA analysis.

Table 6.40: One-way ANOVA analysis between the overall performance of the company and the frequency with which each individual business unit are used.

Overall performance of company	Often	Seldom	Never	Sig.
Retail shops	6.9533	6.8182	6.000	0.417
Grain storage	6.9471	6.7532	7.0649	0.325
Grain marketing	7.1237	6.5802	6.9862	0.016
Financing	7.3647	6.6286	6.8383	0.001
Mechanisation (workshops)	7.3077	6.9057	6.8232	0.065
Mechanisation (spare parts)	6.9891	6.8125	7.1071	0.414
Mechanisation (whole goods)	7.3519	6.8359	6.8489	0.033
Insurance	7.1618	6.8462	6.8844	0.278
Agricultural support services	7.5294	6.7671	6.9351	0.096
Milling exchange services	7.0177	6.8974	6.8765	0.667
Fuel farm delivery services	7.2891	6.8269	6.6549	0.000

The table displays the mean value of how customers that often use (for instance) *retail shops*; perceive the *performance* of the agricultural business. In contrast to this, the individuals that never use *retail shops* have a lower perception of the *performance* of the agricultural business as a whole (mean of 6.000) compared to the individuals that

use *retail shops* often (mean of 6.9533). The often, seldom and never columns therefore indicate the average means of overall *performance* of the agricultural business for each of the individual business units. The frequency with which each business unit is used, is tested separately against the overall performance of the company. The results indicate that there are significant relationships between the overall *performance* of the company with *grain marketing*, *financing, mechanisation (whole goods)* and *fuel farm delivery services*, which indicates that the frequency with which these four business units are used do have an influence on how customers view the agricultural business as a whole (*p < 0.05).*

Even though the analyses designate these four business units/services to have a statistically significant relationship, it does not provide any information with regard to the nature of the relationship. Therefore it is necessary to perform a post hoc test on the values which proved to be significant to determine where the significant difference is. This is called Tukey's test (Mendenhall & Sincich, 1996:655). Table 6.41 provides the nature of the relationship (where the significant difference is) between the four business units identified to have a statistically significant relationship with overall *performance* of the company.

Table 6.41: Post hoc test (Tukey's test) between the overall performance and the four business units

Tukey's test		**Mean difference**	**Sig.**
Grain marketing			
Often	Seldom	0.54346	0.016
Financing			
Often	Never	0.52638	0.007
Often	Seldom	0.73613	0.001
Mechanisation (whole goods)			
Often	Never	0.50293	0.044
Often	Seldom	0.51591	0.040
Fuel farm delivery services			
Often	Never	0.63413	0.000

Table 6.41 shows where the significant differences are with regard to how frequent the business units are used compared to how the respondents perceive the agricultural business as a whole. The results indicate the following:

- When Tukey's test is used, there seems to be no significant relationship between the overall level of satisfaction of the agricultural business and *grain marketing*. However, the results indicate that the frequency with which *grain marketing* is used has an influence when it comes to the overall level of satisfaction towards the company between the respondents that use the business unit seldom and often. The mean difference indicates that those individuals that use the business unit often have a more positive perception of the overall company.
- The frequency with which *financing* is used has an impact on the overall level of customer satisfaction towards the company as a whole between those individuals that use *financing* often and those using it seldom and never. The results indicate that the respondents that use *financing* often have a better perception of the overall company than those using the business unit seldom or never.
- Tukey's test for *mechanisation (whole goods)* indicates that those respondents that use this business unit often have a significantly higher perception of the overall company than those using *mechanisation (whole goods)* seldom or never.
- The outcome of the analysis for *fuel farm delivery services* indicate that there is a statistically significant difference between those individuals that use the business unit often and those that never make use of it. Those that use the service often have a much higher estimation of the company as a whole.

To conclude, the results indicate that the more frequent business units are used, the higher would be the opinion of the customers of the particular business unit (except in the case of *retail shops* where the results were not statistically significant). However, when the frequencies of the various business units were tested against the overall level of satisfaction of the agricultural business as a whole, it was found that the customers using *grain marketing*, *financing*, and *mechanisation (whole goods)* more often rated the *performance* of the agricultural business higher than those individuals using the particular business units seldom. Also, those customers that use *financing*, *mechanisation (whole goods)* and *fuel farm delivery services* often regard the

performance of the company as a whole to be higher, compared to those that never use the particular business units.

6.4.3.4 Empirical Secondary Objective 4:

The aim of the fourth empirical secondary objective is to determine whether the perception of *performance* of customers of the business units has an influence on sustainable profitability. The fourth empirical objective is determined by considering the following steps:

- Step 1: Determining the composition of net profit of what the business units contributed towards the agricultural business.
- Step 2: Compare the satisfaction of *performance* of the business units with their contribution towards net profit.

The results will be discussed step by step.

Step 1: Determining the composition of net profit of what the business units contributed towards the agricultural business.

The last secondary objective includes making use of the financial statements of the business units of the particular agricultural business. The aim is to determine if there is a relationship between how customers perceive the business units to perform and the profitability of the particular business unit. According to the literature, the more satisfied customers are with a particular business (or in this case business unit), the more profitable the business (or business unit) should be. The best encompassing measure to use to measure profitability is the return on assets ratio (ROA). Unfortunately this could not be measured exactly/accurately due to the fact that certain assets are used by multiple business units. Due to this overlap, it was decided to rather use the business units' contribution towards the net profit of the agricultural business in an effort to find an accurate measure.

Table 6.42 provides details with regard to the contribution of the various business units towards the composition of the agricultural business's net profit. The information spans a period of 4 years to ensure accurateness.

Table 6.42: Composition of net profit by the various business units

	Contribution towards net profit					
Business units	**2005/2006**	**2006/2007**	**2007/2008**	**2008/2009**	**Average**	**Rank**
Retail shops	9.5%	16.2%	13.0%	9.2%	12.0%	4
Grain storage	59.8%	51.1%	64.7%	60.0%	58.9%	1
Grain marketing	29.3%	23.5%	12.4%	17.0%	20.5%	2
Financing	15.4%	17.2%	8.2%	10.9%	12.9%	3
Mechanisation (workshops)	-3.4%	-2.2%	-1.0%	-0.6%	-1.8%	7
Mechanisation (spare parts)	-5.3%	-2.2%	1.4%	2.7%	-0.8%	6
Mechanisation (whole goods)	-5.4%	-4.1%	0.4%	-0.1%	-2.3%	8
Insurance	0.3%	0.6%	0.9%	1.0%	0.7%	5

Table 6.42 provides detail with regard to the contribution (as a percentage) the various business units made over a 4 year period to the agricultural business's net profit. It is clear that grain storage contributed the lion share and therefore contributes the highest average percentage, while mechanisation (workshops), mechanisation (spare parts) and mechanisation (whole goods) have actually been running at a loss on average over the past four years.

Step 2: Compare the perception of performance of the business units with their contribution towards net profit.

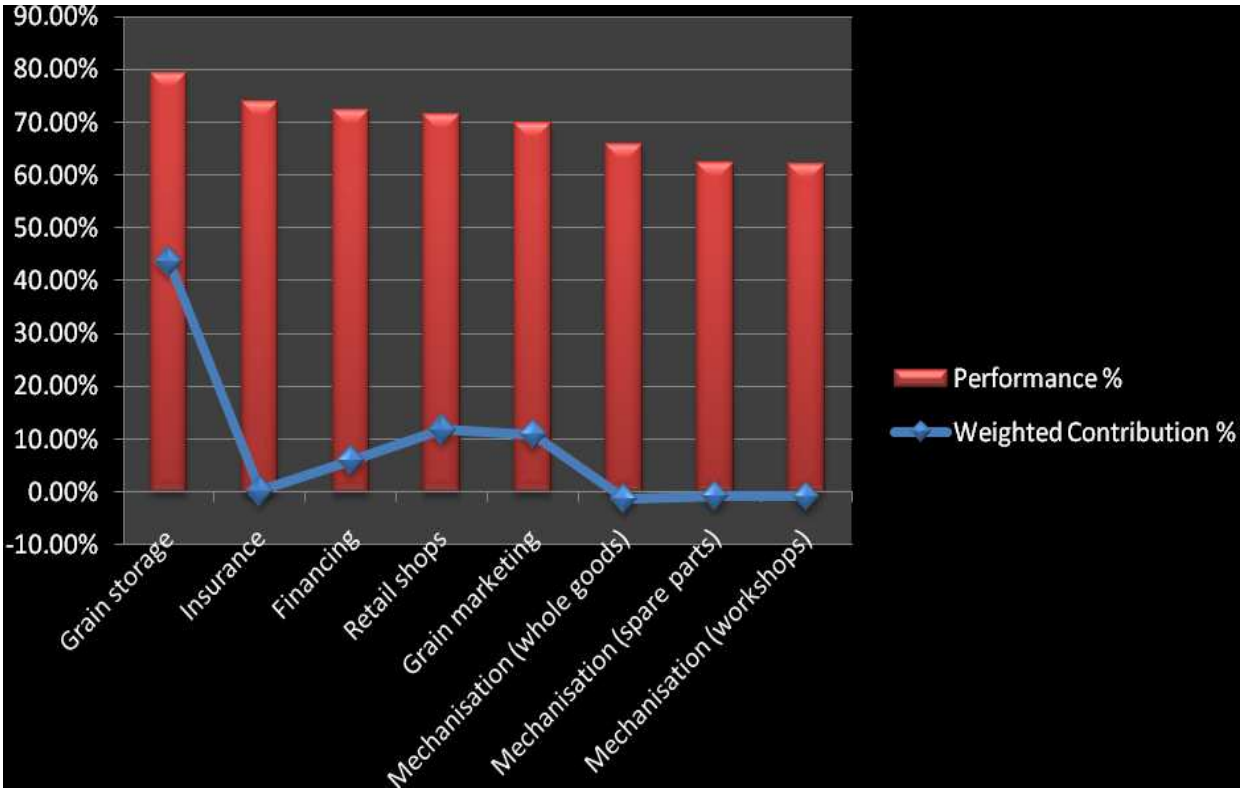
The information from Table 6.10 (the *performance* of the various business units) can be converted to percentages by using the mean value minus 1 and dividing the answer by 8 (nine point Likert scale - 1). Table 6.43 presents the performance of the various business units in percentage format, as well as the average contribution made by each business unit over the past four years. It is important to note that due to the fact that different quantities of customers make use of each business unit, the weighted contribution for each business unit was calculated.

Table 6.43: Contribution percentage of net profit and performance percentage of the business units

Business units	Contribution %	Contribution rank	Performance %	Performance rank
Retail shops	11.83%	1	71.6%	4
Grain storage	43.70%	5	79.2%	1
Grain marketing	10.93%	4	69.9%	5
Financing	6.00%	2	72.3%	3
Mechanisation (workshops)	-0.87%	3	62.1%	8
Mechanisation (spare parts)	-0.71%	8	62.2%	7
Mechanisation (whole goods)	-1.27%	6	65.8%	6
Insurance	0.25%	7	74.0%	2

By making use of a graph, the contribution percentage of net profit, as well as the performance percentage can be compared. Figure 6.2 provides the graphical representation of these two types of percentages.

Figure 6.2: Graphical representation between the contribution percentage and the performance percentage of the business units



The graphical representation indicates that there could be a definite relationship between the contribution to net profit and performance. Unfortunately, this could not be

proven statistically as two different data sets were used (satisfaction survey and financial statements). However, the contribution percentage and the performance percentage of each of the business units seem to follow the same movements. In the case of financing and mechanisation (whole goods), however, when performance increased, the contribution to net profit decreased slightly. It can therefore be assumed that there seem to be a relationship between the contribution that each business unit make to the agricultural business' net profit and the perception of performance that the respondents have towards the business units. According to the literature customer satisfaction would lead to increased profitability and the results indicate a definite correlation between customer satisfaction of the business units and the contribution made to net profit by the various business units.

6.4.4 Hypotheses

It is the intention of the research study to evaluate the following four null hypotheses *(H0)* and their corresponding alternative hypotheses (*H1)*:

Hypothesis Statement Number 1:

H0: There is no single business unit that can significantly influence overall customer satisfaction of an agricultural business.
H1: There is one or more business unit(s) that can significantly influence overall customer satisfaction of an agricultural business.

Hypothesis Statement Number 2:

H0: There is no single driver of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business.
H1: There is one or more driver(s) of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business.

Hypothesis Statement Number 3:

H0: There is no single driver of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.
H1: There is one or more driver(s) of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.

Hypothesis Statement Number 4:

H0: There is no significant relationship between the frequency with which business units are used and the satisfaction of customers.
H1: There is a significant relationship between the frequency with which business units are used and the satisfaction of customers.

Each null hypothesis and its corresponding alternative hypothesis will be evaluated in the following subsections:

6.4.4.1 Hypothesis Statement Number 1

This hypothesis statement intends to determine if there is one or more business unit(s) that has/have a significant influence on the customer satisfaction of the overall organisation. The first hypothesis statement reads as follows:

H0: There is no single business unit that can significantly influence overall customer satisfaction of an agricultural business.

H1: There is one or more business unit(s) that can significantly influence overall customer satisfaction of an agricultural business.

The answer to this hypothesis statement is found in Table 6.38, in attempting to answer the second secondary objective.

Table 6.38: Linear regression between overall level of satisfaction towards each business unit with the performance of the company as a whole

Overall performance of company	Beta Coefficients	t	Sig.
Retail shops	0.583	6.921	0.000
Mechanisation (workshops)	0.218	2.503	0.015
Insurance	0.239	2.687	0.010

The results of this linear regression indicate that when the *performance* of all of the business units are tested against the *performance* of the agricultural business as a whole, it was found that *retail shops* having the biggest impact on overall satisfaction; *insurance* second and *mechanisation (workshops)* third. Therefore, to improve the overall level of satisfaction of customers towards the company as a whole, it is imperative to improve the level of satisfaction towards these three business units of which *retail shops* would have the biggest impact.

The results from Table 6.38 therefore specify that there is indeed one or more business unit(s) that can influence overall customer satisfaction of an agricultural business and these three business units are (in sequence of importance) *retail shops, insurance* and *mechanisation (workshops).* Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

6.4.4.2 Hypothesis Statement Number 2

The aim of this hypothesis statement is to resolve whether there is one of more driver(s) of customer satisfaction that can have a significant influence on the customer satisfaction of the overall organisation. The null and alternative hypothesis is the following:

H0: There is no single driver of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business.

H1: There is one or more driver(s) of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business.

Table 6.33 provide the answer to this hypothesis statement:

Table 6.33: Linear regression between overall satisfaction towards the agricultural business and overall drivers of customer satisfaction

Overall satisfaction towards company	Beta Coefficients	t	Sig.
Product	0.449	9.112	0.000
Service	0.142	2.276	0.024
Management	0.240	3.893	0.000

There are three drivers of customer satisfaction that have an influence on overall customer satisfaction. Of all the overall drivers of customer satisfaction (*price, product, personnel, service* and *management*) tested, the three that have a statistically significant relationship with customers' satisfaction towards the *performance* of the company as a whole are *product, service and management*. The variable with the biggest influence on the overall satisfaction towards the company is *product*. In second place, *management* and thirdly *service* also show an influence on the overall satisfaction of the customers. The information provided by Table 6.33 established that the satisfaction towards *product* has the biggest impact on the overall satisfaction to the agricultural business.

This result therefore indicates that the null hypothesis should be rejected as there are one or more driver(s) of customer satisfaction that can influence overall customer satisfaction of an agricultural business. The alternative hypothesis is therefore accepted.

6.4.4.3 Hypothesis Statement Number 3

The null and alternative hypotheses number 3 is aimed at determining whether there are one or more driver(s) of customer satisfaction within a business unit that can significantly influence overall customer satisfaction of the entire organisation. The result is obtained in Table 6.34 when all of the drivers of customer satisfaction inherent in each business unit are tested against the overall satisfaction towards the company as a whole.

H0: There is no single driver of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.

H1: There is one or more driver(s) of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.

Table 6.34: Linear regression between overall satisfaction towards the agricultural business and all the drivers of customer satisfaction within the various business units

Overall satisfaction towards company	Beta Coefficients	t	Sig.
Retail shops (product)	0.284	2.643	0.010
Grain marketing (price)	0.225	2.153	0.035

There are two drivers of customer satisfaction inherent in a business unit that can significantly influence overall satisfaction. These two are *retail shops product*, as well as *grain marketing price*. These two drivers within *retail shops* and *grain marketing* have a direct positive statistically significant relationship with overall company *performance* when all the drivers within all the business units are tested together. This result therefore indicates that the null hypothesis will be rejected and the alternative hypothesis will be accepted.

The last hypothesis statement will be discussed in section 6.4.4.4.

6.4.4.4 Hypothesis Statement Number 4

The following null and alternative hypothesis intends to resolve whether there is a relationship between the frequency with which a specific business unit is used or not versus the level of customer satisfaction.

H0: There is no significant relationship between the frequency with which business units are used and the satisfaction of customers.

H1: There is a significant relationship between the frequency with which business units are used and the satisfaction of customers.

The answer to this hypothesis is found in attempting to answer secondary objective number three in Table 6.39.

Table 6.39: T-test between the overall performance per business unit with the frequency with which each business unit is used

	N	Mean	Std.Dev	T-test for equality of means		
				t	df	Sig
Retail shop						
Often	313	6.7827	1.52461			
Seldom	23	6.0870	2.06514	1.584	23.795	0.126
Grain storage						
Often	176	7.5511	1.29071			
Seldom	73	6.9452	1.41314	3.279	247	0.001
Grain marketing						
Often	101	7.2574	1.44674			
Seldom	69	6.1449	1.75126	4.516	168	0.000
Financing						
Often	83	7.5181	1.36472			
Seldom	54	6.4630	1.55057	4.189	135	0.000
Mechanisation (workshops)						
Often	54	6.5370	1.71247			
Seldom	91	5.9231	1.64810	2.137	143	0.034
Mechanisation (spare parts)						
Often	183	6.2678	1.83955			
Seldom	103	5.4660	2.09020	3.367	284	0.001
Mechanisation (whole goods)						
Often	52	7.2500	1.65535			
Seldom	108	6.0648	1.65350	4.245	158	0.000
Insurance						
Often	67	7.6418	1.05459			
Seldom	40	6.4500	1.44914	4.534	63.793	0.000

The results indicate that there is a definite statistically significant relationship between the frequencies with which customers use the various business units, except in the case of *retail shops* ($p > 0.05$). Interestingly, all of the means indicate (excluding *retail*

shops) that those individuals using the business units often are more satisfied with the business unit being used, compared to those individuals using the business unit seldom. Therefore, the null hypothesis is rejected (and the alternative hypothesis is accepted) in the case of *grain storage, grain marketing, financing, mechanisation (workshops), mechanisation (spare parts), mechanisation (whole goods)* and *insurance.* Thus, the more frequent these business units are used, the more satisfied the customers would be. In the case of *retail shops* however, the null hypothesis could not be rejected.

The hypotheses' intent was to describe the major relationships between the drivers of customer satisfaction in the business units, the overall drivers of customer satisfaction, as well as the business units themselves with the overall satisfaction towards the agricultural business as a whole. The results indicate that satisfaction towards *retail shops, insurance* and *mechanisation (workshops)* can have a significant influence on overall customer satisfaction. Also, *product, service* and *management* are the drivers that have the most significant influence on overall customer satisfaction, while specifically *retail shop product* and *grain marketing price* can influence overall customer satisfaction. Specifically, *retail shops, product* and *retail shops product* have the biggest influence on overall customer satisfaction, as the relationships were the biggest.

Also, the more frequent the business units are used, the more satisfied customers would be, except in the case of *retail shops*.

6.5 Conclusion

Chapter 6 was aimed at providing the empirical research results of the study under consideration. The demographics of the respondents were discussed with specific reference to the type of farmer, the size of the customer, the number of years' experience, as well as the age of the customer. Descriptive data includes the frequency with which the business units are used, as well as the *performance* of the business units, the organisation as a whole and the drivers of customer satisfaction. Also, the performance of the drivers of customer satisfaction, inherent in each business unit, were analysed in detail. The perceived goals of the agricultural business were tested

and measured against what the respondents felt should be the goals of the agricultural business. The aim of the first empirical secondary objective was to determine which of the drivers of customer satisfaction have the biggest impact on customer satisfaction of the overall company. It was found that the drivers of the *retail shops* (*price, product, personnel* and *service*) all have a big impact on the overall satisfaction towards the drivers of the company as a whole. When tested together, however, it was found that the *retail shops product* and *grain marketing price* have the biggest impact on the customer satisfaction towards the overall company.

The aim of the second empirical secondary objective was to determine whether the best *performing* or the worst *performing* business unit has the biggest impact on overall satisfaction. It was established that, to improve the overall level of satisfaction of customers towards the company as a whole, it is imperative to improve the level of satisfaction *retail shops*, *mechanisation (workshops)* and *insurance* of which *retail shops* would have the biggest impact. Also, *retail shops product* has the biggest influence on the overall level of satisfaction towards the company. Therefore, it seems that if this agricultural business wants to improve the overall level of satisfaction of the company as a whole, the first place to start would be the *retail shops product.*

The aim of the third empirical secondary objective was to determine if the frequency of the use of the different business units affects the overall satisfaction towards the agricultural business. The results indicate that the more frequent business units are used, the higher would be the opinion of the customers of the particular business unit (except in the case of *retail shops*). It can be deduced that the more often business units are used within an agricultural business, the higher the perception of *performance* will be with regards to the agricultural business as a whole.

The aim of the last empirical secondary objective was to determine whether the perception of *performance* of customers of the business units has an influence on sustainable profitability. The contribution percentage of net profit, as well as the performance percentage was compared. There seem to be a definite relationship between the contribution to net profit and performance. However, this could not be proven statistically as two different data sets were used (satisfaction survey and

financial statements). In spite of this, the contribution percentage and the performance percentage of each of the business units seem to follow the same movements. Also, the most important driver, business unit and driver within a business unit were found to be *product*, *retail shops* and *retail shops product.* The more frequent business units were used, the more satisfied customers would be (except for *retail shops*).

Chapter 7 provides concluding remarks on the study as a whole.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

In any business, customer satisfaction and loyalty is essential in ensuring survival and growth. In the agricultural industry, however, the need for customer satisfaction is amplified due to the unique supply chain inherent in an agricultural business and due to the fact that the customer and the shareholder is the same person. The research study thus aimed to determine the relationships between the various drivers of customer satisfaction within the business units that form part of the "umbrella" organisation, the business units themselves and the drivers of customer satisfaction of the overall business. All this was done in an attempt to determine which of the business units, drivers within the business unit and the drivers of the overall organisation had the biggest impact on overall customer satisfaction with the agricultural business as a whole. This chapter intends to provide concluding remarks on the main findings in the literature chapters, as well as the empirical findings and possible recommendations for agricultural businesses.

7.2 Main findings in the literature

The main findings of Chapter 2, 3 and 4 will be discussed in the following section.

7.2.1 Chapter 2: The background of the agricultural Industry in South Africa

The aim of Chapter 2 was to examine the background of the agricultural industry in South Africa by referring to the history and development of agricultural businesses. Essential legislation pertaining to agricultural businesses, as well as the current state of South African agriculture was examined.

Agricultural cooperatives were founded as early as 1844 in England and were established in South Africa in 1982 with the founding of the Pietermaritzburg Consumer's Cooperative. In the period between the 1900s and the 1990s, agricultural cooperatives as a business form flourished due to governmental support such as subsidised loans to farmers, established and controlled marketing channels for the products provided by the farmers, as well as guaranteeing the debt of the cooperative. However, after the first democratic election in 1994, the newly elected government decided to put an end to the support provided to cooperatives by the government and the outcomes were the following:

- The majority of agricultural cooperatives converted to investor-oriented firms (IOFs), which have the primary objective of increasing the wealth of the shareholder in the form of the share price.
- Cooperatives had to become more competitive and function like any other business. The result was that various smaller cooperatives amalgamated to form bigger and more competitive agricultural businesses.

The difference between an IOF and a cooperative lies in the fact that the users (customers) of an IOF can be differentiated from the investors (owners), while with a cooperative the owner and user (customer) is interlinked. It is, however, important to note that the shareholders in the agribusiness under consideration in this study are also the major users (customers) of the business. Therefore, it can be assumed that although the business has converted from a cooperative to an IOF, the major users/customers and the owner/shareholders have remained as before the conversion. The implication of this is that the customers/shareholders could be accustomed to the way a cooperative is managed (with the focus on service and better deals for the farmer), but because an investor-owned firm is focussed on profitability and the maximisation of the share price, this could have a negative effect on how the customer/shareholder perceive the organisation.

The most important part of the agricultural supply process for the purposes of this study though, is the indication that the services as well as the inputs provided by the agricultural business to the producer, makes the producer also a customer of the agricultural business. Herein is the uniqueness of the agricultural business supply

chain. Also, Chapter 2 introduces the concept of relationship management, which is the management of strategic relationships with all major stakeholders of the organisation, especially in the case of agricultural businesses, relationships with suppliers and customers. It is essential to manage the various relationships in an effort to build quality relationships with both suppliers and customers to create an efficient supply chain that leads to customer satisfaction and loyalty.

7.2.2 Chapter 3: Customer Relationship Management

When there is a difference between customers' expectations of a service, product or experience and customers' perception of the performance of the actual service, product or experience, a customer gap emerges. The narrower this gap (the closer expectations and perceptions of performance are), the more the customer is satisfied. Customer relationship management focuses on segmenting the customers into different groups, acquiring knowledge about these customers and use the information to build quality relationships. These relationships could then lead to increased trust and commitment from the customer towards the company (loyalty), which would lead to customer retention and ultimately increased profitability. Customer satisfaction and loyalty has been researched extensively and it has been found that customer satisfaction leads to customer loyalty that has the possible advantage of creating value for a business through a long-term relationship with the customer. The definition for customer satisfaction used in this particular study is the judgmental and cognitive-based response of the customer of the entire consumption experience of a specific product/service, which reflects his/her confirmation or disconfirmation of prior expectations towards the specific company/product/service. This reaction signifies the customers' perception of how the company/product/service performs from their outlook. Before the 1990s customer satisfaction was only measured as post purchase judgements of the particular product or service. However, it has been found that the satisfaction with the entire process should be measured (i.e. overall satisfaction). Also, a customer that has more than one transaction with a business will fall back on past experiences with the business in determining satisfaction, while a customer that has only one transaction with a business will only judge satisfaction on that one experience.

Therefore, overall satisfaction with a business has a bigger impact on the repurchase intentions of a customer than transaction-specific satisfaction.

Customer satisfaction encourages repeat purchases, shapes word-of-mouth communication, lowers consumers' price sensitivity, and has implications for customer recruitment, while dissatisfaction could lead to complaints and lawsuits. Customer satisfaction ultimately affects shareholder value. Very importantly, it has been established that negative disconfirmation hurts a company much more than positive disconfirmation could help the company. Negative disconfirmation should therefore be avoided at all cost.

The factors needed in the development of satisfaction of customers are perceived price fairness, perceived product quality, employee-customer interaction (personnel) and service quality that inspire trust. Also, in the case of agricultural business, the customers' perception of management also plays a role in determining customer satisfaction as the customers are also shareholders of the business.

Traditional customer satisfaction studies focus on the SERVQUAL method that concentrate on measuring the perceptions of customers with regard to service quality. The study under consideration moved away from the traditional SERVQUAL method in an effort to simplify the study and test various other drivers of customer satisfaction (price, product, service, personnel and management).

7.2.3 Chapter 4: Customer satisfaction, loyalty and profitability

The aim of Chapter 4 was to determine the relationship and/or link from customer satisfaction to profitability.

Customer loyalty leads to customer profitability, which is the difference between the income earned from a customer, and the cost incurred by the business that is associated with the specific customer during a specified period. Customers that have developed a relationship with the business over time and are satisfied will be loyal to the business; they will generate more profit because they are accustomed to the

service and use the service more; they are less price sensitive and thus, businesses can change more.

Customer profitability then ultimately leads to business profitability. There exists a strong positive relationship between customer satisfaction and shareholder value, indicating that an increase in customer satisfaction will lead to an increase in shareholder wealth. Customer satisfaction could increase shareholders' wealth by leading to stable cash flows and less risk, as well as an increase in profits due to less price sensitivity of customers, increased referrals; and a reduction in costs could lead to both an increase in profit (and therefore dividends) and growth. It can therefore be deduced that for the business to be profitable, the price the customer pay would have to be more than the cost incurred in offering the product or service. The customer would also keep on buying the product or service if he/she perceives the value to be high enough to justify the price.

There seem to be two contradicting theories with regard to the link between customer satisfaction and costs. One theory postulates that to get satisfied customers, a company need to spend money. The other theory postulates that customer satisfaction ultimately leads to a reduction in costs. Both theories are correct in the sense that a business first need to spend money in order to ensure future customer satisfaction and that customer satisfaction will lead to a reduction in costs. It seems that the initial expenses will be of a short-term nature, while the reduction in costs will only become apparent after a period of time has passed. Therefore, an important conclusion drawn is that satisfaction programmes are expensive for a business in the short-term, but that the long-term effects are financially beneficial.

It is of great importance to businesses to ensure that customers spend their maximum share-of-wallet (SOW) and this goal could be more important than simply retaining customers. Also, there is a significant relationship between SOW and the company's profitability through the mediating role of revenue. That indicates that when share-of-wallet increases, revenue will increase and so will the profitability of the business. However, this is only true when it comes to profitable customers. Various profitability

measures were discussed in this chapter, of which the business units' contribution to net profit was the best fit for this specific study.

7.3 Main empirical findings

The main empirical findings relate to the secondary objectives set in Chapter 1, as well as the four hypotheses stated. The first secondary objective was to determine which of the drivers of customer satisfaction have the biggest impact on customer satisfaction with the overall company. This objective was reached by firstly determining which of the drivers of customer satisfaction inherent in the various business units have the biggest impact on the overall drivers; and secondly, by determining which of the overall drivers of customer satisfaction has the biggest influence on the satisfaction with the overall company.

The results indicated that all of the drivers inherent in each of the business units are positively correlated to the overall drivers of customer satisfaction and loyalty. This means that an increase in customer satisfaction with r*etail shop price*, will lead to an increase in customer satisfaction with *price* of the overall company. Also, when a regression analysis was done to determine which of the various business units' drivers has the biggest impact on overall *price, product, service* and *personnel,* the results indicated the *retail shops price* perception has the biggest impact on overall *price* perception; *retail shops product* perception has the biggest impact on overall *product* perception; *retail shops personnel* perception has the biggest impact on overall *personnel* perception; and lastly, *retail shops service* perception has the biggest impact on overall *service* perception. This result was found to be significant, as it seems that the customers view the drivers inherent in *retail shops* as that of the company overall. To the customers the *retail shops* are the "window" of the agricultural business overall.

Recommendation: Due to the significant impact that the various drivers of customer satisfaction (*price, product, personnel* and *service*) of *retail shops* have on the overall drivers of customer satisfaction, it is imperative that an agricultural business pays special attention to how customers perceive the *retail shops*. In many instances, the

retail shops are the only contact the customers have with the agricultural business and their perception of the various drivers influence how they view the drivers of the overall company. Agribusinesses can therefore use the *retail shops* as the origin of the company's image, consequently special attention should be paid to the "look and feel" of the *retail shops*. Other actions that requires attention in getting the "look and feel" of the retail shops to an acceptable level is to concentrate on the layout of the shops and the continuous training of personnel to be professional, friendly and efficient.

The second step was determining which of the drivers of customer satisfaction of the overall company has the biggest influence on satisfaction with the overall company. The results were achieved by running a linear regression between the overall drivers (independent variables) and satisfaction with the company as a whole. The results indicated that three of the drivers were found to be statistically significant, namely overall *product*, overall *service* and overall *management*, of which *product* was found to have the biggest impact on overall satisfaction within the organisation. Also, when the various drivers inherent in each business unit were tested against customer satisfaction with the overall organisation, it was found that only two drivers (inherent in business units) were statistically significant. *Retail shops product* and *grain marketing price* have statistically significant relationships with customer satisfaction of the overall company, of which *retail shops product* has the most noteworthy relationship. The results obtained therefore correspond with the findings from the literature that states that the drivers of customer satisfaction will increase overall customer satisfaction.

Recommendation: This result indicated that although overall *product*, overall *service* and overall *management* all have a positive statistical significant relationship with overall customer satisfaction, *product* has the biggest impact. Therefore, if an agricultural business wants to look at one specific driver to improve, overall *product* quality and overall *product* availability should be the first priority. Also, *retail shops product* has a direct positive relationship with the overall customer satisfaction of the agricultural business; therefore extra attention should be devoted to *retail shops product* availability and quality. As overall *product* and *retail shops product* have such a great impact on overall customer satisfaction and loyalty, it is imperative that special attention is paid to specific product-related aspects within the overall business and

retail shops especially. Frontline personnel, especially in *retail shops*, should have specialist knowledge (therefore should be trained) on the various products available to the customers and optimal inventory levels should be determined and maintained with the intention of providing customers with quality and accessible products. In addition, *grain marketing price* has a statistically significant relationship with overall customer satisfaction. As the majority of the customers with the particular agricultural business are *mainly grain* farmers, it is important that the customers perceive the prices charged within this specific business unit to be fair. Therefore, as long as the customers perceive the price to be fair, the price does not necessarily have to be the lowest. This perception can be achieved by communicating to customers the competitive advantage that the specific business unit will provide to them and specifying what the customer is actually paying for. It might be necessary to provide itemised billing in an effort to be more transparent to the customers.

The second secondary objective aimed to determine which of the business units has the biggest impact on overall satisfaction. The first step in attaining this objective was to determine which of the drivers inherent in the various business units had the biggest impact on the *performance* of the various business units. The results indicated that:

- within *retail shops* and *grain storage, personnel* had the biggest impact
- within *grain marketing* and *mechanisation (workshops), price* had the biggest impact
- within *financing, mechanisation (spare parts), mechanisation (whole goods)* and *insurance, service* had the biggest impact.

The second step was to establish which of the business units have the biggest impact on overall customer satisfaction. The results indicated that there are positive statistically significant relationships between overall customer satisfaction and satisfaction with *retail shops*, *mechanisation (workshops)* and *insurance*, of which *retail shops* has the biggest impact.

Recommendation: The results indicated that firstly *retail shops,* then *insurance* and lastly *mechanisation (workshops)* have the biggest impact on overall customer satisfaction. Therefore, these three business units should be looked at first when an

agricultural business wants to increase customer satisfaction. The drivers that drive these three business units were respectively *retail shops personnel*, *insurance service* and *mechanisation (workshops) price*. Therefore, an agricultural business that wants to increase overall customer satisfaction should try to increase customer satisfaction with these three business units, and in order to increase customer satisfaction with these three business units, the drivers that drive each should receive attention. Again, as mentioned before, as *retail shops personnel* plays such an important role in establishing customer satisfaction, it is necessary to ensure that these frontline *personnel* (including the *insurance personnel*) that interact daily with the customers, performs to their best ability. This can be done by providing specialist training with regard to products, but more important, ensuring that the frontline *personnel* have good interpersonal relationship skills, which is needed in order to understand the customers and increasing their perception of performance. With regard to *mechanisation (workshops) price*, it is necessary to be more transparent and indicate what the customer is actually paying for. Also, as mechanisation (workshops) is regarded as one of the worst performing business units, innovation with regard to this business unit might be needed. Providing field services to the farmer (especially in harvest time), when the farmer does not have the time or resources available to bring the equipment to the workshops, might be an option in increasing the perception of performance of this business unit. The demand for this business unit (due to seasonal requirements) should also be estimated correctly, and appropriate modifications should be made, for instance ensuring that there are more mechanics working and more products available during harvest time.

The third secondary objective was to determine whether the frequency with which each business is used would affect overall customer satisfaction of the overall agricultural business. The first step in verifying this objective was to determine whether the frequency with which the business units are used impact on the *performance* of the specific business unit, and the second step was to determine which of the business units' frequency has the biggest impact on overall customer satisfaction. The results indicated that there is a definite positive statistically significant relationship between the frequencies with which the customers use the business units and customer satisfaction, except in the case of *retail shops.* Therefore, the more frequent customers would make

use of a business unit, the better the customer would perceive the performance of the business unit to be (except in the case of *retail shops*). As discussed in Chapter 3, the narrower the gap between what customers' expectations and customers' perceptions, the better customer satisfaction would be. This result therefore could indicate that the more frequently the customers use a particular business unit, the more they would know what to expect from the business unit. If they perceive to get what they expect from the business unit, this will have a positive influence on customer satisfaction. Also, the customers using *grain marketing, financing* and *mechanisation (whole goods)* frequently will feel more satisfied with the agricultural business as a whole than those customers using these three business units rarely. In addition, customers that frequently make use *of financing, mechanisation (whole goods)* and *fuel farm delivery service* would be more satisfied with the *performance* of the agricultural business as a whole than those than never make use of these business units. This result thus indicates that those customers that never use those three specific business units, have a less positive perception of the company as a whole, than those use the three business units frequently.

Recommendation: The results therefore clearly indicate that customers that use particular business units more often would feel more satisfied with the agricultural business as a whole. Therefore, to increase patronisation of specific business units would have a positive impact on how satisfied customers are with the agricultural business. There is a need for more research to be done on this specific subject as it is necessary to determine whether this is also true in other organisations and industries.

The fourth and last secondary objective's intention was to determine whether there is a link between how customers perceive the *performance* of the business units and the profitability of these specific business units. It was decided to use the measure of contribution each business unit made towards the net profit of the agricultural business as a whole. An average contribution towards net profit was calculated for each business unit over a five year period, after which the average *performance* percentage of each business unit was calculated. These two percentages were plotted on a graph, which indicated that (although not statistically significant) there is a definite correlation between the *performance* of the business units (according to the customers) and the

average net contribution of the unit towards profit. This result therefore correspond with the majority of findings (although it could not be proven statistically) that customer satisfaction leads to profitability within a company.

The results for the four hypotheses evaluated rendered the following results:

The null hypothesis (H0) for hypothesis statement 1 stated that there is no single business unit that can significantly influence customer satisfaction of an agricultural business. The results (Table 6.38) point out that there are indeed three business units that can significantly influence overall customer satisfaction, namely *retail shops, insurance* and *mechanisation (workshops).* Therefore H0 is rejected and H1 is accepted, in terms of which that there is one or more business unit(s) that can significantly influence overall customer satisfaction of an agricultural business.

The null hypothesis (H0) for hypothesis statement 2 stated that there is no single driver of customer satisfaction that can significantly influence overall customer satisfaction of an agricultural business. The results (Table 6.33) indicated that *product, service* and satisfaction towards *management* all have a statistically significant influence on overall customer satisfaction. Therefore H0 is rejected and H1 is accepted. H1 states that there is one or more driver(s) of customer satisfaction that can significantly influence customer satisfaction of an agricultural business.

The null hypothesis (H0) for hypothesis statement 3 stated that there is no single driver of customer satisfaction inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business. The linear regression result (Table 6.34) indicated that there were two significant drivers inherent in a business unit, namely *retail shops product* and *grain marketing price*. H1 were therefore accepted and H0 rejected. H1 states that there is one or more driver(s) inherent in a business unit that can significantly influence overall customer satisfaction of an agricultural business.

The last null hypothesis statement (H0) declares that there is no significant relationship between the frequency with which business units are used and the satisfaction of customers. It was found (Table 6.39) that the more frequent a business unit is used, the better customer satisfaction towards that specific business unit would be. This held for all of the business units, except *retail shops.* Therefore, for all of the business units except *retail shops,* H0 is rejected and H1 is accepted, in terms of which that there is a significant relationship between the frequency with which business units are used and the satisfaction of customers.

7.4 Other important findings

Due to the nature of the study and the questionnaire used in obtaining the data needed in reaching the objectives of the study and either accepting or rejecting the hypotheses, there were a great deal of other additional information that are worth mentioning. This information is provided to enhance and contribute towards agricultural business literature and research.

Retail shops are used by 98.6% of the respondents, of which approximately 92% use this particular business unit regularly. *Mechanisation (spare parts)* and *grain storage* are also used on a regular basis. As was expected, *mainly grain* farmers make use of *grain storage* and *mechanisation (spare parts)* more often than *mainly live stock* farmers. Also, the “bigger” the customer, the more often *grain storage* and *grain marketing* is used and vice versa. This result was also emphasised when a cross-tabulation between the farming activities and the “size” of the customers were examined. *Mainly grain* farmers are more likely to be the bigger customers, while *mainly live stock* farmers tended to be smaller customers, as *mainly grain* farmers “need” the agricultural business more in terms of the range of services offered to the customers.

Recommendation: As the customer relationship model in Chapter 3 suggest, it is necessary to segment customers into various groups. Customers that make use of the majority of the business units and provide a large percentage as part of the turnover

should receive certain benefits such as lower interest rates and better prices. Customers should be classified according to their use of the business units and their contribution to turnover and all the customers should know the benefits that each customer “level” will receive. This should then act as a motivation to the lower level customers to make use of more services, products and business units provided by the agricultural business. It is therefore necessary to reward loyalty to the agricultural business, by providing incentives to customers for using more services and contributing more to the business’s turnover. These incentives should be additional to the normal incentives already given by the agriculture business.

All of the business units presented mean values above the middle value of 5.00, indicating that all the units’ *performance* are above average. *Grain storage* performed the best of all the business units, while all three *mechanisation* units *(workshops, spare parts* and *whole goods) performed* the worst. The mean of the *performance* of the company as a whole was higher than the average of all of the services combined, indicating that the respondents have a high perception of the *performance* of the company as a whole. The performance of the drivers of customer satisfaction resulted in *personnel* scoring the highest of all of the drivers, with *management* second, *service* third and *product* and *price,* second last and last respectively. Although *price* was scored the lowest, the mean was still above the middle value of 5.00.

The majority of the business units’ drivers that scored the highest were *personnel, service* second and *price* last. The customers of this particular agricultural business thus perceive both *personnel* and *service* to be of particular high value. Table 7.1 provides a summary of the ranking of the various drivers inherent in each business unit; the averages and means; and the difference between the average and the mean in each case.

Table 7.1: Summary of drivers inherent in business unit

Business units	Price	Product	Personnel	Service	Average	Mean	Dif
Retail shops	4	3	1	2	6.2661	6.7278	**-0.462**
Grain storage	3	--	1	2	6.8144	7.3333	**-0.519**
Grain marketing	3	--	1	2	6.7276	6.5895	**0.138**
Financing	4	3	2	1	6.9294	6.7879	**0.142**
Mechanisation (workshops)	3	--	1	2	5.9355	5.9657	**-0.030**
Mechanisation (spare parts)	3	4	2	1	5.9711	5.9799	**-0.009**
Mechanisation (whole goods)	4	3	1	2	6.3196	6.2652	**0.054**
Insurance	2	4	1	3	6.8304	6.9206	**-0.090**
Agricultural business	4	3	1	2	6.5311	6.9354	**-0.040**
Weighted Averages	5.8307	5.8695	6.9827	6.7576	6.3601		
Agricultural drivers	5.4940	6.0310	7.4164	7.1829	6.5311		
Difference	**0.337**	**-0.122**	**-0.434**	**-0.425**	**-0.171**		

Table 7.1 presents a summary of the main findings with regard to each individual business unit, as well as the company as a whole. The *price, product, personnel* and *service* columns indicate the ranking order each driver occupy in each business unit (according to *performance*). The Average column provides a calculated average of the *performance* of all the drivers inherent in each business unit. The Mean column gives an indication of the *performance* of each business unit, as indicated by the respondents. The Difference column provides the discrepancy between the average and the mean columns.

It is clear that *personnel* occupies the first spot in the majority of the business units, with *service* second, *product* third and *price* last. The only exceptions are *financing, mechanisation (spare parts)* and *insurance.* The business units that do not have a physical *product* to test, namely *grain storage, grain marketing* and *mechanisation (workshops),* all indicated *personnel* to be ranked first, *service* second and *price* last. Interestingly, the Difference column indicates that the majority of the business units' drivers averages *performs* inferior compared to the means of the various business units, except in the case of *grain marketing, financing* and *mechanisation (whole goods).* The finding that the business units' means *performs* better than the drivers' averages, indicates that the customers have a better perception of the business units overall than when their drivers' averages are tested. This result could also signify that

the means of the business units that *performs* the worst – *mechanisation (workshops, spare parts* and *whole goods)* did differ a great deal from the averages of the drivers. Therefore, the perception of the customers with regard to the worst *performing* business units were approximately the same as the average *performance* of their inherent drivers. Also, the means of the other (better *performing* business units) show a greater difference than the average *performance* of the drivers. These results could indicate that better *performing* business units have a bigger impact on how customers perceive the business as a whole.

Recommendation: As mentioned before, personnel plays such an important part in all the business units, it is therefore of utmost importance that the best personnel with the best interpersonal relationship skills work with the customers directly. Personnel should therefore also receive intensive product and relationship training in an effort to increase service delivery levels and consequently customer satisfaction.

The weighted average row provides the averages of all of the *price* drivers inherent in the various business units, while the agricultural drivers' row provides the means of the drivers of customer satisfaction for the company as a whole. Again, the difference is calculated and the results indicate that in all the cases, except for *price*, the overall mean *performance* (as indicated by the customers) is higher than that of the average calculated. Therefore, except in the case of *price,* the perception of *product, personnel* and *service* is better than what the customers indicated as inherent in the various business units.

More than 70% of the respondents felt that the number one goal of the agricultural business is to maximise profits. The second highest rated objective was to receive a sustainable return on the share price, while providing affordable and quality products was rated third. The respondents indicated that what they feel should be the goals of the agricultural business are exactly the opposite of what they feel the goals currently were. The respondents pointed out that the goals of the agricultural business (according to them) are corporate-centred, while they feel that the goals should rather be farmer-centred, as it was in the past (when the agricultural business was still a cooperative). This result therefore contributes to the body of literature in examining the

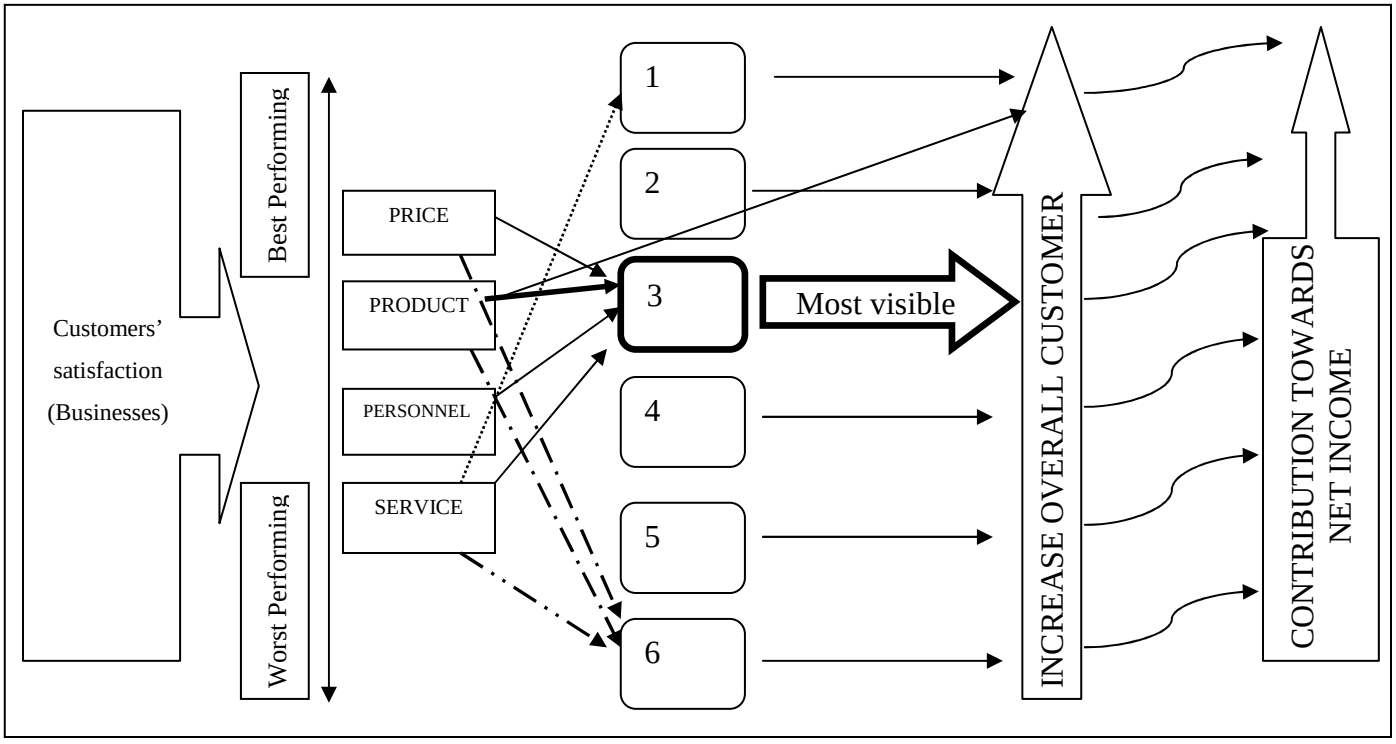
conflict that exists in agricultural businesses due to the customers also being the shareholders.

Recommendation: Farmers still feel that the goals should be mainly that of a cooperative (farmer-centred), which places the management of agricultural businesses in a very complex and difficult situation. The management of an agricultural business has to ensure that the business remains competitive and therefore corporate-centred goals are important to ensure the survival of agricultural businesses. However, the fact that the customers are also the shareholders of the agricultural business complicates the matter. A recommendation for agricultural businesses, therefore, is educating customers and communicating decisions to them and encouraging them to participate in decision-making at all levels. It is important that management and the board of directors become more transparent in their management of the agricultural business. The customers need to know the most important actions and figures proposed, as well as the reasons behind decisions. Farmer-centred goals should receive more attention in order to ensure customer satisfaction. There is, thus, a very thin line between keeping the customers satisfied through farmer-centred goals, while still remaining competitive and thriving in the industry (corporate-centred goals). It might be necessary in appointing a representative from each area to represent that specific area as part of the board of directors. This might provide a better communication channel between the farmers and the organisation and specific information related to the area could be communicated directly via this channel. The organisation can then get closer to the grassroots level customers and observe if there is a problem and/or change in the perception of customers. This will also simplify information as each area will only receive information specifically related to their farming activities and not those of other areas (as different areas have different farming activities). In the previous dispensation (agricultural cooperatives), the board of directors represented the various areas and the farmers selected these directors themselves. A similar principle in companies could increase communication and understanding between the farmers and the overall organisation.

7.5 Contribution of the study

The study is unique in the sense that there is very little research done, firstly, on business units and customer satisfaction, and secondly, on agricultural business units. The industry is unique in the sense that the customers are also the shareholders and, as discussed in Chapter 2, this amplifies the need for customer satisfaction. This research study contributes to the body of literature, and empirically to agricultural business research and customer satisfaction research. The study aimed to use a simplified method of measuring customer satisfaction, which measures the various factors that contribute to customer satisfaction, namely satisfaction regarding *price, product, personnel, service* and *management* (unique to the industry). Traditional customer satisfaction studies focus on the SERVQUAL method that only measures satisfaction with *service* quality.

Figure 7.1: Proposed model with regard to business-to-business customer satisfaction



From a pure business-to-business standpoint, the contribution is in respect to the drivers inherent in each business unit and how it reflects towards overall customer satisfaction and ultimately profitability. The model starts with the relevant level of customer satisfaction from the standpoint of the customers (businesses themselves).

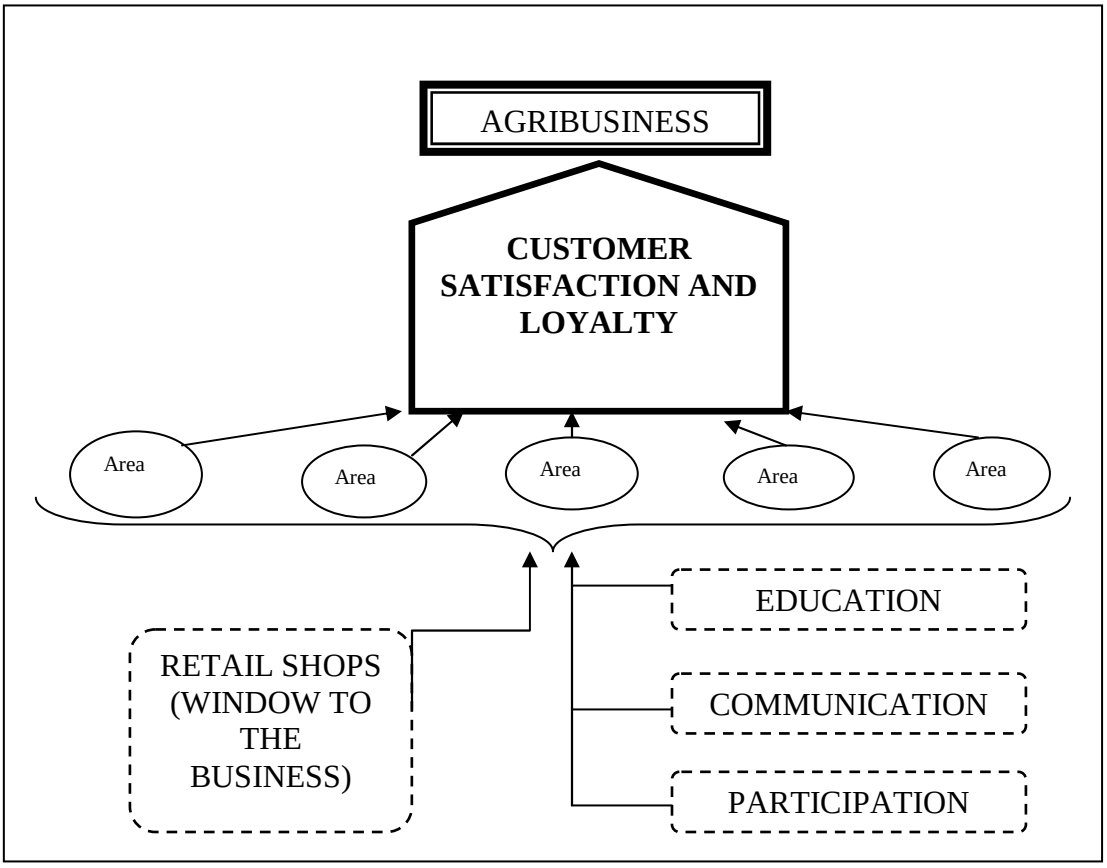
The business units are categorised from the best performing to the worst performing business unit. Inherent in each business unit, there are drivers, namely price, product, personnel and service. The most prominent results relate to the best performing unit (Unit 1), the worst performing unit (Unit 6), as well as the most visible unit which is the most frequently used (Unit 3). It was found that the most visible unit's performance is driven by all four drivers of customer satisfaction, but that satisfaction towards product is directly related to overall customer satisfaction of the entire company. There is thus a direct link from customer satisfaction towards product in the most visible unit to overall customer satisfaction towards the company as a whole. The worst performing unit – Unit 6 – were driven by three of the four drivers, namely price, product and service. Interestingly, the best performing unit (Unit 1) were only driven by service. It was also established that the most visible business unit has the biggest impact on customer satisfaction, irrespective of whether this particular business unit is the best or the worst performing business unit. The perception of customers towards the overall company is directly related towards the performance of the most visible business unit. Any change in customer satisfaction of business units will lead to a change in overall customer satisfaction, as these results are positively correlated. However, it is important to note that the best performing business units have a bigger impact on customer satisfaction. It therefore relates to the literature that states that extremely satisfied customers has a bigger impact that customers that are just satisfied. The last part of the model indicates that there is a definite link between how the business units perform in terms of customer satisfaction and their contribution towards net profit. The best performing business units provide the biggest contribution towards net profit and visa versa.

From section 7.4 it was deduced that when the means of the business units' performance were compared to the average means of the four drivers inherent in the business units, the perception of customers towards the best performing business units and the most visible business units were higher than that of drivers' averages. This result indicates that when customers have a positive perception towards a specific business unit, their perception would remain high, even though individual drivers might be rated lower. Therefore, business units with high customer satisfaction performance could be less vulnerable to increases in prices. Furthermore, it was found that the worst performing business units' means were comparably similar when evaluated with the

drivers' averages. This result therefore indicates that when customers' perception of a business unit is not that good, their ratings of the individual drivers inherent in the business unit are similar to the overall performance of the business unit. Therefore, any change in satisfaction towards the drivers in the business unit would have a corresponding effect on the satisfaction towards the business unit itself. Therefore, a price increase in a worst performing business unit, for instance, would lead to an immediate decrease in customer satisfaction towards the business unit.

With regard to agricultural business in particular, the contribution pertains to the most visible business unit, namely retail shops, which has been found to be the "window" to the agricultural business as a whole.

Figure 7.2: Proposed model with regard to agricultural business customer satisfaction



The model proposed specifically for agricultural businesses are very simplified and focuses on retail shops and the unique supply chain relationship of agricultural businesses (where the customers and the shareholders are the same people/businesses). Retail shops were found to be the "window" to the agricultural

business due to the fact that almost all of the customers make use of this specific business unit. When customers perceive this business unit to perform well, their perception of the agricultural business' performance is good. These two perceptions (towards the retail shops and towards the company as a whole) are directly associated with each other and dependent. The differences between what the customers feel the company's objectives should be and what they feel it currently is, identified the need to make the customers conscious of this unique challenge in agricultural businesses. There are three aspects that are recommended to make customers aware of the challenges facing agricultural businesses, namely education with regard to the unique supply chain relationship, increased communication between the agricultural business and the customers, in order to give the farmers a voice and provide opportunities for efficiently and effectively dealing with conflict. The last aspect is to increase participation of farmers in decision-making and in so doing increase their feelings of involvement, membership and ownership. These three objectives could be reached by segmenting the customers according to their specific farming area and appointing a representative to open up the communication channel between the grassroots level customers and the top management of the agricultural business.

7.6 Limitations

Limitations pertaining to this specific study are, firstly, that only one agricultural business was examined during the course of the empirical research, albeit a major agricultural business in Central South Africa, in terms of reputation, reach and capacity. The second limitation centres on the fact that Central South Africa and this specific agricultural business focus on grain and on a smaller scale livestock, whereas other agricultural businesses in other geographic areas in South Africa will focus for instance on grapes and fruit. The third limitation concerns the fact that the various business units were used to different degrees by customers. For instance, roughly 99% of the customers make use of *retail shops*, while only 36% make use of *insurance*. Lastly, very little academic research was available with regard to the business units of agricultural businesses.

7.7 Recommendations

The main recommendations for this research study focus on the following five aspects:

i. The finding that indicates that the customers of agricultural businesses seem to be confused about the primary objective of the business. The business form dictates that the company should focus on corporate-centred goals, but the customers feel that the company should focus on farmer-centred goals. However, the management of the majority of the agricultural businesses indicate in their vision and mission statements that they are indeed focussed on providing farmers with service at better prices in order to increase the value on the farm itself. This brings into question whether a company is the best business form for agricultural businesses. A company as business format currently seems to be the only manner in which agricultural businesses could remain competitive and survive financially. Therefore, the only way of overcoming this specific hurdle is to educate customers on the management of an agricultural business, with specific reference to the difficulties of merging the corporate goals that are needed to survive and compete and the farmer-centred goals that are needed to maximise customer satisfaction. Also, it will have to become an objective of agricultural businesses to give customers the opportunity to engage more (communicate) with the agricultural business and ultimately participate in decision-making in an effort to make customers feel more part of the agricultural business (as they were in the “cooperative” days).

ii. In order to increase customer satisfaction, the findings indicate that *retail shops* play a significant role. It has been established that all the drivers inherent in *retail shops* have a significant and direct influence on how customers perceive the overall drivers - and especially *retail shops product* has been found to be directly related to how customers perceive the agricultural business as a whole. This, therefore, indicates that agricultural businesses should pay special attention to all of the aspects related to the *retail shops,* because it is in effect seen as the “window” to the agricultural business itself, especially since almost all of the customers use this specific business unit and in some cases it represents their only form of contact with the agricultural business.

iii. This result is also significant in generalisation for other industries and businesses. The most visible business unit has the biggest impact on customer satisfaction and should therefore receive special attention with regard to keeping customers satisfied with reference to the various drivers of customer satisfaction, as well as the overall perception of the business unit. Also, satisfaction towards the product of the most visible business unit is extremely important, as this driver has a direct positive relation to the perception of performance the customers have of the overall company.

iv. The sequence of increasing customer satisfaction for a business is thus to first give attention to the most visible business unit, then the best performing business units and lastly the worst performing business units.

v. Also, the traditional method of measuring customer satisfaction focussed on customer satisfaction towards *service* quality (SERVQUAL). The literature and empirical findings indicated that there are other drivers that also influence customer satisfaction, such as satisfaction regarding, *price, product, personnel* and *management.* The empirical findings also indicated that satisfaction regarding *product* (both the availability and the quality thereof) plays a significant role in customer satisfaction. *Service,* therefore, is a crucial factor to devote attention to. However, of all the drivers of customer satisfaction, satisfaction with *product* emerges as the major influence on customer satisfaction with the company as a whole. Therefore, special attention should be paid to increase the availability and quality of products being sold in agricultural businesses.

vi. The study focussed on the other drivers of customer satisfaction, namely price, product, personnel and service, therefore it is recommended that research are conducted on these factors in other industries in order to expand the development alternative methods of measuring customer satisfaction.

vii. The results also indicate that those business units that *perform* better, will have a bigger impact on how customers perceive the agricultural business as a whole, which signifies that agricultural businesses should attempt to increase the customer satisfaction with their best business units, in an effort to maximise overall customer satisfaction. In short, extremely satisfied customers are preferable over customers that are just satisfied. This result can therefore also be generalised to other industries and companies in revealing that customer

satisfaction can be increased by focussing on the better performing business units first.

viii. Further research on agricultural businesses is needed in order to expand knowledge on this specific subject - especially in terms of the South African context and with regard to the relationship between such businesses and customer satisfaction. Also, studies that focus on other geographical areas with differing core foci (grapes, live stock and fruit), as well as other industries are needed in order to compare the findings of this particular study.

7.8 Conclusion

This research study investigated the complexity of agricultural businesses and their customers. Also, the study specifically aimed to determine the relationship between the various drivers of customer satisfaction with the business units, the business units themselves, as well as the drivers of customer satisfaction with the agricultural business as a whole and to establish the link with customer satisfaction regarding the overall business. Additionally, the study aimed to establish a link between the *performance* of the business units and each unit's contribution towards profit.

Throughout the study the uniqueness of the industry and the customers of the agricultural businesses kept emerging. These organisations consist of various smaller business units (businesses themselves) that share the same customer base. This study provided the opportunity to test these customers' satisfaction with the various business units and the business itself, which would not be possible with businesses in other industries. This study also raises the important problem of whether a company is the best business form to use in the case of agricultural businesses. The answer to this question is not necessarily provided in this study, but certain recommendations are made, such as; educating customers regarding the complexities of managing an agricultural business, as well as allowing them to participate to a larger extent in decision-making.

BIBLIOGRAPHY

ABC (Agricultural Business Chamber). 2010. Economic Intelligence. (http://www.agbiz.co.za/EconomicIntelligence/CompetitivenessofAgribusiness/tabid/107/Default.aspx)
[Accessed 29 April 2010]

Acock, A.C. 2005. Working with missing values. *Journal of Marriage and Family.* Vol.67:1012 – 1028.

Adomaitiene, R. & Slatkeviciene, G. 2008. Employee Satisfaction and Service Quality in Contact Centres. *Economics and Management.* Vol. 13:770 – 775.

Aksoy, L., Cooil, B., Groening, C. Keiningham, T.L. & Yalçin, A. The Long-Term, Stock Market Valuation of Customer Satisfaction. *Journal of Marketing.* Vol. 72:105 – 122.

Anderson, E.W. 1996. Customer satisfaction and price tolerance. *Marketing Letters.* Vol. 7(3):19 – 30.

Anderson, E.W., Fornel, C. & Lehmann, D.R. 1994. Customer Satisfaction, Market Share and Profitability: Findings from Sweden. *Journal of Marketing.* Vol. 58:53 – 66.

Anderson, E.W., Fornell, C. & Mazvancheryl, S.K. 2004. Customer Satisfaction and Shareholder Value. *Journal of Marketing.* Vol. 68:172 – 185.

Anderson, A., Pearo, L.K. & Widener, S.K. 2008. Drivers of Service Satisfaction: Linking Customer Satisfaction to the Service Concept and Customer Characteristics. *Journal of Service Research.* Vol. 10(4):365 – 381.

Anderson, E.W. & Sullivan, M.W. 1993. The Antecedents and Consequences of Customer Satisfaction for Firms. *Marketing Science.* Vol. 12(2):125 – 143.

Arnould, E., Price, L. & Zinkhan, G. 2004. *Consumers.* 2nd ed. New York: McGraw-Hill Irwin.

Baumann, C., Burton, S. & Elliott, G. 2005. Determinants of customer loyalty and share of wallet in retail banking. *Journal of Financial Services Marketing.* Vol. 9(3):231 – 248.

Bechwati, N.N., Sisodia, R.S. & Sheth, J.N. 2009. Developing a model of antecedents to consumers' perceptions and evaluations of price unfairness. *Journal of Business Research.* Vol. 62(8):761 – 767.

Blackwell, R.D., Miniard, P.W. & Engel, J.F. 2006. *Consumer Behaviour.* 10th ed. Mason: Thomson South-Western.

Bless, C. & Higson-Smith, G. 2000*. Fundamentals of Social Research Methods – An African Perspective.* 3rd ed. Lansdowne: Juta Education.

Bodet, G. 2008. Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships. *Journal of Retailing and Consumer Services.* 15:156 – 162.

Botha, S. 2007. Managing in the organization. In Karlsen, H., Haddow, I. & Botma, R. (eds). *Management: Fresh Perspectives.* Cape Town: Pearson Prentice Hall:50 – 93.

Brennan, R., Canning, L. & McDowell, R. 2011. *Business-to-Business Marketing.* 2nd ed. London: Sage Publications.

Brown, S.P. & Lam, S.K. 2008. A Meta-Analysis of Relationships Linking Employee Satisfaction to Customer Responses. *Journal of Retailing.* Vol. 84(3):243 – 255.

Bryman, A. & Bell, E. 2007. *Business Research Methods.* 2nd ed. Oxford: Oxford University Press.

Cant, M.C., Brink, A. & Brijball, S. 2006. *Consumer Behaviour.* Cape Town: Juta and Co. Ltd.

Chen, S., Yang, C., Lin, W. & Yeh, T. 2007. Service quality attributes determine improvement priority. *The TQM Magazine.* Vol. 19(2):162 – 175.

Chmelíková, G. 2008. Economic Value Added versus Traditional Performance Metrics in the Czech Food-Processing Sector. *International Food and Agribusiness Management Review.* Vol. 11(4):49 – 66.

Collis, J. & Hussey, R. 2009. *Business Research: A Practical Guide for Undergraduate & Postgraduate students.* 3rd Ed. Palgrave Macmillan: New York.

Competition Commission. 2007. The South African Agriculture Industry in Context. Research Report.
(http://www.compcom.co.za/policyresearch/policyDocs/Agric_cops.pdf)
[Accessed 17 July 2008]

Cooil, B., Keiningham, T.L., Aksoy, L. & Hsu, M. 2007. A Longitudinal Analysis of Customer Satisfaction and Share of Wallet: Investigating the Moderating Effect of Customer Characteristics. *Journal of Marketing.* Vol. 71:67 – 83.

Cook, M.L. 1997. Organisational Structure and Globalisation: The Case of User Oriented Firms. In: Nilsson, J. & Van Dijk, G. (eds.) *Strategies and Structures in the Agro-Food Industries.* Assen: Van Gorcum & Comp:77 – 93.

Cooper, M.C., Lambert, D.M. & Pagh, J.D. 1997. Supply Chain Management: More Than a New Name for Logistics. *The International Journal of Logistics Management.* Vol. 8(1):1 – 14.

Cooper, D.R. & Schindler, P.S. 2006. *Business Research Methods.* 9th ed. New York: McGraw-Hill/Irwin.

Crouch, S. & Housden, M. 2003. *Marketing Research for Managers.* 3rd Ed. Oxford: Butterworth- Heinemann.

Deng, Z., Lu, Y., Wei, K.K. & Zhang, J. 2010. Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. *International Journal of Information Management.* Vol. 30(4):289 – 300.

Du, X., Jiao, J. & Tseng, M.M. 2006. Understanding customer satisfaction in product customization. *International Journal of Advanced Manufacturing Technology.* Vol. 31:396 – 406.

Drucker-Godard, C., Ehlinger, S. & Grenier, C. 2001. 'Validity and Reliability', In Thietart, R. (eds), *Doing management research: a comprehensive guide,* Sage Publications: Paris, 196 – 219.

East, R., Hammond, K. & Gendall, P. 2006. Fact and Fallacy in Retention Marketing. *Journal of Marketing Management.* Vol. 22:5 – 23.

Ellis, S.M. & Steyn, H.S. (2003). Practical significance (effect sizes) versus or incombination with statistical significance (p-values). *Management Dynamics*, 12(4):51 –53.

Emelianoff, I.V. 1942. *Economic theory of cooperation: Economic structure of cooperative organizations.* Centre for Cooperatives, University of California, Davis, Californnia, U.S.A. 1995.

Esterhuizen, D. 2006. *An evaluation of the competitiveness of the South African agricultural sector.* Unpublished Ph.D thesis: Pretoria: University of Pretoria. (http://upetd.up.ac.za/thesis/available/etd-12082006-144349/unrestricted/00front.pdf) [Accessed 15 December 2011]

Esterhuizen, D., Doyer, O.T. & Van Rooyen, C.J. 2008. The State of Black Economic Empowerment in the Agribusiness Sector in South Africa. Working paper presented at

the University of Pretoria, Department of Agricultural Economics, Extension and Rural Development.
(http://econpapers.repec.org/paper/agsupaewp/108000.htm)
[Accessed 2 February 2012]

Ethridge, D.E. 2004. *Research methodology in applied economics: organizing, planning and conducting economic research.* Blackwell Publishing:Iowa.

Fornell, C. 1992. A national customer satisfaction barometer: the Swedish experience. *Journal of Marketing.* Vol. 56:6 – 21.

Fornell, C., Mithas, S., Morgeson III, F.V. & Krishnan, M.S. 2006. Customer Satisfaction and Stock Prices: High Returns, Low Risk. *Journal of Marketing.* Vol. 70:3 – 14.

Firer, C., Ross, S.A., Westerfield, R.W. & Jordan, B.D. 2008. *Fundamentals of Corporate Finance.* 4th South African ed. Berkshire: McGraw Hill.

Galle, R. 1997. The International Cooperative as a Partnership: Legal Aspects. In: Nilsson, J. & Van Dijk, G. (eds.) *Strategies and Structures in the Agro-Food Industries.* Assen: Van Gorcum & Comp: 20 – 30.

Girod-Séville, M. & Perret, V. 2001. 'Epistemological Foundations', In Thietart, R. (eds), *Doing management research: a comprehensive guide,* Sage Publications: Paris, 13 – 29.

Gitman, L.J. 2009. *Principles of Managerial Finance.* 12th ed. Boston: Pearson Prentice Hall.

Godson, M. 2009. *Relationship Marketing.* Hampshire: Oxford University Press.

Guo, C., Kumar, A. & Jiraporn, P. 2004. Customer satisfaction and profitability: is there a lagged effect? *Journal of Strategic Marketing.* Vol. 12:129 – 144.

Gustafsson, A., Johnson, M.D. & Roos, I. 2005. The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Rentention. *Journal of Marketing.* Vol. 69:210 – 218.

Gruber, T., Szmigin, I. & Voss, R. 2009. Developing a deeper understanding of the attributes of effective customer contact employees in personal complaint-handling encounters. *Journal of Services Marketing.* Vol. 23(6):422 – 435.

Gruca, T.S. & Rego, L.L. 2005. Customer Satisfaction, Cash Flow, and Shareholder Value. *Journal of Marketing.* Vol. 69:115 – 130.

Hair, J.F., Bush, R.P. & Ortinau, D.J. 2000. *Marketing Research: A Practical Approach for the New Millennium.* Singapore: Irwin McGraw-Hill.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.A. & Tatham, R.L. 2006. *Multivariate Data Analysis.* 6th Ed. Pearson Education Incorporated: New Jersey.

Hallowell, R. 1996. The relationship of customer satisfaction, customer loyalty, and profitability: an empirical study. *International Journal of Service Industry Management.* Vol. 7(4):27 – 42.

Hansmann, H. 1988. Ownership of the Firm. *Journal of Law, Economics, and Organization.* Vol. 4(2):267 – 304.

Hansen, T., Wilke, R. & Kaichkowsky, J. 2009. Managing consumer complaints: differences and similarities among heterogeneous retailers. *International Journal of Retail and Distribution Management.* Vol. 38(1):6 – 23.

Hardeep, S. & Amandeep, K. 2011. Customer Relationship Management: A Dynamic Tool for Customer Satisfaction, Customer Retention & Customer Loyalty. *Asia Pacific Journal of Research in Business Management.* Vol. 2(5):166 – 180.

Harvey, S.J. & Sykuta, M.E. 2006. Farmer Trust in Producer- and Investor-Owned Firms: Evidence from Missouri Corn and Soybean Producers. *Agribusiness.* Vol. 22(1):135 – 153.

Hausknecht, J.P., Trevor, C.O. & Howard, M.J. 2009. Unit-level Voluntary Turnover Rates and Customer Service Quality: Implications of Group Cohesiveness, Newcomer Concentration and Size. *Journal of Applied Psychology*. Vol. 94(4):1068 – 1075.

Helgesen, Ø. 2006. Are Loyal Customers Profitable? Customer Satisfaction, Customer (Action) Loyalty and Customer Profitability at the Individual Level. *Journal of Marketing Management.* Vol. 22:245 – 266.

Helgesen, Ø. 2008. Marketing for Higher Education: A Relationship Marketing Approach. *Journal of Marketing.* Vol. 18(1):50 – 78.

Helmberger, P.G. & Hoos, S. 1962. Cooperative enterprise and organisation theory. *Journal of Farm Economics.* 44:275 – 290.

Hill, C.W.L. & Jones, T.M. 1992. Stakeholder-agency Theory. *Journal of Management Studies.* Vol. 29:131 – 154.

Hind, A.M. 1999. Co-operative Life Cycle and Goals. *Journal of Agricultural Economics.* Vol.50(3):536 – 548.

Homburg, C., Hoyer, W.D. & Koschate, N 2005.Customers' Reactions to Price Increases: Do Customer Satisfaction and Perceive Motive Fairness Matter? *Journal of the Academy of Marketing Science.* Vol. 33(1):37 – 49.

Hu, H., Cheng, C., Chiu, S. & Hong, F. 2011. A study of customer satisfaction, customer loyalty and quality attributes in Taiwan's medical service industry. *African Journal of Business Management.* Vol. 5(1):187 – 195.

Hussey, J. & Hussey, R. 1997. *Business Research: A practical guide for undergraduate and postgraduate students.* Palgrave: New York.

ICA (International Cooperative Alliance). 2010. What is a cooperative? (http://www.ica.coop/coop/index.html)
[Accessed 2 February 2010]

Jankowicz, A.D. 2000. *Business Research Projects.* 3rd Ed. London: Business Press.

Jones, M.A. & Suh, J. 2000. Transaction-specific satisfaction and overall satisfaction: an empirical analysis. *Journal of Services Marketing.* Vol. 14(2):147 – 159.

Katz, J.P. & Boland, M.A. 2002. One for All and All for One? A New Generation of Co-operatives Emerges. *Long Range Planning.* Vol. 35:73 – 89.

Keiningham, T.L., Perkins-Munn, T., Aksoy, L. & Estrin, D. 2005. Does customer satisfaction lead to profitability? The mediating role of share-of-wallet. *Managing Service Quality.* Vol. 15(2):172 – 181.

Keiningham, T.M., Perkins-Munn, T. & Evans, H. The Impact of Customer Satisfaction on Share-of-Wallet in a Business-to-Business Environment. *Journal of Services Research.* Vol. 6(1):37 – 50.

Kent, R. 2007. *Marketing Research: Approaches, Methods and Applications in Europe.* Thomson Learning:London.

Kotler, P. 2000. *Marketing Management. The Millennium Edition.* New Jersey: Prentice-Hall Inc.

Krasnikov, A., Jayachandran, S. & Kumar, V. 2009. The Impact of Customer Relationship Management Implementation on Cost and Profit Efficiencies: Evidence from the U.S. Commercial Banking Industry. *Journal of Marketing.* Vol. 73:61 – 76.

Kumar, V., Pozza, I.D., Peterson, J.A. & Shah, D. 2009. Reversing the Logic: The Path to Profitability through Relationship Marketing. *Journal of Interactive Marketing.* Vol. 23:147 – 156.

Kuo, Y., Wu, C. & Deng, W. 2009. The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behaviour.* Vol. 25(4):887 – 896.

Kutner, M.H., Nachtsheim, C.J., Neter, J., William, L. 2005. *Applied Linear Statistical Models.* 5th ed. CA: McGraw-Hill Irwin.

Kyriakopoulos, K., Meulenberg, M. & Nilsson, J. 2004. The Impact of Cooperative Structure and Firm Culture on Market Orientation and Performance. *Agribusiness.* Vol.20(4):379 – 396.

Kyriakopoulos, K. & Van Bekkum, O. 1999. Market orientation of European Agricultural Cooperatives: Strategic and structural issues. Paper presented at the IXth Congress of the European Association of Agricultural Economists, Warsaw, Poland, August 1999. (http://www.acdivoca.org/acdivoca/CoopLib.nsf/dfafe3e324466c3785256d96004f15a8/ac9405663203a4cb85256ef9006a1258/$FILE/Market%20Orientation%20of%20Europe%20Ag%20coops.pdf)
[Accessed 9 March 2011]

Lancaster, G. 2005. *Research Methods in Management. A concise introduction to research in management and business consultancy.* Oxford: Elsevier.

Leo, L., Gani, L. & Jermias, J. 2009. Investigating the Impacts of Customer Satisfaction on Firm Performance. *Gadjah Mada International Journal of Business.* Vol. 11(3):341 – 359.

Liou, J.J.H. 2008. A novel decision rules approach for customer relationship management of the airline market. *Expert System with Application.* Vol. 36(3):4374 – 4381.

Luo, X. 2009. Quantifying the Long-Term Impact of Negative Word of Mouth on Cash Flows and Stock Prices. *Marketing Science.* Vol. 28(1):148 – 165.

Luo, X. & Bhattacharya, C.B. 2006. Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing.* 70:1 – 18.

Luo, X. & Homburg, C. 2008. Satisfaction, Complaint and the Stock Value Gap. *Journal of Marketing.* Vol. 72(July):29 – 43.

Mägi, A.W. 2003. Share of wallet in retailing: the effects of customer satisfaction, loyalty cards and shopper characteristics. *Journal of Retailing.* Vol. 79(2):97 – 106.

Manos, B. & Manikas, I. 2010. Traceability in the Greek fresh produce sector: drivers and constraints. *British Food Journal.* Vol. 112(6):640 – 652.

Martin-Consuegra, D., Molina, A. & Esteban, A. 2007. An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. *Journal of Product and Brand Management.* Vol. 16(7):459 – 468.

Masemola, P. 2008. MEC assures community to benefit from AgriBEE. *AgriNews.* May.2.

Mbengue, A. 2001. 'Comparing tests', In Thietart, R. (eds), *Doing management research: a comprehensive guide,* Sage Publications: Paris, 223 – 266.

Medenhall, W. & Sincich, T. 1996. *A Second Course in Statistics: Regression Analysis.* 5th Ed. Prentice Hall: New Jersey.

Megginson, W.L., Smart, S.B. & Lucey, B.M. 2008. *Introduction to corporate finance.* London: Cengage Learning.

Melville, S. & Goddard, W. 1996. *Research Methodology: An Introduction For Science & Engineering Students.*Cape Town: Juta & Co Ltd.

Meyer-Waarden, L. 2007. The effects of loyalty programs on customer lifetime duration and share of wallet. *Journal of Retailing.* Vol. 38(2):223 – 236.

Miller, R.E. & Brooks, N.G. 2010. Class Service Quality: Moving Beyond SERVQUAL. Information Systems Educators Conference. Nashville Tennessee, USA. http://proc.isecon.org/2010/pdf/1394.pdf
[Accessed 15 September 2011]

Mithas, S., Krishnan, M.S. & Fornell, C. 2005. Why Do Customer Relationship Management Applications Affect Customer Satisfaction? *The Journal of Marketing.* Vol. 69(4):201 – 209.

Mufane, P. 2010. Land Reform Management in Namibia, South Africa and Zimbabwe: A Comparative Perspective. *International Journal of Rural Management.* Vol. 6(1):1 – 31.

Mulhern, F.J. 1999. Customer Profitability Analysis: Measurement, Concentration, and Research Direction. *Journal of Interactive Marketing.* Vol. 13(1):25 – 40.

Myers, L.J. & Well, A.D. 1995. *Research Design and Statistical Analysis.* Lawrence Erlbaum Associates: New Jersey.

Naumann, E., Williams, R. & Kahn, M.S. 2009. Customer satisfaction and loyalty in B2B services: directions for future research. *Marketing Review.* Vol. 9(4):319 – 333.

NCBA (National Cooperative Business Association). 2008.
(http://www.ncba.coop/abcoop.cfm.)

[Accessed 15 June 2008]

Nel, I. 1994. ‘n Bedryfsekonomiese ondersoek na groepvorming in die Suid-Afrikaanse Landboukoöperasiewese. (Unpublished Ph.D. thesis) University of the Free State, Bloemfontein.

Nowak, L.I. & Washburn, J.H. 1998. Antecedents to client satisfaction in business services. *The Journal of Services Marketing.* 12(6):441 – 452.

Oliver, R.L. 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research.* Vol. 17(4):460 – 469.

Oliver, R.L. 2009. *Satisfaction: A Behavioral Perspective on the Consumer.* 2nd ed. New York: M.E. Sharpe, Inc.

Olson, K. & Boehlje, M. 2010. Theme Overview: Fundamental Forces Affecting Agribusiness Industries. *Choices: The Magazine of Food, Farm and Resource Issues.* Vol. 25(4):1 – 4.
(http://www.choicesmagazine.org/magazine/pdf/block_53.pdf)
[Accessed 28 October 2011]

Ortmann, G.F. & King, R.P. 2007(a). Agricultural Cooperatives I: History, Theory and Problems. *Agrekon.* 46(1):40 – 68.

Ortmann, G.F. & King, R.P. 2007(b). Agricultural Cooperatives II: Can they facilitate access of small-scale farmers in South Africa to input and product markets? *Agrekon.* 46(2):219 – 244.

Palmatier, R.W., Jarvis, C.B., Bechkoff, J.R. & Kardes, F.R. 2009. The Role of Customer Gratitude in Relationship Marketing. *Journal of Marketing.* Vol. 73(5):1 – 18.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1988. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing.* Vol. 64(1):12 – 40.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1994. Alternative Scales for Measuring Service Quality: a Comparative Assessment Based on Psychometric and Diagnostic Criteria SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing.* Vol. 70(3):201 – 230.

Park, J., Shin, K., Chang, T. & Park, J. 2010. An integrative framework for supplier relationship management. *Industrial Management & Data Systems.* Vol. 110(4):495 – 515.

Pfeifer, P.E., Haskins, M.E. & Conroy, R.M. 2005. Customer Lifetime Value, Customer Profitability, and the Treatment of Acquisition Spending. *Journal of Managerial Issues.* Vol. 17(1):11 – 25.

Piercy, N.F. 2009. Strategic relationships between boundary-spanning functions: Aligning customer relationship management with supplier relationship management. *Industrial Marketing Management.* Vol. 38(8):857 – 864.

Piesse, J., Doyer, T., Thirtle, C. & Vink, N. 2004. The changing role of grain cooperatives in the transition to competitive markets in South Africa. *Journal of Comparative Economics.* Vol. 33:197 – 218.

Prabhakar, A. 2007. Customer Satisfaction. *Journal of the Quality Assurance Institute.* Vol.21(3):5 – 10.

Ranaweera, C. 2007. Are satisfied long-term customers more profitable? Evidence from the telecommunication sector. *Journal of Targeting, Measurement and Analysis for Marketing.* Vol. 15(2):113 – 120.

Rauyruen, P. & Miller, K.E. 2007. Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research.* Vol.60:21 – 31.

Reichheld, F.F. & Sasser, W.E. 1990. Zero defections: quality comes to service. *Harvard Business Review.* Vol. 68:105 – 111.

Richards, K.A. & Jones, E. 2008. Customer Relationship Management: Finding Value Drivers. *Industrial Marketing Management*. Vol. 37:120 – 130.

Roberts-Lombard, M. 2010. The supplier relationship practices of travel agencies in the Western Cape Province – what is the status quo? *Acta Commercii.* Vol 10:1 – 14.

Roberts-Lombard, M. 2011. Customer retention through customer relationship management: The exploration of two-way communication and conflict handling. *African Journal of Business Management.* Vol. 5(9):3487 – 3496.

Robotka, F. 1947. A theory of cooperation. *Journal of Farm Economics.* 29:94 – 114.

Rod, M., Ashill, N.J., Shao, J. & Carruthers, J. 2008. An examination of the relationship between service quality dimensions, overall internet banking service quality and customer satisfaction: A New Zealand study. *Marketing Intelligence and Planning.* Vol. 27(1):103 – 126.

RSA (Republic of South Africa). 2005. Cooperatives Act 14 of 2005.
(http://www.info.gov.za/view/DownloadFileAction?id=67866)
[Accessed 6 June 2009]

Rust, R.T. & Keiningham, T.L. 1994. *Return on Quality: Measuring the Financial Impact of Your Company's Quest for Quality*. Probus: Chocago.

Sandrey, R. & Vink, N. 2007. The deregulation of agricultural markets in South Africa and New Zealnd: a comparison. *Agrekon.* Vol. 46(3):323 – 350.

Saungweme, P.W. 2009. Value Chain Linkages in Agribusiness Supply Chains in South Africa. Unpublished paper from the University of Stellenbosch Business School. Edamba Summer School. 23 – 29 July.
(http://www.edamba.eu/userfiles/file/Saungweme%20Percy.pdf)
[Accessed 17 March 2011]

Sekaran, U. 1992. *Research Methods for Business: A skill Building Approach.* 2nd Ed. John Wiley & Sons, Inc: New York.

Sexton, R.J. 1995. A perspective on Helmberger and Hoos' theory of cooperatives. *Journal of Cooperatives.* Vol. 10:92 – 99.

Sharma, A.K. & Kumar, S. 2010. Economic Value Added (EVA) – Literature Review and Relevant Issues. *International Journal of Economics and Finance.* Vol. 2(2):200 – 220.

Sikuka, W. 2010. The Comparative Performance of Selected Agribusiness Companies and Cooperatives in the Western Cape, South Africa. Unpublished thesis (MCom), University of Stellenbosch.

Singh, J. & Sirdeshmukh, D. 2000. Agency and Trust Mechanisms in Consumer Satisfaction and Loyalty Judgments. *Journal of the Academy of Marketing Science.* Vol. 28(1):150 – 167.

Skirnik, S. 2002. The Role of Cooperative Entrepreneurship and Firms in Organising Economic Activities – Past, Present and Future. *The Finnish Journal of Business Economics.* Vol. 1:103 – 124.

Söderlund, M. & Rosengren, S. 2010. The happy versus unhappy service worker in the service encounter: Assessing the impact on customer satisfaction. *Journal of Retailing and Consumer Services.* Vol. 17:161 – 169.

South African Department of Agriculture, Forestry and Fisheries. 2012.

(http://www.daff.gov.za/)
[Accessed 15 February 2012]

South African Department of Labour. 2012. Legislation.
(http://www.labour.gov.za/legislation)
[Accessed 10 February 2012]

STATSSA (Statistics South Africa). 2011. Quarterly Labour Force Survey 2011.
(http://www.statssa.gov.za/publications/P0211/P02111stQuarter2011.pdf)
[Accessed 4 June 2011]

Stock, R.M. 2005. Can Customer Satisfaction Decrease Price Sensitivity in Business-to-Business Markets? *Journal of Business-to-Business Marketing.* Vol.12(3):59 – 87.

Sun, B., Wilcox, R. & Zhu, T. 2007. Ignoring your best customer? An investigation of Customer Satisfaction, Customer Retention and Their Financial Impact. *Journal of Relationship Marketing.* Vol. 6(3/4):87 – 116.

The Presidency (RSA). 2011. History.
(http://www.thepresidency.gov.za/pebble.asp?relid=69)
[Accessed 15 September 2010]

Thomas, A.B. 2004. *Research Skills: for management students.* Routledge: London.

Torres, A., Akridge, J.T., Gray, A., Boehlje, M. & Widdows, R. 2007. An Evaluation of Customer Relationship Management (CRM) Practices Among Agribusiness Firms. *International Food and Agribusiness Management Review.* Vol. 10(1):1 – 16.

Trusov, M., Bucklin, R.E. & Pauwels, K. 2009. Effects of Word-of-Mouth Versus Traditional Marketing: Findings from an Internet Social Networking Site. *Journal of Marketing.* Vol. 73:90 – 102.

Van Dijk, G. 1997. The Sixth Reason for Co-operation: New Generation Co-operatives. In: Nilsson, J. & Van Dijk, G. (eds.) *Strategies and Structures in the Agro-Food Industries.* Assen: Van Gorcum & Comp, 94 – 110.

Van Rooyen, C.J., Esterhuizen, D. & Doyer, O.T. 2000. How Competitive is Agribusiness in the South African Food Commodity Chain? In: Trienekens, J.H. & Zuurbier, P.J.P. (eds). *Chain Management in agribusiness and the food industry.* Waginingen: Waginingen Pers, (http://web.up.ac.za/sitefiles/File/48/2052/1999-01.pdf) [Accessed 17 October 2010]

Van Niekerk, J.A.S. 1988. *Co-operative Theory and Practice.* Pretoria: SAAU.

Van Zyl, J. & Coetzee, A. 2012. Customer relationship management in a dead industry. Paper presented at the South African Management Forum in Bloemfontein on the 9th of February 2012.

Van Zyl, J., Vink. N., Kirsten, J. & Poonyth, D. 2001. South African Agriculture in Transition: the 1990s. *Journal of International Development.* Vol. 13:725 – 739.

Venter, D. & Neuland, E. 2005. *NEPAD and the African Renaissance.* Johannesburg:Richard Havenga & Associates.

Vogel, V., Evanschitzky, H. & Rameseshan, B. 2008. Customer Equity Drivers and Future Sales. *Journal of Marketing.* Vol. 72:98 – 108.

Westbrook, R.A. 1987. Product/consumption-based affective responses and postpurchase processes. *Journal of Marketing Research.* Vol. 24(3):258 – 270.

Wu, L. 2011. Beyond Satisfaction: The relative importance of locational convenience, interpersonal relationships, and commitment across service types. *Managing Service Quality.* Vol. 21(3):240 – 263.

Yieh, K., Chiao, Y. & Chui, Y. 2007. Understanding the Antecedents to Customer Loyalty by Applying Structural Equation Modeling. *Total Quality Management.* Vol. 18(3):267 – 284.

Yu, S. 2007. An Empirical Investigation on the Economic Consequences of Customer Satisfaction. *Total Quality Management.* Vol. 18(5):555 – 569.

Zairi, M. 2000. Managing customer dissatisfaction through effective complaints management systems. *The TQM Journal*. Vol. 12(5):331 – 335.

Zeithaml, V.A. 2000. Service Quality, Profitability, and the Economic Worth of Customers: What We Know and What We Need to Learn. *Journal of the Academy of Marketing Science.* Vol. 28(1):67 – 85.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2009. *Services Marketing: Integrating Customer Focus across the Firm.* 5th ed. McGraw Hill: New York.

Zhao, L., Lu, Y., Zhang, L. & Chau, P.Y.K. 2012. Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision Support Systems.* Vol. 52(3):645 – 656.

Zikmund, W.G., Babin, B.J., Carr, J.C. & Griffen, M. 2010. *Business Research Methods.* 8th Ed. South-Western Cengage Learning: Canada.

APPENDIX A

SATISFACTION SURVEY

This questionnaire will be regarded as strictly confidential.
Indicate your answer with a cross (X) in the appropriate box.
Take note that the questionnaire is printed on both sides.

1. What type of farming activities do you practice? Choose one option from the list.	
1(a). Grain only	
1(b). Mainly grain with live-stock (cattle, sheep, stud, game, milk, etc.)	
1(c). Live-stock only (cattle, sheep, stud, game, milk, etc.)	
1(d). Mainly live-stock (cattle, sheep, stud, game, milk, etc.) with grain	
1(e). Even split between grain and live stock	

2. Does irrigation contribute substantially to your main income?	Yes		No	

3. How long have you been farming?	

4. How old are you?	

5. Trade point (Town)?	

The following question relates to how frequently you use the following SUIDWES services.

6. Please indicate how often you use the following XXX services.				
	Often	Seldom	Never	Not available, but are needed
6(a). Retail shops				
6(b). Grain storage				
6(c). Grain marketing				
6(d). Financing				
6(e). Mechanisation – Workshops				
6(f). Mechanisation – Spare parts				
6(g). Mechanisation – Farm equipment				
6(h). Insurance				
6(i). Agriculture support services (e.g. soil analysis, etc.)				
6(j). Milling exchange services				
6(k) Fuel farm delivery services				

Please indicate from Question 7 to Question 16 your satisfaction levels regarding the services you currently use.

7. How would you rate the overall performance of the following XXX divisions? **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			Do not make use of SUIDWES service
	1	2	3	4	5	6	7	8	9	
7(a). Retail shops										
7(b). Grain storage										
7(c). Grain marketing										
7(d). Financing										
7(e). Mechanisation – Workshops										
7(f). Mechanisation – Spare parts										
7(g). Mechanisation – Farm equipment										
7(h). Insurance										
7(i). Agriculture support services (soil analysis, etc.)										
7(j). Milling exchange services										
7(k). Fuel farm delivery services										
7(l). XXX overall										

8. How would you rate the overall performance of the following aspects of XXX? **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A.
8(a). Prices										
8(b). Products – availability										
8(c). Products – quality										
8(d). Products – diversity										
8(e). Personnel										
8(f). Service										
8(g). Management										

Questions 9 to 16 consist of questions with regards to the services XXX offer. Only answer the questions that are applicable to the specific services you use.

RETAIL SHOPS										
9. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
9(a). Competitiveness of XXX prices										
9(b). Availability of products										
9(c). Quality of products										
9(d). Diversity of products										
9(e). Effectiveness of branch personnel service (fast, friendly, correct)										
9(f). Effectiveness of rep. service (fast, friendly, correct)										
9(g). Effectiveness of retail shop manager										
9(h). Month account facilities										
9(i). Physical facilities										
9(j). After sale service										

GRAIN STORAGE										
10. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
10(a). Competitiveness of XXX tariffs										
10(b). Correctness and effectiveness of grain grading										
10(c). Competence of personnel										
10(d). Effectiveness of service (fast, friendly, correct)										
10(e). Effectiveness of silo manager										
10(f). Value that silo manager add to my farm										
10(g). Effectiveness of the information service at the silo										

GRAIN MARKETING										
11. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
11(a). Competitiveness of XXX grain marketing service										
11(b). The appropriateness and diversity of marketing products										
11(c). Knowledge and competence of personnel										
11(d). Trust in personnel										

FINANCING										
12. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
12(a). Competitiveness of XXX interest rates										
12(b). Competitiveness of XXX products										
12(c). The appropriateness of financial products										
12(d). Knowledge and competence of personnel										
12(e). Effectiveness of the application process (fast, friendly, correct)										

MECHANISATION – Workshops										
13. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
13(a). Competitiveness of XXX prices										
13(b). Knowledge and competence of personnel										
13(c). Quality of service (fast, friendly, correct)										
13(d). Keeping of promises										
13(e). Physical facilities										
13(f). After sale service										

MECHANISATION – Spare parts										
14. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
14(a). Competitiveness of XXX prices										
14(b).Availability and diversity of products										
14(c). Quality of products										
14(d). Knowledge and competence of personnel										
14(e). Quality of service (fast, friendly, correct)										
14(f). Keeping of promises										
14(g). Physical facilities										
14(h). After sale service										

MECHANISATION – Farm equipment										
15. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
15(a). Competitiveness of XXX prices										
15(b). Availability and diversity of products										
15(c). Quality of products										
15(d). Knowledge and competence of personnel										
15(e). Quality of products (fast, friendly, correct)										
15(f). Keeping of promises										
15(g). Physical facilities										
15(h). After sale service										

INSURANCE										
16. The following statements deal with the service you (most often) use. Please rate how XXX performs on a 9 point scale on each statement. **1** means very poor and **9** means excellent.										
	Poor			**Average**			**Good**			
	1	2	3	4	5	6	7	8	9	N/A
16(a). Competitiveness of the rates on insurance products										
16(b). Appropriateness of the range and quality of insurance products										
16(c). Knowledge and competence of personnel										
16(d). Effectiveness of service (fast, friendly, correct)										
16(e). Settlement of claims										
16(f). Financing of insurance premiums										
16(g). Aftercare										

Questions 17 to 30 must be completed in full.

17. What, in your opinion, SHOULD the goals of XXX be? Indicate on a scale from 1 to 9 to what degree the goal must be part of XXX. **1** means the goal is not important at all and **9** means the goal is very important.									
	Not important			**Average**			**Very important**		
	1	2	3	4	5	6	7	8	9
17(a). Sustainable return on the XXX share price									
17(b). To provide competitive services to the farmer (quality and price)									
17(c). To maximise the profit of XXX									
17(d). To improve the profitability of the farmer on his farm									
17(e). To provide affordable and quality products									
17(f). Involvement with community actions in the vicinity (schools, etc.)									

18. What, in your opinion, are the CURRENT goals of XXX? Indicate on a scale from 1 to 9 to what degree the goal are part of XXX. **1** means the goal is not important at all and **9** means the goal is very important.									
	Not important			**Average**			**Very important**		
	1	2	3	4	5	6	7	8	9
18(a). Sustainable return on the XXX share price									
18(b). To provide competitive services to the farmer (quality and price)									
18(c). To maximise the profit of XXX									
18(d). To improve the profitability of the farmer on his farm									
18(e). To provide affordable and quality products									
18(f). Involvement with community actions in the vicinity (schools, etc.)									

19. What, in your opinion, is the most important aspects what you expect of an agricultural business such as XXX? Please rank your answer from the most important aspect (nr. 1) to the least important aspect (nr. 5).	
(a). Price	
(b). Product	
(c). Service	
(d). Personnel	
(e). Management	

The following questions are in connection with your view of the future and the role XXX should play in it.

20. In the following 10 years, do you plan to (Choose the one that is the most likely):	
(a). Retire with your family from farming?	
(b). Be succeeded by a family member?	
(c). Keep on farming?	
(d). Uncertain?	
(e). Leave the country?	

21. How do you plan to change or rationalise your farming activities in the near future?					
	Start	**Expand**	**Maintain**	**Reduce**	N/A
21(a). Mealies					
21(b). Sunflower					
21(c). Other grain					
21(d). Live stock (cattle and sheep)					
21(e). Intensive trade (chicken, pig, flowers, etc.)					
21(f). Game farming					
21(g). Permanent crops					
21(h). Irrigation					
21(i). Alternative investments (outside farming)					
21(j). Total farming activities					

22. Are there any other aspects of your farming that you plan to change in the near future?
_____
_____
_____
_____
_____
_____

23. What technology are you currently using and what would you like to use more often in the future?				
	CURRENTLY		**FUTURE**	
	Currently using	**Do not use at all**	**Want to use in the future**	**Do not want to use it ever**
23(a). Precision farming				
23(b). GPS				
23(c). Grain Marketing				
23(d). Internet – to obtain information				
23(e). Internet – bank services				
23(f). Internet – purchases				
23(g). Computer – trading purposes				
23(h). Computer – accounting purposes				

24. Do you regard the following as a threat or an opportunity for you as a farmer?			
	Opportunity	**Threat**	**Uncertain**
24(a). Internet and other technology			
24(b). Government /Political environment			
24(c). Economic situation in RSA			
24(d). Labour legislation and labour unions			
24(e). Black Economic Empowerment (BEE)			
24(f). Upcoming farmers			

25. What would contribute that you would not supply grain to XXX silos? More than one answer can be given. (This question is ONLY for grain farmers)	
25(a). Landload	
25(b). Conditions of roads	
25(c). Distance to silo	
25(d). Tariffs	
25(e). Roadworthiness of vehicles	

25(f). Turnaround time at silo	
25(g). Own facilities	
25(h). Certainty of payment	

26. If you had a choice, which products would you purchase directly from the supplier or producer?		
	Yes	**No**
26(a). Seed		
26(b). Fertiliser		
26(c). Fuel		
26(d). Farm equipment		

27. How do you prefer to be in contact with XXX? Choose just one option.	
27(a). A neat retail shop in the nearest town	
27(b). A representative that comes to my farm to see me	
27(c). Both	

28. In your opinion, what are the 3 aspects where XXX currently perform the best?
_____ _____ _____ _____ _____ _____

THIS IS THE END OF THE QUESTIONNAIRE. THANK YOU FOR YOUR COOPERATION AND CONTRIBUTION.

APPENDIX B

DATA DISTRIBUTION

Question 7

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q7a	338	-.683	.133	.149	.265
Q7b	255	-1.451	.153	3.434	.304
Q7	190	-.924	.176	.746	.351
Q7d	165	-1.199	.189	1.165	.376
Q7e	175	-.913	.184	.641	.365
Q7f	299	-.536	.141	-.460	.281
Q7g	181	-.851	.181	.267	.359
Q7h	126	-1.114	.216	1.732	.428
Q7i	94	-.981	.249	.354	.493
Q7j	157	-1.228	.194	1.771	.385
Q7k	169	-1.691	.187	3.710	.371
Q7l	325	-.474	.135	.054	.270
Valid N (listwise)	26				

Question 8

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q8a	336	-.166	.133	-.353	.265
Q8b	340	-.251	.132	-.663	.264
Q8	337	-.678	.133	.250	.265
Q8d	337	-.535	.133	-.196	.265
Q8e	341	-1.069	.132	1.552	.263
Q8f	339	-.929	.132	.806	.264
Q8g	339	-1.586	.132	3.351	.264
Valid N (listwise)	328				

Question 9

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q9a	341	-.235	.132	-.357	.263
Q9b	342	-.207	.132	-.630	.263
Q9	341	-.492	.132	-.239	.263
Q9d	333	-.436	.134	-.292	.266
Q9e	342	-1.033	.132	1.269	.263
Q9f	295	-.857	.142	.646	.283
Q9g	332	-1.465	.134	2.547	.267
Q9h	322	-1.700	.136	4.489	.271
Q9i	288	-.849	.144	.806	.286
Q9j	268	-1.046	.149	1.171	.297
Valid N (listwise)	202				

Question 10

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q10a	222	-.225	.163	-.333	.325
Q10b	220	-1.188	.164	2.400	.327
Q10	241	-1.613	.157	4.477	.312
Q10d	239	-1.653	.157	4.400	.314
Q10e	237	-2.028	.158	6.688	.315
Q10f	213	-1.349	.167	1.548	.332
Q10g	217	-1.193	.165	1.689	.329
Valid N (listwise)	192				

Question 11

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q11a	186	-.685	.178	.766	.355
Q11b	184	-.707	.179	.833	.356
Q11	193	-1.153	.175	1.733	.348
Q11d	194	-1.216	.175	1.277	.347
Valid N (listwise)	178				

Question 12

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q12a	179	-.315	.182	-.372	.361
Q12b	192	-.475	.175	.438	.349
Q12	175	-.602	.184	.862	.365
Q12d	194	-1.300	.175	3.663	.347
Q12e	186	-1.116	.178	1.449	.355
Valid N (listwise)	160				

Question 13

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q13a	177	-.325	.183	-.118	.363
Q13b	181	-.944	.181	.646	.359
Q13	178	-.969	.182	.467	.362
Q13d	172	-.927	.185	.402	.368
Q13e	173	-1.057	.185	1.535	.367
Q13f	153	-.892	.196	.660	.390
Valid N (listwise)	148				

Question 14

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q14a	310	-.180	.138	-.443	.276
Q14b	314	-.185	.138	-.717	.274
Q14	312	-.335	.138	-.473	.275
Q14d	314	-.827	.138	.320	.274
Q14e	313	-.972	.138	.718	.275
Q14f	303	-.969	.140	.518	.279
Q14g	300	-.601	.141	.375	.281
Q14h	264	-.801	.150	.698	.299
Valid N (listwise)	255				

Question 15

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q15a	185	-.525	.179	.441	.355
Q15b	188	-.551	.177	.133	.353
Q15	186	-.992	.178	1.964	.355
Q15d	187	-1.080	.178	1.621	.354
Q15e	188	-1.060	.177	1.258	.353
Q15f	186	-1.008	.178	.810	.355
Q15g	181	-1.114	.181	1.717	.359
Q15h	177	-1.068	.183	.818	.363
Valid N (listwise)	170				

Question 16

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q16a	125	-.575	.217	.185	.430
Q16b	122	-.849	.219	.960	.435
Q16	128	-1.108	.214	1.681	.425
Q16d	127	-1.268	.215	1.941	.427
Q16e	108	-1.256	.233	2.080	.461
Q16f	115	-1.043	.226	1.479	.447
Q16g	116	-1.166	.225	1.392	.446
Valid N (listwise)	100				