# Enhancing the sustainability through customer relationship management as a solution to the sustainability of the independent short-term insurance broker

**Jan Oeschger**

11120150

Mini-dissertation submitted in partial fulfillment of the requirements for the degree *Master* of *Business Administration* at the Potchefstroom Campus of the North-West University

Supervisor: Mr JC Coetzee

November 2013

# ABSTRACT

This study sets out to validate that a Customer Relationship Management system is an enhancing factor in the sustainability of the short-term insurance broker's business. This objective frolm the fact that very few brokers utilize a complete and integrated Customer Relationship System that could enable them to use the data and information they hold in an effective and sustainable manner. For this reason a primary objective was developed and from this secondary objectives supporting the key issues in Customer Relationship Management systems, sustainability, use ability, interphase, security and integration ability.

An empirical study was conducted and a detailed representation of the facts and key issues to the problem statement was analysed. Various detailed analogies were created from which accurate and reliable deductions were derived. A sample population of bona-fide independent short-term brokers in the North-West province of South Africa were compiled by employing strict discriminatory criteria. A questionnaire was developed that tests the key aspects. The questionnaire used key demographic questions, while the component specific questions employed a Likert scale. A total of 75 questionnaires were distributed and 61 were received back that could be used for statistical analysis.

Results from the research indicated that the factors contributing to Customer Relationship Management are cost and value enhancing. These factors signify sustainability and that a CRM system can deliver, user interphase, cloud computing, data security and system integration ability. The findings developed in a key conclusion shows that not only is Customer Relationship Management a key factor to sustainability, but it is an emerging factor of Customer Resource Management as well.

A secondary finding is that most brokers have some sort of Customer Relationship Management system, but they do not know what they have and how to utilize it to the full.

**Key terms:** **CRM,** Customer Relationship Management, Customer Resource Management

# ACKNOWLEDGEMENTS

I which to express my appreciation with sincere thanks and a feeling of humility towards the following people who made this journey in attaining an MBA:

- The Lord God Almighty - for within His grace I walk.
- My wife Adele - thank you for the love and support and the time allowed me to achieve my goal.
- My son Juan-Andrew - thank you for the time I took out of your life.
- The management and staff of the business school - for allowing me to complete this degree under difficult circumstances.
- My supervisor, Johan Coetzee - for your endless insight, wisdom and guidance.
- Dr Suria Ellis - for the hours spent on analysing and coaching the statistical portion of this work.
- Me Antionette Bisschoff - for the language editing and attention to detail.
- My employer Santam (LTD) - for the time and funds allowed me to complete this degree.

# TABLE OF CONTENTS

# LIST OF GRAPHS

# LIST OF TABLES

# LIST OF FIGURES

# LIST OF DEFINITIONS

A. “Advice” means any recommendation, guidance or proposal of a financial nature furnished, by any means or medium, to any client or group of clients –

a. in respect of the purchase of any financial product; or

b. in respect of investment in any financial product; or

c. on the conclusion of any other transaction, including a loan or cession aimed at the incurring of any liability or the acquisition of any right of benefit in respect of any financial product; or

d. on the variation of any term or condition applying to a financial product, on the replacement of such product, or on the termination of any purchase of or investment in any such product, and irrespective of whether or not such advice (i) is furnished in the course of incidental to financial planning in connection with the affairs of the client; or (ii) results in any such purchase, investment, transaction, variation, replacement or termination, as the case may be, being affected.

B “Client” means a specific person or group of persons, excluding the general public, who is or may become the subject to whom a financial service is rendered intentionally, or is the successor in the title of such person or beneficiary of such service.

C. “Intermediary service” means subject to subsection (3) (6). Any act other than furnishing of advice, performed by a person for or on behalf of a client or product supplier-

a. The result of which is that a client may enter into, offers to enter into or enters into any transaction in respect of a financial product with a product supplier, or

b. With the view to-

i. Buying, selling or otherwise dealing in (whether on a discretionary basis), managing, administering, keeping in safe custody, maintaining or servicing a financial product

purchased by a client from a products supplier or I which the client has invested;

ii. Collecting or accounting for premiums or other moneys payable by the client to the product supplier in respect of financial product; or

iii. Receiving, submitting or processing the claims of a client against a product supplier.

# CHAPTER 1

# NATURE AND SCOPE OF THE STUDY

## 1.1 INTRODUCTION

The importance and need for sustainability and economic survival of the small to medium-sized independent short-term broker should be addressed as a matter of priority. The very method proposed to both save money and insure sustainability for the short-term insurance broker in rural South Africa, lies in the development and implementation of a customised Customer Relationship Management system and a strategy that is able to integrate on a non-discriminatory basis with the systems of insurance providers and clients.

The brokerages are owned and managed by individual ordinary people. They have limited staff. They also compete against various national and direct competitors for market share in an ever decreasing market of insurable public.

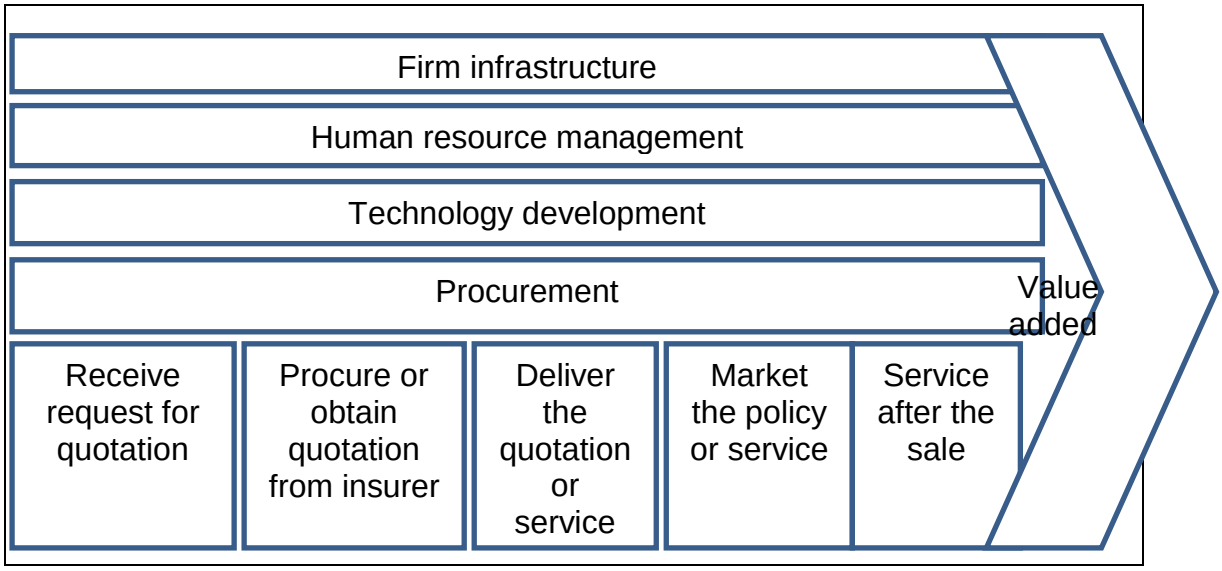
The major factors that influence this are the increasing quantity of competitors to the market and the question of financial sustainability. The sustainability issue is enhanced by the competition from large national short-term intermediaries such as bank groups and large multinational brokerages.

Time, resources and income streams directed at constantly paging through files for information, continuous reproduction of information required by the service providers, accessing service providers' systems or waiting for schedules to be delivered from the insurers, could be utilised in a much more effective and efficient manner. The solution to this is the development of a Customer Relationship Management system and strategy as a more effective cost saving intervention (Fernekees, 2011:Pwp2-Wp2.).

A customer relationship management system is described as a system involving management of “all aspects of a customer’s relationship with an organisation to increase customer loyalty and retention and an organisation’s profitability” (Baltzan, Phillips & Haag, 2006:28). It is thus a valuable source of information to be used in an organisation’s strategy. The volume of data and client information that exists within the hard-copy files and poor data systems in a broker’s office is vast. If this data could be arranged and converged in a single effective customer relationship management system that is integrated, the ring-fencing of clients and loyalty to the broker business becomes a reality.

This aligns with the management of the entire customer base. Here knowledge and the flow of information through the business’ day to day operations, form the basis for an effective strategy and sustainability in these small businesses. Collins (2001:156) states this importance in alignment by mentioning that technology in itself is no guarantee for greatness. Technology should be an integral part of the entire business strategy across all functional and support areas as indicated in the value chain Graph 1.1. To understand the focus on the broker business, one needs to very briefly explain the value chain in this segment of financial services.

**Graph 1.1: A value chain in short-term insurance**




Source: Adapted from Baltzan et al., 2009:22

The role of the independent broker in an intermediated short-term insurance value chain is as follows:

- The procurement of potential insurers or policy holders. Secondly the broker builds a relationship with these potential policy holders, and is provided with the authorization from the prospective clients to conduct the management of their short-term insurance needs. At this stage and after completion of the documents required in terms of legislation, the broker compiles a risk assessment and needs analysis.

- The broker next approaches the various insurance providers to obtain quotations as per the extent of cover required, and the cost in terms of the premiums from these providers.

- The broker presents this to the prospective policy holder and after mutual agreement has been reached, the broker accepts the quote from the insurance provider and completes the contract.

This forms the base of the relationship between the insurance-company and the insured. The broker constantly manages the interaction as the intermediary role dictates. He will provide advice and general services to the insured and also liaise with the insurance-company on the insured's behalf.

As described, the importance of having an up-to-date and user friendly customer relationship management system and strategy can therefore not be over-emphasized.

Of interest are the flow and the sharing of information between the broker and his clients, as well as the broker and the various insurance companies. The practical implication of this is the measurement and mapping of who interacts with whom and what information is shared, routes followed both for personal and official types of information. In this study the existence and benefits of an

official CRM system to assist with the sustainability of the independent intermediary in the short-term insurance industry, will be investigated.

## 1.2 RATIONALE OF THE STUDY

### 1.2.1 Causal factors

After one of the most challenging underwriting cycles in the short-term insurance history in South Africa, the end of 2012 saw various small independent intermediaries conglomerating into larger groups and national service providers. This is also a result of the challenges to comply with the Financial Advisory and Intermediary Act (SA, 2002) forcing financial service providers to comply with regulatory examination requirements (KPMG. 2013:75).

More often than not the reason is twofold. The improved ease of administration based on the larger national group's data management systems and secondly, the snowballing costs of sustaining a small business in an ever increasingly challenging environment.

This tendency is a real threat to the existence of the small business independent broker, and tied to this is the loss of a most valuable distribution channel to the short-term insurance industry.

CRM systems and solutions according to Spinelli (2006:24), are a "front office application" that makes it possible for organisations to not only manage customer data, but have customers interact in this management of data. Today customers can amend, change, correspond and convey their opinions on these systems. Du Plessis and Roberts-Lombard (2013:1) concur by stating that CRM enables organisations with the capability to have real-time customer interaction and service through the use of customer information.

The purpose and use of a CRM in comparison to existing varied practices in client base management, thus needs to be investigated and the findings should be used to generate solutions to the intended purpose of the CRM strategy and -system.

However, one should not be limited to this one possibility in the CRM realm. There is even scope for brokers to develop their own version of a social network related system for subscribers as well as mere visitors to a sponsored web based CRM network. This will create an opportunity for individuals to raise insurance related issues, connect with role-players and even competitors in the field.

Consider the success and frequency of communication boasted by most social networks. The successes of these networks may now also be tapped into by businesses' customer relationship management systems and insurers can now come in contact directly with a rather literate end user of your product or service and engage in interaction and marketing. The key concept is to use technology in such a manner that it becomes an accelerator (Collins, 2001:152) in the business system.

This process is low in cost, since the success of a CRM combined with social networks depends on the spread and informal cross selling of your site, idea or even brand from person to person. A client is invited into this CRM social network and introduced. Once introduced, he/she can invite other participants and so expands the network. This becomes a thoroughly useful tool in marketing to a resource limited small business.

A point that well illustrates the use of social networks is made by Godin (2009) in an interview with a small business forum. Here Godin proposed a solution to people who are not able to visit a small business in person. The customers can keep up with news and new developments via social media. Godin suggests that e-mail newsletters are now common practice though not yet fully utilised to its maximum potential. He also states, in close relation, that people on Twitter and Face-book often do not consult him for the said advice,

since he often just provides them with the best references and suggestions to where and how they might go about in solving their problem. This is relevant in most organisations since this is the way people interact on social media. We often do not approach an expert on a subject matter via traditional mediums anymore, but rather someone on a social network with a clear and meaningful way of providing us with advice and routes to follow. In this scenario, using CRM with a social network in the business of the short-term insurance intermediary, the policyholder can chose with whom they wish to interact to obtain advice and guidance.

## 1.3 MARKET ENVIRONMENT FOR INDEPENDENT SHORT-TERM INTERMEDIARY

### 1.3.1 Problem statement

The short-term insurance industry deals in an intangible commodity, namely delivery on a promise of material remuneration in the event of an insured event. This entire industry is dependent on the flow of information concerning the risk and the insured. The better the quantity and quality of this information the better the outcome in terms of risk premium and cover provided. Lack of a single coherent system at the level where this relationship is formed, is as varied as the amount of intermediaries in the market. This results in differences between the insured and the broker, and the broker and the insurer, as to what data is needed. The broker must constantly provide information on the insured and has risk requirements with every insurance provider. Each provider has a focus of his own, thus the broker needs to be agile in providing this information in the required format. This is where the challenge and the opportunity exist. Data constantly needs to be available and updated. Consequently, the need for a CRM system once more proves valid.

Loss of risk management opportunities and upselling opportunities occur when data sources are inadequate or in a poor state. This results in the loss

of proper risk solutions to a customer's needs, as well as lost income opportunities foro the broker and the insurance provider (KPMG. 2013: 13).

Since costs in obtaining and maintaining data cannot be ignored, the potential saving in having a coherent CRM system and strategy in place should not be ignored. At present Santam LTD North-West experiences a growth of 14% year on year in the independent administration-type intermediated businesses.

Lost competitive positioning against large entities utilising CRM is a fact that cannot be ignored. The problem is clear - customer data is the pivot around which the entire relationship in the business is built. A better understanding and management of the customer and his/her information must be investigated and explored, since the present the approach is not aligned at all. This two-way communication opportunity and its importance is proven by Du Plessis and Roberts-Lombard (2013:3). They describe the results of a study in the long-term insurance industry where they have researched the importance of two-way communication in a CRM system and found it to be a positive contributing factor in CRM. Du Plessis and Roberts-Lombard (2013:3) have found CRM to provide mutually beneficial relationships with clients that provide a long-term relationship and is beneficial to profitability.

## 1.4 OBJECTIVES OF STUDY

### 1.4.1 Primary objective

The primary objective of this study is to promote a Customer Relationship System as a solution to the sustainability of the independent short-term insurance broker in the North West Province of South Africa.

### 1.4.2 Secondary objectives

A vital part of this research is doing an analysis of what the present CRM systems in use comprise of. Requirements for these systems to enhance sustainability amongst the intermediated insurance businesses, will also be addressed. Gil-Lafuente and Luis-Bassa (2011:1) describes the evolution from just seeking customer satisfaction to customer brand loyalty through using CRM.

In this study the next level in Customer Relationship Management, namely Customer Experience Management, which assists with customer loyalty and increases selling opportunities, is exposed. This is echoed by Danckwerts in an article for KPMG (2013:21), where he states that digital technologies enable insurers to leverage information technology beyond traditional processes.

The findings from the study will be used to review an analysis of the CRM systems available. One such system is Microsoft's CRM package for small businesses as discussed by Sayer (2005:24). This, in conjunction with the needs analysis proposals, will be turned into the prospect of future solutions in the CRM sphere. The solutions must be easier and faster insuring long-term sustainability in the administrative support and data management of the independent short-term broker in the North-West Province of South Africa.

With this knowledge in hand, it will be good business practice to investigate the possibility to start a social platform of interaction in the topics related to insurance i.e. the available services and products from the independent broker. This might even extend to outside users other than the clients of the broker. They in turn will invite friends and colleagues, or as in Twitter's model send out "tweets", resulting in business growth, the broker gaining a better understanding and knowledge of his/her social network clients, and also becoming more visible.

Thus the broker not only provides a vehicle for information sharing and a value added service, but also obtainsan immeasurable valuable source of information on hand at a reasonable cost. It is a question of quantity coming in and quality going out as far as information and the management thereof goes.

A major benefit of an effective CRM system and strategy may also lie in the tendency to use CRM systems to track clients and grow sales as highlighted by Boyer (2003:8) in an article as early as April 2003.

The development of the cloud as a storage and hardware solution (Fernekees, 2011:Wp2), enables small businesses to overcome the cost implications of large CRM systems.

## 1.5 SCOPE OF THE STUDY

This research relates strongly to the information management field as it analyses the use of an electronic data-base with capabilities specific to Customer Relationship Management. This is however, not just a system, but part of the business' strategy. To optimize profits, revenue, and satisfaction at an individual customer level, is stated as a fundamental business strategy. Thus it could be argued that the driving principles behind this may be in the realm of strategy management and implementation (Baltzan *et al.,* 2006:20).

As the researcher is situated in the North-West Province, South Africa, the physical boundary of this study is limited to the geographical areas of Potchefstroom, Klerksdorp, Lichtenburg, Rustenburg and Brits.

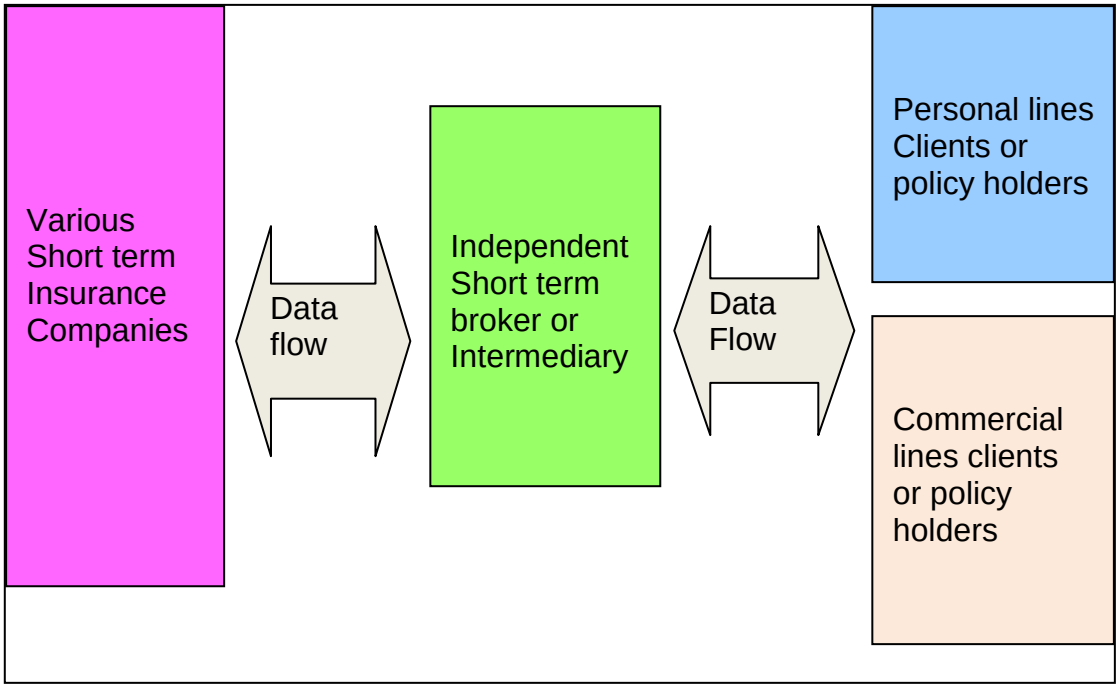
The industry involved is the short-term insurance industry. This is narrowed down to specifically the intermediate model of insurance solutions providers. This model's existence and success depends on an elaborate network of brokers who function as intermediaries between the short-term insurance companies and the insurable public. These brokers may be employees of large national intermediary companies or independent brokers. For the

purpose of this study, independent brokers have been used. This category of intermediary may be described as a small to medium type business with a single owner, or at most, in partnership with another individual broker. They are often located in the area where their main client base is situated.

Brokers involved in this study are small independent brokers in the short-term insurance industry with active Financial Service Provider licenses. Secondly, only brokers with active agencies with the largest short-term insurance-company in South Africa are used. This is due to the fact that they are the most numerous and varied in terms of distribution and business size.

In Figure 1.1, the position of the short-term broker or intermediary is indicated schematically. It is clear that the broker forms the link between the insurer and the insured. This role is largely based on obtaining, managing and supplying information between the two role-players: the insurer on one side and the insured on the other.

**Figure 1.1: Position of the independent broker in the supply chain indicating data flow**




Source: Own illustration

## 1.6 RESEARCH METHODOLOGY

### 1.6.1 LITERATURE/THEORETICAL STUDY

The intended process is to proceed to build on the literature and theoretical information that currently supplies a solid base for the support of the topic. The use of primary and Internet sources is the focus. Due to the technological inclination of the study, peer reviewed Internet sources will form the bulk of the research.

### 1.6.2 EMPIRICAL STUDY

The empirical part of the study comprises of a manually distributed questionnaire testing the aspects of concern amongst the intended population. It entails the questionnaire design, study population, gathering of data, and statistical analysis.

The population chosen was the population of independent brokers identified in the geographical demarcation. Data were be gathered from the completed questionnaires measuring the issues at hand, directly from the people involved in the value chain of the short-term insurance industry in North West Province.

The data were be statistically analysed to ensure that it is both valid and useful to the intended study. From this statistical analysis, deductions could be derived that hold truth to the study and thus provide directive in delivering recommendations to the predicted statement, namely that a Customer Relationship Management system and strategy is the most suitable solution to the sustainability of the independent short-term insurance broker in the North-West Province.

## 1.7 LIMITATIONS OF THE STUDY

Peltier, Schibrowsky and Zhao (2009:308) report that the mere adoption and use of a CRM system and program will not provide the return on investment required, unless it is tied to a high level of coordination between IT and marketing. It is important not to isolate CRM as an alone standing factor in the sustainability of the independent short-term broker, but as an enhancing factor that greatly improves sustainability.

Since this study only focuses on CRM as a solution, the observations may warrant an additional study into CRM strategy and systems as an answer to the problem statement in the fullest sense. It is predicted that various results will emanate that may lead to more in-depth studies.

## 1.8 LAYOUT OF THE STUDY

Chapter one forms the basis of the study indicating the intent and span of the research. The intention and problem statement of the study is stated here with clear intent and direction. An overview of the methods to investigate is provided.

Chapter two is a detailed literature study and an evaluation of the Customer Relationship Management field of study, drawing comparisons to similar and complementary studies found to be relevant to this study.

Chapter three focuses on the test of the validity of the study in a practical scientific manner, enabling the confirmation of the intended research or providing a diverse answer to the issues at hand. An extensive survey, with reliable results will form the backbone of this chapter.

In Chapter four the findings derived from the empirical research in Chapter three and recommendations resulting from this study are described. This chapter is also the closing of the circle and the solution to the problem

statement. Both the primary and secondary objectives are addressed in this final closing chapter.

## 1.9 CONCLUSION

Considering that little previous research could be found by the researcher on the use of a Customer Relationship Management system to achieve sustainability in a vast sector of the financial services industry, this study seems even more overdue and nessesary. This study also echoes the relevance of Du Plessis and Roberts-Lombard (2013:6) in the field of CRM in the long-term insurance industry in South Africa.

This study not only outlines the challenges facing the independent short-term brokers as owner/managers of their respective independent businesses, but also an alternative for a most cost and time consuming activity, namely the management of client data. This closely relates to effective marketing and establishing a connections withthe client to achieve a sustainable relationship and ultimately an effective and well managed business.

Gerber (1995:249) stresses the importance of having a systems strategy as “the stuff of which our lives are made, and the stuff of your business as well”. He strongly advocates having an integrated system as the key to the success of the small owner managed type business. He touches here on the main element of this study and the importance of Chapter one as the key to the entire study. Survival, or rather sustainability, lies in the element of having aligned systems. In this study the focus is on Customer Relationship Management systems as the binding factor to enhance sustainability.

## 1.10 CHAPTER SUMMARY

Chapter one provides the reason or foundation of this study, focusses on the importance of the research and also describes an overview of the methods

followed to drive important recommendations and closings to the entire study. The problem-statement is enhanced by observations and questions related to the problem of a sustainable short-term insurance business.

As one method, an empirical study is conducted in Chapter 3, where detailed representations of the facts and key issues of the problem statement is analysed, various detailed analogies are created, from which accurate and reliable deductions are derived.

The study continues in the final chapter where the findings of the empirical study are presented. Here practical and valid recommendations to the primary aim are presented with the expected secondary objectives mentioned.

In conclusion, a full, detailed guideline and first-time study in thefield of advocating a Customer Relationship Management solution are provided to ensure or at least enable better sustainability of the independent short-term insurance broker.

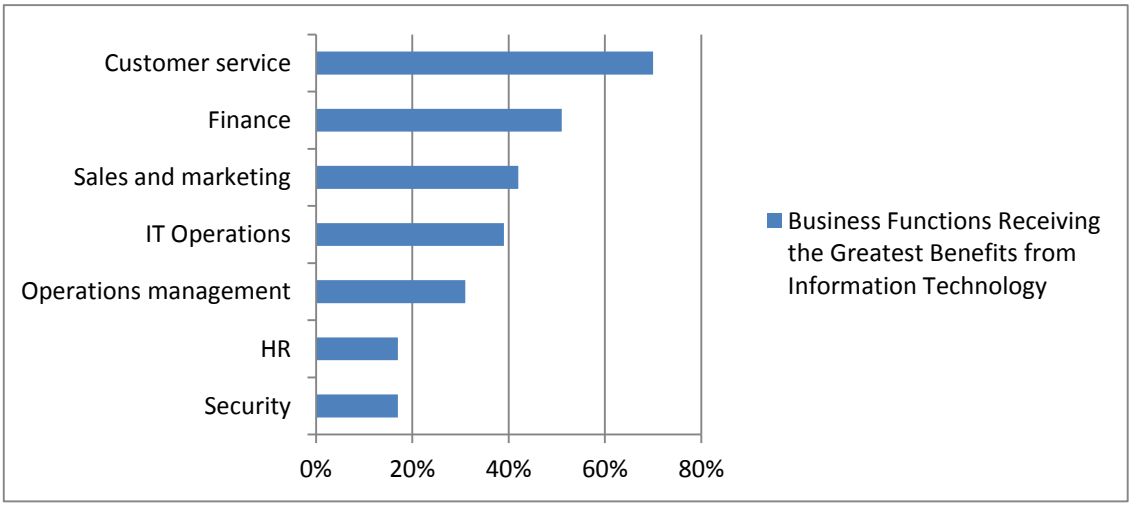
# CHAPTER 2

# LITERATURE STUDY

## 2.1 INTRODUCTION

Information is a strategic asset to a business (Baltzan *et al,* 2009:7). This fact is even more applicable to the short-term insurance industry where the flow of data forms the basis of the tri-party contractual relationship between insured or client, the intermediary or broker and the insurance company. The source of information or data, is the customer as policy holder (KPMG.2013:21). It is this key point in a relationship that is most crucial for the insurance industry and also the section in the data flow chain that will benefit most from information technology applications. Baltzan, *et al*, (2009:9) clearly display this fact in Figure 2.1.

**Figure 2.1: Business functions receiving the greatest benefits from information technology**




Source: Baltzan *et al.* (2009:9)

Figure 2.1 shows a clear advantage to customer services in the application of information technology. Figure 2.1 indicates close to a twenty present advantage that this may generate for the organisation. Compared to the advantages to internal processes such as human resources, security,

operations management, sales, marketing and finance, this one field stands out.

Considering that in the short-term, in the insurance supply chain as illustrated in Figure 1.1, the customer is the main source of the income stream for firstly the intermediary, and then the insurance company, the importance to invest and develop a customer relationship management system is crucial to the survival of the intermediary.

The short-term insurance industry forms part of the financial services sector of the South African economy. As such it is subjected to the economic trends and challenges on the same level as the rest of the industries in this sector.

The purchase of short-term insurance is largely a decision taken by the individual or business manager to safeguard assets against peril. As such, the trends in the spending patterns of the insurable individual or business, are influenced by economic trends. At the end of the first quarter of 2013, the South African consumer confidence levels fell to an all-time low of minus seven. This is a full point lower than what the score was at the height of the economic crises in the 2007 to 2008 financial years when the low was minus six (FNB BER, 2013:1). The relevance of pointing out the propensity of the consumer to spend relates to the very survival of the short-term intermediary in the sense that if the insurable public chooses not to insure but rather to spend money on more tangible and important things than on insurance premiums, the income source for the intermediary is weakened.

The ability to insure and protect against financial and material ruin is dependent on expendable income. The cost of insurance is the premiums payable by the insured for the cover provided by an insurance company. The choice in challenging economic times between buying insurance instead of making alternative investments, is a clear example of opportunity cost (Mohr *et al.,* 2008:200). Insurance is also referred to as a grudge purchase, since a definite amount of money is paid towards safeguarding material and financial survival in case of an unforeseen or negative event causing loss or damage

that may potentially ruin an individual or company (Cooper, 2011:1). This grudge purchase is universal in the study of short-term insurance and echoed by McDonnell and Bartlett (2009:69). To mirror this trend, they also state that as in South Africa, the Australian insurance groups also utilise price levers as a strategy to deal with this often difficult view influencing the buyer. The concept of a grudge purchase is even enhanced by the South African finance providers like banks, that insist on it that items financed by them, are insured. This is a threat to the independent short-term insurance intermediary. The financing institution agent as part of a national intermediary group now has the opportunity and means to influence the customer to, by means of a mere broker's appointment document, sign over his entire short-term policy to the national insurance intermediary. The small independent intermediary thus loses the income from commission and is even more threatened.

To highlight the competitive challenges facing the intermediary, one must take into account that short-term insurance is a monopolistic type product. Regardless of the insurance company selling it, the basic cover and intention are the same. Every insurance company distinguishes itself by adding unique selling points and value added products to the basic policy. This is also closely tied to the price determination by each insurance company. This method of pricing is a major cause for close competition and pressure on the end customer and policy holder.

The consumer who is the policy holder and end client in the short-term insurance value chain, experiences declining confidence in the economy and expresses this loss of confidence in the economy in various ways. Applicable to this industry, is the choice to either not insure or insure only carefully selected items. As a result of this the industry experiences a loss in premium income. The short-term intermediary receives, as its major income source, commission from the specific insurance company he/she chooses to place or take out the short-term insurance policies from. These commissions are based on a percentage of the premium. When premium income declines, commission declines, and as a result the intermediary's income stream comes under threat.

The diminishing premium and commission income together with the challenges facing intermediaries, become a question of survival. In answer to this, costs must be cut, resources optimised and growth opportunities need to be vigorously pursued. To enable these, a well-executed customer relationship management system and strategy is proposed. This is underlined in a Nigerian insurance industry study where Oghojafor, Adulojo and Olowokudeju (2011:452), stress that regardless the industry, management should note the importance of customer focus as a means to effective growth and customer relationship management. Customer relationship management is not only useful but also makes a customer feel appreciated.

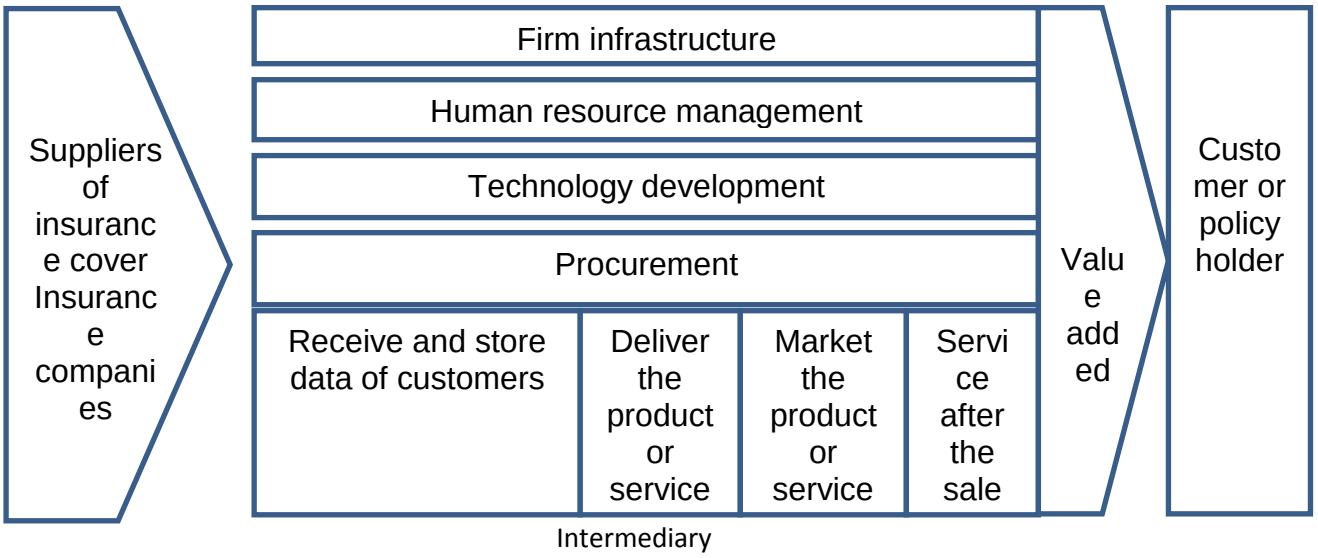
## 2.2 DEFINITION OF AN INDEPENDENT SHORT-TERM BROKER

Since this study is executed from the perspective of the independent short-term insurance broker or intermediary, it is necessary to define the intermediary in terms of the acts governing the industry and to also create context for the position of the intermediary in the short-term industry supply and value chain.

In Graph 2.1, the intermediary is placed in the middle and is defined in terms of the value chain. The activities and structure within the business of the independent intermediary are indicated. The insurance company is shown in the position of the supplier and the client or policy holder in the position of the customer.

The value added activity takes place in the environment of the intermediary and is directed towards the value received by the policy holder or customer (KPMG, 2013:21).

**Graph 2.1: A virtual value chain, indicating the position of the short-term intermediary**.




Source: Adapted from Baltzan *et* al., 2009:22

The short-term insurance industry as a whole is regulated by the Short-Term Insurance Act no. 53 of 2000 (SA, 2000). This act makes provision for an intermediated model of distribution of short-term insurance products to the insurable public. The Financial Advisory and Intermediary Services (FAIS) Act no 37 of 2002 (SA, 2002) in turn regulates the intermediaries to the full extent of the law.

The term broker, in the context of this study, will refer to the intermediary (see list of definitions). Terms that are used and referred to in this study, that need to be defined in more detail and in terms of the Act (no. 53 of 2000) are: client, financial services provider and specific to this study, intermediary, as per the list of definitions.

In this highly regulated environment the intermediary must ensure that he/she complies with the full requirements of the regulations of the FAIS act (53 of 2000) at all times. This includes the successful completion of the regulatory exams as determined by law, and operating the intermediated business in terms of the requirements as well.

In this study, intermediaries referred to, are all in the category that operates in terms of full accreditation and that are in possession of valid licenses issued by the financial services board. The holders of these valid licenses are allowed to conduct short-term insurance businesses as intermediaries between the service providers or short-term insurance companies and the insurable public, which include individuals and business entities as illustrated in Graph 2.1.

## 2.3 DATA RELATING TO CUSTOMER RELATIONSHIP MANAGEMENT IN THE SHORT-TERM INSURANCE INDUSTRY

Businesses use strategies and technologies as key factors in their activities facing customers, and to obtain a competitive advantage. Band (2005:1) names five critical issues related to customer relationship management, namely: “governance, process management, data management, user adoption, and technology.” He proposes ten practical guidelines related to these five issues to achieve a well implemented customer relationship plan. The benefit of an effective system is also echoed in this study as: “increased revenues, lower cost, higher return on investment, and improved competitive strength.”

Closely related to the structure provided by a well-integrated customer relationship management framework, is the use of enhancing technologies. Mobile technology as a means to conduct a customer relationship program and to interact with the program is proposed as an enhanced method of conducting such a program and strategy (Lee & Jun, 2007:809).

An additional out-flow from increased developments in mobile technology, is the ever more popular use of social media on mobile devices, with data storage retrieving and the mining capabilities in cloud computing (Indrawan, et al., 2013:23). This is the next level in enhancing capabilities in the field of customer relationship management that is investigated in this chapter. A

success factor of cloud computing is the cost saving it may facilitate (Garrison, Kim & Wakefield, 2012:62).

Amongst others, Boban et al. (2011:1), state that a strategic objective should aim at aligning data in an organisation to the goals and objectives of that organisation. This allows for integration in the organisational strategy and alignment. To utilise the customer relationship management framework and enhance it by adding mobile and social network technologies, is a good fit for the framework investigated in this study.

Supporting the theme of having a customer relationship management system to enable sustainability goals for a customer relationship system, should be to improve communication, create multiple touch points to service clients, strong alignment to enterprise resource planning, reduce waste of mailing budgets and comply to data regulations (Boban et al., 2011:1).

Since the customer is at the centre of customer relationship management, the benefit of such a system also lies in the improved profiling of an organisation's customers (Bentley & Whitten, 2007:29).

As early as 2006, Stair and Reynolds (2006:363), in a list of then possible actions for mobile devices, mention amongst others, the possibility of using smartphones or mobile devices to view bank statements, pay accounts, view stock prices, conduct research and trades, manage numerous information services as well as various other financial services. Today this is already the standard.We find ourselves in a fast evolving environment in this regard, with the scope for smartphone application development ever broadening. This application development may provide various customer relationship management opportunities. Considering the impact and full extent, an integrated customer relationship management system, enables it and is even referred to as being a disruptive force facing an organisation (Baird & Parasnis, 2011:32).

### 2.3.1 Theory on data utilised in the short-term insurance industry

Data can be defined as “raw facts that describe the characteristics of an event. Information, on the other hand is data in a meaningful and useful context” (Baltzan et al., 2009:10).

Subsequently a division can be made between different types of data and itscharacteristics applicable to the short-term insurance industry. Data can be divided between demographic and risk related information. There is a third component, namely business intelligence, must be taken into account as well. This includes the applications and information technologies that are used to find data, and analyse it in a manner that will support decision-making processes (Baltzan et al., 2009:11).

The key element to a customer relationship management program is that it provides a single, integrated view of the customer (Boban et al., 2011:1). This single view enables the user to see the full extent of a customer’s portfolio with the intermediary, thussaving time and effort for the user since he/she do not have to search or switch between files to find customer information.

Closely related to this, Boban et al. (2011:1) name three types of distinct data an organisation needs to gather to operate a successful customer relationship management program, namely descriptive, behavioural and contextual data (Boban et al., 2011:1).

The value of data is underlined as the second most valuable resource in an effective organisation, only surpassed by the organisation’s human resources (Oghojafor et al. 2011:454).

### 2.3.2 Descriptive or demographic data in the short-term insurance value chain

The first and most important basis for the existence of the insurance contract or short-term policy, is the key demographic information. This includes, but is

not limited to, information identifying the parties involved in the various degrees of detail. This describes and provides detail of the insurance provider, the intermediary and most importantly, the insured or customer. This may be enhanced and extended to include lifestyle and psychographic data (Boban et al., 2011:1).

Since this study is limited to and deals with the position of the intermediary in relation to customer relationship management as an enabler, from this perspective the information making the relationship possible is that of the customer. This information will include the description and identification of the customer in very accurate and precise detail - personal details, details relating to the customer's physical and contact addresses for correspondence and interaction purposes, and also descriptions and identification of co-insured's or other parties in the relationship to the intermediary. This is information or data that will assist the intermediary in closing a correct and just contract with a service provider.

### 2.3.3 Contextual data or data relating to the object of insurance

The subject of insurance is the items insured and objects covered in terms of the policy wording. Relating to this, a more item-specific set of data is required. The items must be well identified, described and the value insured for must be qualified. This is risk specific information and depending on the nature of the insured item, may be quite detailed and complex. This is not data that is consistent amongst all customers and vary according to each individual customer. Because this data is diverse and unstructured, it proves to be the most difficult to integrate in a structured customer relationship management system. This data will not cause the customer relationship in itself to fail, but is more directed at the conduction of the business (Boban et al., 2011:2).

### 2.3.4 Behavioural data or risk management related data

Key to sustainable underwriting and risk management is the financial credibility of an insured. There is a definite correlation between the financial management practices and status of an individual or organisation and the propensity to submit unsound and frequent claims, and the non-payment of premiums. A model for combining the financial information available and cloud computing technologies as described by Song et al., (2012:2236), may offer a solution to screen or predict the financial soundness of an individual in an almost real-time user friendly manner.

This also holds data on transactions that form the relationship between the customer and the intermediary. A balance should be found though between what quantities of this type of information are necessary and what may be viewed as too much (Boban et al. (20011:2).

## 2.4. CHALLENGES IN DATA USAGE IN THE SHORT-TERM INSURANCE ENVIRONMENT

### 2.4.1 User capabilities

The systems used are dependent on the user for all aspects of its functions and applications. It is important that there is a striving towards high quality and frequency of user involvement between the system, application and the user (Band, 2005:7). Users must be well trained and functional. Ample support must also be available to these users. This is a situation not only limited to the user and its capabilities, but also to the usability or user-friendliness of the software involved. The interface between user and software must thus be as understandable and functional as possible, making it practical, easy and fast to work with.

On the continuum of users in terms of capability, two extreme opposites are identifiable. On the one side the novice user is found and on the other, the

expert (Bentley & Whitten, 2007:615). Due to the fact that short-term intermediaries are managers of their own businesses and are more equipped and experienced in tasks such as recognising discrepencies, solving problems, identifying and exploiting opportunities in their own realm of expertise, but very seldom trained or skilled in operating computers (Bentley & Whitten, 2007:615). They do, however, identify that the total novice category is on the diminishing side as technology becomes more readily available and integrated into business. Stair and Reynolds (2006:35) put the task of identifying and implementing an information system as the responsibility of management. They propose a two legged approach for managers to make this possible. The first is to obtain computer literacy, while the second is to increase this knowledge by software systems literacy.

The fact that the user is a person must not be excluded from the equation in the customer relationship management process. Training, user support, ease of use and technical capabilities of these users, are all aspects that are closely associated with the development of an effective customer relationship management program and strategy (Band, 2005:9).

This human side of the interface causes interface problems that may result in “confusion, panic, frustration, boredom, misuse and abandonment”, according to Galitz cited by Bentley and Whitten (2007:615). These interface problems are termed “human factors” by them.

Not unique to this highly governed industry where experienced and capable staff is a scarcity, but also globally, the recruitment and retention of such staff is a challenge. This is a statement reflected by Khandekar and Deshmukh (2012:8).

### 2.4.2 Data integrity, a characteristic of high quality data

A well-executed customer relationship management program and strategy is dependent on high quality data. As a means to ensure high quality in data, Band (2005:7) suggests that data quality management approaches should be

implemented in the process of development, as early as possible. Data quality has been singled out in his study's results as an occurrence in most of the organisations studied. The reason customer relationship management programs often fail may be laid in front of the door of incomplete and low quality data that is entered into the system. Another reason that ties into this, is the lack of adoption by the user, which results into abandonment of the system overall (Boban et al., 2011:2).

The quality of the data obtained and gathered in customer relationship management systems is detrimental to the deployment ability of a fully integrated, operational and well maintained customer relationship management system (Boban et al., 2011:1). According to their findings, consistency and quality of customer data form the backbone of such a strategy.

Data of high quality is defined as being accurate, complete, consistent, unique, and in time (Baltzan et al., 2009:76). Since this study is an investigation into the short-term insurance industry, each of these characteristics need to be qualified as it relates to the industry and the field of study. To reach a stage where data is viewed as high in quality, it must be understood that it is not a quick and easy process. The process requires on-going work and monitoring, putting policies and procedures in place, employing tools to measure and monitor information constantly and only then may data quality be attained (Boban et al., 2009:7). Du Plessis and Roberts-Lombard (2013:6) state that communication to clients in the long-term insurance industry should be timely, understandable, and accurate and that customers should as a priority be informed of key changes in their policies.

#### 2.4.2.1 Accuracy

Accuracy in spelling, values, addresses, descriptions of occupancy and risk in the insurance industry, may very well be the difference between a claim being honoured and supported by the policy, or the financial ruin of an individual or organisation. Any deviation from absolute correctness in any of the fields may

cause financial loss of catastrophic consequence to an insured and the intermediary. For example, having the wrong model description in the case of a vehicle's insurance may result in an inaccurate premium calculation and financial loss in value at the time of a claim. Accurate data is so important that Boban et al. (2011:2) call it the lifeblood of an effective sales force. Discrepancies between customer relationship management systems data and information from other sources in an organisation, is yet another reason for the low adoption of a customer relationship management system (Boban et al., 2011:2).

Having a customer relationship management framework with capabilities to store accurate data and having a user who captures data accurately on one platform, may greatly enhance the outcome of the service provided by the intermediary.

#### 2.4.2.2 Completeness

The full spectrum of data required for all fields must be adhered to. This is of particular value where the complete data spectrum can determine the end result of insurance cover. On a practical level, incomplete data may result in unpaid claims, or incorrect premiums and cover. The variation in model descriptions in the case of vehicle insurance is industry specific. To leave out or not capture the complete set of a specific model's details, may result in a claim being wrongly settled, premiums and values being misrepresented and in the end, a very unsatisfied paying customer.

An organisation should understand where the data it needs and uses comes from and that data profiling is key in understanding this information. The context both defines the type of data as well as usability in the end (Boban et al., 2011:2).

#### 2.4.2.3 Consistency in data

A crucial data characteristic in the insurance industry is consistency. The data must add up. In other words the data described in the contents of the policy contract and policy schedule, must be consistent with and reflected in the debit order breakdown as well.

It is crucial in an insurance environment that the items covered are paid for and the correct premiums are received for the corresponding items and the cover provided. As an integral part of database quality, Khandekar and Deshmukh (2012:7) suggest that companies develop systems that are user-friendly, and enabled to be updated continuously with the data of customers. They also propose a frequently-asked-questions-solution for intermediaries to assist in enabling consistency in data.

#### 2.4.2.4 Uniqueness

This characteristic may very well be described as insurance against double insurance. In other words there must be no duplication in data.

The best way to highlight this practically from an insurance point of view, is the threat of double insurance. This means that an item or data set may be duplicated resulting in being charged additionally and incorrect premiums for the item duplicated. Data must be unique and singular. The uniqueness enable insurance companies and intermediaries to apply customer- and risk segmentation rules, and differentiate between customers, as well as obtaining new insurersand retaining existing clients (Khandekar & Deshmukh, 2012:7).

#### 2.4.2.5 Timeliness

Data must be current and reflect the present or most recent known actual status. The frequency in updating data also needs to be addressed here. In terms of short-term insurance, the standing arrangement is to at least once a year, at the renewal date of the contract, update all relevant data in the

contract. At this renewal date the entire policy is reviewed, from the customer's demographic detail through to the items under cover and the detailed extent of cover required and available.

Timeliness in data is well reflected in the notion that holds truth in that a specific point in time may very well change and may not be factual at all in the progression of time (Boban et al., 2011:1).

In a Nigerian insurance industry study, Oghojafor et al. (2011:458) concluded that customers still need to come into direct contact with persons to enable major transactions. This is also reflected in the process between intermediaries and the insured in the South African context, as is described in Chapter 3 of this study. As they have determined, a reason for this is the lack of an integrated system between customer relationship management systems and other applications on the information management front of the insurance industry. The result of their findings is the suggestion to have an integrated customer relationship system in the insurance industry. The overall benefit of such a system is increased profitability.

As seen in these examples, all deviationd from any of the characteristics of high quality data may lead to financial loss either by the customer, in thr case of claims not being settled as expected, or by the insurance company in terms of wrong premiums, or unnecessary claims by the intermediary in terms of incorrect commissions based on the premiums paid over. There is a clear and definite cost that poor data quality represents (Baltzan et al., 2009:77). The cost may even be deeper as mere financial and material loss, but go as far as loss of customer base and poor brand reputation of the intermediary.

## 2.5 CLOUD COMPUTING AS IT RELATES TO CUSTOMER RELATIONSHIP MANAGEMENT

According to Grance and Mell (cited by Balasunmanian & Armudhan. 2012:23), the most popular definition in use of cloud computing is: “a model for enabling convenient, on demand network access to a shared pool of configurable computing resources (e.g. networks, servers, storage, application and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction”. Garrison, Kim and Wakefield (2012:61) also prefer this definition as most acceptable and widely used. They also promote cloud computing as a means to improve spending patterns on information technology expenses.

Broken down into basic concepts, cloud computing is described as various Internet servers in a single location or even in different physical locations spread randomly (Leavitt, 2009:16).

As a means of storage and data support, cloud based facilities are both cost effective and low in maintenance (Balasubramanian & Armudhan, 2012:35). Cloud computing may be seen as a workable, cost-effective solution to store and access data including software and hardware availability on the Internet in a convenient user friendly manner as determined by user needs. Cloud benefits are cost effectivity, increased availability, application, integration support, and flexibility for users (Leavitt, 2009:17).

Differentiation between the three main strands of cloud computing available should be made on the basis of the practicality to the user’s needs of each of them.

The first option, a public cloud, allows access to various users in an open, unlimited fashion. Due to this multi-user characteristic, this form of cloud computing is not regarded as the safest option for storing data (Balasubramanian & Armudhan 2012:36). They do however continue to argue that this security of data aspect is debatable and not deemed to be as

unsecure as perceived, since various attempts at bridging security measures by crackers have hardened security measures in this field as a result (Balasubramanian & Armudhan, 2012:37).

The second option being the private cloud, has a more direct and user specific approach, where the user's own hardware and software operate hosted services. This is the most secure form based on the control over access and users. With this increased control and own resources, the cost factor comes into play thus making it a far more expensive option (Balasubramanian & Armudhan 2013:36).

The combination of public and private cloud computing options is the hybrid cloud. Here different providers present a combination of applications. Although more expensive than public clouds, and less secure than private clouds, this is deemed to bee the optimal solution to the insurance intermediary. The intermediary may, on this strand of cloud computing, have a more open or public approach to obtain demographic and general customer relationship data, as well as a much more private and user specific platform when dealing with financial and risk specific data.

Over and above these, there are four services available (Leavitt 2009:17) in cloud computing, namely:

- **S**ervices supplied directly to the user ranging from storage, middleware, collaboration and database capabilities.
- Iaa**S** or Infra structure as a Service which provides a full Internet based computer infrastructure service.
- Paa**S** or Platform as a Service, gives a full or partial development capability to users even in collaboration with each other.
- Saa**S** or Software as a Service provides quite a complex turnkey solution even as complex as customer relationship management capabilities.

In their study on available cloud computing options for the medical professional in rural South Africa, Coleman et al. (2012:16) describe the same geographical challenges that they outline for the short-term intermediary in rural South Africa, as mirrored in this study. Their study, however, is limited to contact between a rural medical professional and an expert support structure in a very well defined and private group. Due to the multi-user nature of the insurance industry value chain in this study, a private cloud solution that allows interaction to general public users of the value chain, is seen as the optimal means to conduct data storage and access. They continue to state that cloud computing is linked to economics of scale and confirm that cloud on a pay-as-you-consume basis may again drive costs to the user downwards.

In a multi-industry study involving amongst others the financial industry, Garrison, Kim and Wakefield (2012:63) have found that the competitive advantage cloud computing provides, spans technical, managerial and relational capabilities of an organisation.

## 2.6. STUDIES INTO CUSTOMER RELATIONSHIP MANAGEMENT IN OTHER SMALL BUSINESSES GLOBALLY

Customer relationship management is defined as “managing all aspects of a customer’s relationship with an organisation to increase customer loyalty and retention and an organisation’s profitability” (Baltzan *et al.,* 2009:28). A more detailed approach describes customer relationship management as “a software application that provides customers with access to a business’s processes from initial enquiry through post sale service and support” (Bentley & Whitten 2007:28). Customer relationship management creates both loyalty and increased sales according to this finding.

In a study in the long-term industry in South Africa, Du Plessis and Roberts-Lombard (2013:6) have found that two factors in an effective CRM process is key to the outcome of its effectiveness. These factors are two-way communication and conflict handling.

## 2.7 STUDIES INTO CUSTOMER RELATIONSHIP MANAGEMENT IN THE SHORT-TERM INSURANCE INDUSTRY

Investigating peer reviewed studies in the field of customer relationship management in the short-term industry yielded very little in terms of results. This fact is also echoed by Oghojafor et al. (2011:452), when they stressed that few results have been found in the Nigerian insurance industry as well.

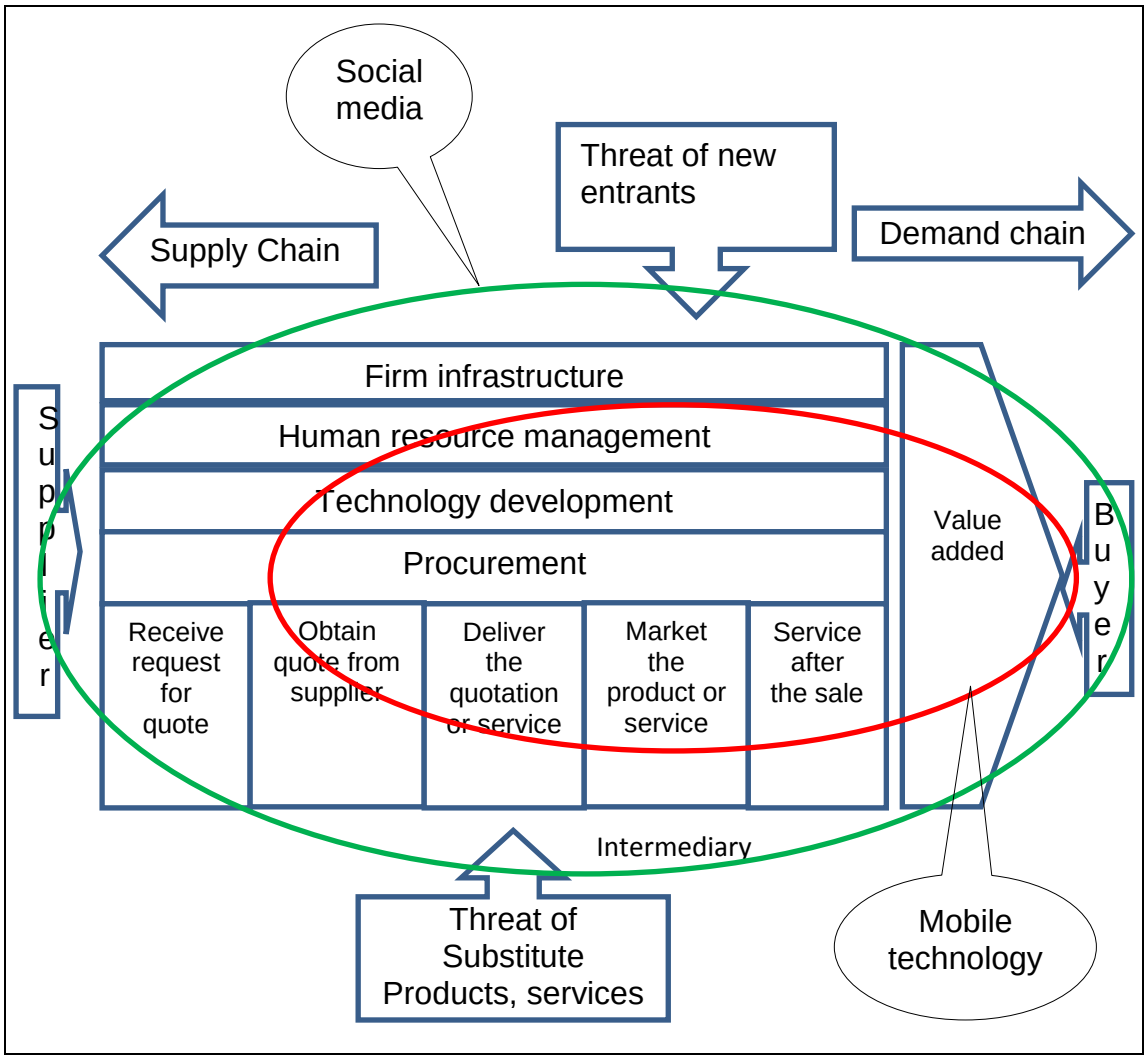
The importance though of knowledge of and customer relationship management in the insurance industry, has been underlined when it has been found that 100% of respondents acknowledged this (Khandekar & Desmukh. 2012:7). Through a study of the South African long-term industry and customer loyalty, Du Plessis and Roberts-Lombard (2013:2) have found that CRM and especially two-way communication between customer and insurer are strong contributing factors to the relationship with the customer.

## 2.8 MOBILE AND SOCIAL TECHNOLOGY AS ENHANCING FACTORS IN CUSTOMER RELATIONSHIP MANAGEMENT

Before discussing these two enhancing factors, it is important to first graphically depict where these two technologies tie into the customer relationship framework.

In Graph 2.2, the interaction between the customer and the intermediary are indicated as it relates to customer relationship management. Du Plessis and Roberts-Lombard (2013:6) have found that both parties in the insurance relationship have to be able to communicate with each other to strengthen the CRM effectiveness and the long-term relationship.

**Graph 2.2: Graphical illustration of a value chain with Porter's 5 forces and the position of mobile- and social technology**




Source: Adapted and enhanced from Baltzan *et al*., 2009:23

### 2.8.1 Mobile technology

"The use of wireless devices, such as personal digital assistants, cell phones, and smart phones to place orders and conduct business". This is what is referred to as mobile commerce (Stair & Reynolds, 2006:362). They state that the use of such devices is more user friendly and easier to operate than conducting business on even a personal computer.

The nature of data and information used as needed to conduct short-term insurance business, play right into the hands of mobile technology. This is

largely due to the fact that two-way communication is a requirement to enable this type of business.

These facts are of use in this study since the information needed is highly personalised and interactive in nature. The device proposed is the mobile smart phone with various applications and integration capabilities. Graph 2.2 illustrates these interactions; it overlays with key core business functions relating to the enhancement of customer service. Interactive communication is illustrated by the circle, and includes the relevant business aspects in the intermediary's environment as well as the customer's (KPMG, 2013:21).

The modern trend globally is that customer attention and activity is increasingly focused towards mobile technology enhanced by virtual social media interaction. The enabling factor to this trend is the mobile device - this interaction cannot be overemphasised (Baird & Parasnis 2011:30).

The mobile device is effective as a means of conveying contextually valuable messages relevant to customer needs (Lee & Jun, 2007:808). Enhanced by the present application development, the possibility for utilising mobile devices to enhance the customer relationship management of a short-term intermediary is quite attainable. We already see trends manifesting in South Africa, like real time traffic information used by some insurers to notify their clients (KPMG, 2013:21).

A major challenge in the use of mobile interaction and two-way data sharing, as it may relate to the marketing of the product or service lies in the privacy of the client or in this study's case, the insured or policy holder (Lee & Jun, 2007:809). Considering the ease of use and the speed at which information can be distributed by the intermediary, it may cause unwanted or untimely communication actions that may result in irritation and eventually disconnection between the intermediary and the customer. The nature, volume and frequency of these mobile device communications should be carefully managed by the intermediary and should form part of the customer relationship management strategy. The fact that mobile devices or

smartphones are one user at a time- or one user specific devices, make these units the ideal platform for interacting with a user (Stair & Reynolds, 2006:363).

### 2.8.2 Social media interaction

The possibilities of this platform in combination with the use of cloud computing by the short-term insurance intermediary, are exciting. Latest studies in the field of combining android enabled mobile devices to incorporate social media applications by Indrawan *et al.* (2013:24), go as far as incorporating face recognition in social media in a cloud computing environment.

Considering the possibilities this development may hold for the insurance intermediary interacting with its customers, the value becomes clear. Tying this to the customer relationship management strategy and the interaction, personalisation and quality of communication are vastly enhanced. Today managers of businesses tend to get increasingly closer to their customers and build extensive social media programs to accomplish this (Baird & Parasnis, 2011:30).

This interaction is not just for enjoyment and leisure purposes. Research has found that the customer needs to feel a positive experience and that the interaction must “deliver tangible value in return”, in order to enable the obtaining of new customers and the keeping of the attention, let alone the willing surrendering of data by the customer. As seen in Graph 2.2, the social media extends over the mobile technology scope of interaction and is illustrated as having a broader scope to include mobile technology as a means of interaction, but is not limited to only mobile technology.

Traditionally, companies controlled the data and the customer relationship management platform, but with the arrival of interactive social media applications and connectivity, the customer now manages the relationship (Baird & Parasnis 2011:30). Baird and Parasnis propose not to just embrace

this trend, but to actively develop a strategy to facilitate the collaborative experiences and dialogue customers prefer.

A study by Baird and Parasnis (2011:31) reveals that customers, when using social media, do so on their own terms.They identified four challenges or trends a company should be aware of when moving customer relationship management to a social media platform. These are that, although the use of social media is ever increasing in volume and user count, customers only interact with companies occasionally; customers prefer to use this media for interaction with friends and family and not brands; customers expect a return of tangible value in the trade-off between them and the companies for their time and information; and lastly they have identified the "advocacy paradox" which means there is a belief by companies that social media interaction will increase advocacy. There has been identified a clear discrepancy in that the companies believe the value of this to be much higher than their customers value it. So the company needs to find creative ways to get the support from customers on social media platforms.

Important aspects to manage in the integration of social media into a customer relationship management program, is to "think like a customer".If you want to know what a customer wants, you should ask the customer. Most importantly, though, if a customer wants to engage with a company on a social media platform it is the customer's choice and exactly what the company should provide for (Baird & Parasnis, 2011:36).

## 2.9 SYSTEM INTEGRATION

Organisations have multiple information technology systems for storing data that is functional in managing operating businesses. It is crucial to an effective customer relationship management system not to exist in isolation or on a separate system from the other business functions. The customer relationship management system should be integrated with the rest of the enterprise's resource management and supply chain management applications (Bentley &

Whitten, 2007:29). The application and use of enterprise integration software to enable interface with the different systems, should be considered if an organisation chooses to conduct business over the Internet. These applications enable interface with external databases as well as internal systems.

Technology in itself though is not the single factor that will grant business success. Out of 84 interviews with the top good to great companies, Collins et al. (2001:152) has determined that 80% of the most successful ones have named technology as an enabler and an accelerator, but not as the one key element. He also highlights that the strategy in these companies has been to integrate and actively strategize their information technology resources. Gerber (1995:247-248) describes system integration as one of the binding factors in successfully managing and operating a business. He clearly describes elements of a customer relationship management system and the integration thereof with the balance of the business information systems. This illustrates the importance of having integrated systems.

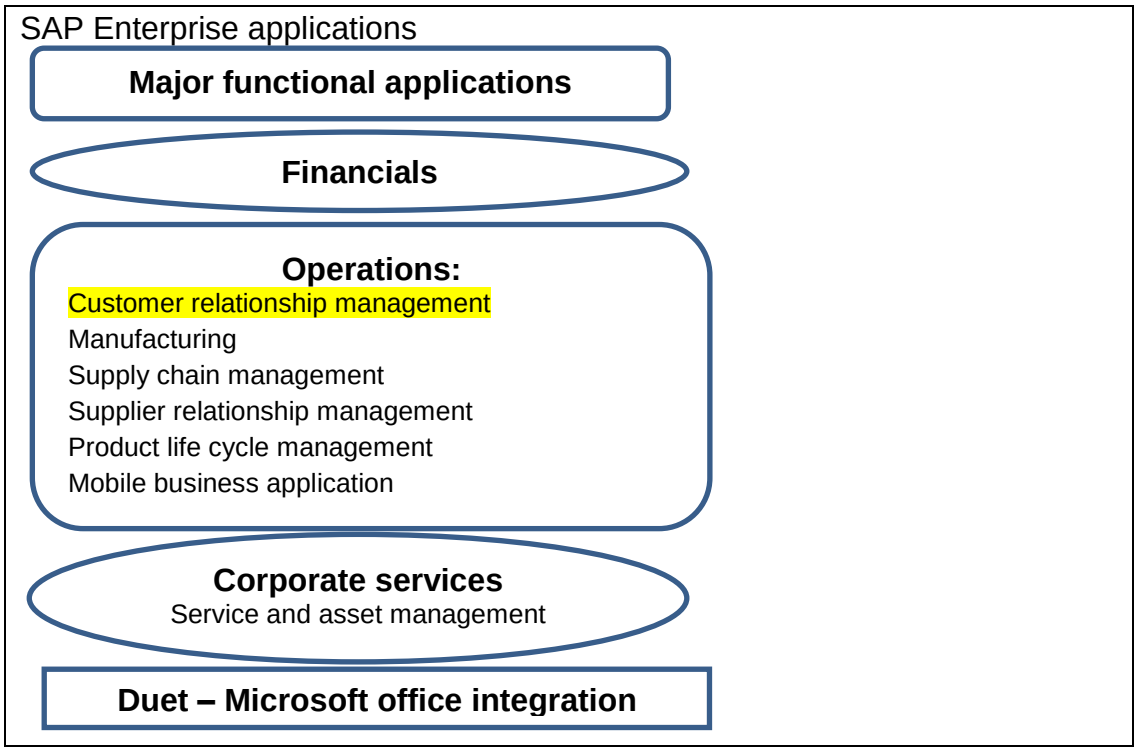
The integration of the customer relationship management system into the business information strategy and programs, is also stressed as the opportunities SAP provides in aligning the different applications on a single platform. This strategy is aligned as part of a supply chain management system and the benefits of a fully integrated system are exclaimed (Jacobs, Chase & Aguilano, 2009:459).

## 2.10 SOME AVAILABLE INTEGRATED SYSTEMS IN CUSTOMER RELATIONSHIP MANAGEMENT

Valuable to this investigation is a glance at which integrated systems answer some of the challenges indicated in the literature study on the topic of customer relationship management. SAP holds various integrated applications and does indeed allow for development and full integration on a

single system, as illustrated in Figure 2.2 (Jacobs, Chase & Aquilano 2009:458).

**Figure 2.2: SAP Enterprise applications**




Source: Jacobs et al., 2009:458

Salesforce.com is mentioned as a cloud based company with extensive customer relationship management integration solutions (Leavitt 2009:16). Software as a service model is utilised by cloud based Salesforce.com, to provide solutions with cost effective outcomes due to their utilisation of the economies of scale principle, as a result of their multi-user strategy. They supply the integrated solutions for customer relationship management system in a cost effective manner (Mietzner et al., 2009:18).

The end result in a successful customer relationship management program is an investment in both capital and time. These programs are long-term strategies that may deliver quite differentiated customer experiences. These experiences may even set an organisation apart from its competition by means of competitive capabilities (Band, 2005:9).

## 2.11 DATA SECURITY AND ETHICAL CONSIDERATIONS IN CUSTOMER RELATIONSHIP MANAGEMENT

Information and data in an insurance value chain are both the insurance company and the intermediary's intellectual capital and as such their most valuable resource (Batlzan, *et al.* 2009:50). This valuable resource needs to be safeguarded and protected.

Regardless the means of data storage and platforms used, the main concern for any organisation remains data security. The cloud, as a proposed storage and support function in this paper, is no exception. This risk is enhanced by the fact that the cloud as proposed in this paper, is a multi-entity structure with various parties involved (Balasubramanian & Aramudhan, 2012:35-36). They continue to propose a list of helpful requirements to take into account.

These include that the user should require his own cloud administrator or service provider to adhere to and prove that the persons having access to the data is controlled and proved; the administrators should be willing to undergo security screenings and audits at intervals; there must be control over where the data is stored; encryption facilities must be available at all stages and these must be designed and maintained by expert professionals; the processes to recover and restore, investigative capabilities in case of security breach and disaster situations should be in place; and finally should the company fail,what will happen to the data.

The strength of cloud computing, the cost saving capabilities, the scalability and integration abilities that cloud computing produce, have been predicted to be 25% of the information technology spent in the United States (Leavitt 2009:15). Amongst the most well-known cloud computing companies, are Amazon.com's Amazon web services, Google's Google apps and Salesforce.com's Force.com (Leavitt, 2009:15). These are just some of the prominent companies in this sector but not the only ones.

Broadening the potential scope in usage to the social and mobile environment, the exclusive offers and sales value gained by the user outweighs privacy fears though (Baird & Parasnis, 2011:34).

## 2.12 CONCLUSION

Organisations increasingly find the value in customer relationship management systems as a means to create customer loyalty and a source to increase sales.

Social network usage as a complement to your customer relationship management system may be beneficial, but the organisation should be keenly aware of the deceiving nature the social network user has. Social media is a “game changer” with the customer in control of the relationship.

Amongst the various solutions combining customer relationship management systems on an integrated basis, supported and situated in the cloud and flexible enough to accommodate mobile and social technologies, Salesforce.com and SAP type solutions seem to be a strong base to start empirical research from.

## 2.13 CHAPTER SUMMARY

In this chapter we defined the outline and gaps in the customer relationship management environment. An approach from the delivery point of view to the short-term intermediated business model has been done. It is proposed that an integrated customer relationship management system is analysed as a solution to the sustainable survival of the short-term insurance intermediary.

The definition and contextual environment that the intermediary conducts his business in, is defined and described in terms of legislation that governs this line of business. From a data usage point of view, the nature of the data

relevant to this sector of the financial services industry is governed to equal extent, and must be in strict compliance with the prescribed rules of the Financial Services Board (FSB).

The challenges and characteristics of valid and useful data are subsequently explored in terms of the description of the challenges from the user through to the data captured in a structured fashion.

Due to the volumes and challenges in storage, back-up capabilities and with costs as a driver, the cloud has been investigated as a means of enabling a stable and capable data handling and enabling factor. The cloud has been explored in terms of availability, options and trends globally.

The intrinsic value of data as an intermediary's capital resource is highlighted and thus the asset needs to be secured and safeguarded. Aspects surrounding data security in the environment are defined and described.

Hence forth it was necessary to investigate industry specific studies in the field of customer relationship management, as it relates to small enterprises in principle and as well as to the insurance industry, more specifically the short-term insurance industry. A more focused approach to attempt to find South African specific studies has been conducted and yielded vast research opportunities due to the fact that very few focused studies in the field of customer relationship management could be found, making this study even more acute and valuable.

As a next step to the proposed customer relationship management system, trends have been identified that show an increased use of mobile platforms or technology to enable and extend customer relationship management in this field.

The mobile technology environment have proven to be a useful framework for social media development and organisations have been quick to see the opportunity in social media as a source of customer relationship specific data.

It has been found that the social platform has inherent challenges of its own that must be taken into account before an organisation embarks on this route. An effective system cannot exist in isolation and a proper system integration between the applications in an organisation and its customer relationship management system have been investigated.

The key message is that vast opportunities exist in the utilisation of a customer relationship management program and the validation of the hypothesis that customer relationship management may be the solution to the sustainability. The survival of the short-term intermediary as business owner and manager in rural South Africa will be empirically tested in Chapter 3 on the back of aspects related to this field as presented in Chapter 2.

# CHAPTER 3

# EMPIRICAL STUDY

## 3.1 INTRODUCTION

This chapter deals with the empirical research conducted to investigate the research objectives as described in section 1.4. It describes the design of the research and gives explanations of the methods of research used and the analyses utised to reach the aim of this study.

In Chapter 2 literature study provided various factors that contributed and influenced the primary and secondary objectives. The end-goal of the research was to determine the manner in which these factors enhanced or weakened the sustainability of the short-term insurance broker by means of a CRM system.

A questionnaire was designed to test the factors that enhance the success of a CRM system as a solution to the sustainability of the independent short-term insurance broker. To confirm the primary objectives, the secondary objectives were isolated and highlighted. From the combination of the sets of objectives, drivers relevant to the CRM and short-term insurance brokers were identified and tested in the questionnaire that was designed to test each of these. CRM was identified as a solution, but within this key drivers were identified during the literature study in Chapter two. The drivers, namely demographical information, IT capabilities of the brokers, evaluation of the effectiveness of CRM systems in use, sustainability factors, systems support and training, cloud computing, security, mobile and social media and integration of systems, were tested in this study. The questionnaire can be viewed as Appendix A. The findings of the questionnaire are presented in this chapter.

The questionnaire has been distributed amongst independent short-term brokers in the North-West Province. This chapter also explaines the processes involved in obtaining the data from the questionnaires, from the design to the collection process as well as the analysis of the data. It is deemed to be necessary to build this chapter on the methodology and philosophy of the empirical research method.

## 3.2 DESIGN OF THE RESEARCH

### 3.2.1 Important aspects relating to the empirical study

Key factors to be described in the design of the empirical research are population description, size of sample, type of sample and the design of the survey.

#### 3.2.1.1 Population

Since this study is industry specific and focuses on the CRM aspect as found in the offices of the independent short-term insurance broker, the population has been composed of active short-term insurance brokers with valid FSP licenses. The brokers composing this population are all situated in the North-West Province of South Africa. They are based in the municipal districts of Klerksdorp, Lichtenburg, Rustenburg, Brits and Potchefstroom.

Due to practical and time constraints the population has been limited to short-term insurance brokers with active agencies affiliated with the largest short-term insurance provider in South Africa, Santam LTD (KPMG 2013:21). The total size of the population registered with the FSP as short-term licence holders, in posession of active agency contracts with Santam LTD, is 2013 with N= 327. This also includes national and large multi-national brokers. The population was dissected as described above and the N was recalculated at 75.

#### 3.2.1.2 Type and size of the sample

Due to practical reasons and time constraints the population was segmented and some of these these entities affiliated with national brokerages as well as the developing and new agencies with no policies on record, were excluded. Brokers utilising independent administrators to execute administrative functions on behalf of the brokers, were also excluded. Individuals included in the sample were brokers and key staff members dealing with the insurance companies and the insurable public. The constraints placed on the inclusion of the full sample in the research caused the researcher to rely on this segmented portion of the population (Welman, Kruger & Mitchell, 2005:55). The type of sample used was a stratified random sample based on the segmentation criteria applied (Welman et al., 2005:62). The final population size was N= 75.

It is important that sample sizes are determined beforehand. This ensures that the confidence interval will be within a band narrow enough to be statistically significant. Only with this narrow interval can decisions be made.

**Figure 3.1: Geographical area of the North-West Province, South Africa**


Source: Adapted from Santam Business Enterprise Map 2013

To ensure results that are representative of the population, the sample has been taken over the geographical area of the North-West Province. The characteristics and contents of the sample is still representative of the population, but only on a smaller scale (Welman, Kruger & Mitchell, and 2005:55).

3.2.1.3 Design of the survey

There are mainly two schools of survey that dominate in the research field - the first is the qualitative method and the second is the quantitative method (Welman *et al.,* 2005:8-9).

The qualitative method, according to Welman et al. (2005:8), is mainly a proposed method where value, meaning and processes needs to be qualified. The qualitative method is beneficial in the research of relationships within the inquiry. The data gathered with qualitative research is the result of the subjective thoughts of the individuals in the sample. Qualitative data is also

largely composed of people's spoken opinions from which the researcher must derive contextual meaning.

Quantitative surveys, on the other hand, consist of numerical responses that enable the researcher to test the relationship between variables. This method focuses on the analysis of relationships that may, or may not exist within this value free data set (Welman et al., 2005:8). The data is described as more objective. Therefore this method of survey has been chosen for this study. Another factor also contributing to the choice of a quantitative survey, has been the clear boundaries and elements that support the primary and secondary objectives of the research. This method of survey supports the measurement of the relationships between the aspects comosing an effective CRM system. By qualifying the strength of relation, each of these aspects can be investigated and can assist in providing solutions to the primary objective, or it can provide insight into aspects needing additional study.

To support the investigation into the primary and secondary objectives, a questionnaire was designed to test the various aspects making up the backbone of the theme of this study. This new questionnaire was designed around the ten questions identified in Chapter one of this study and supported by the literature studies in Chapter two which proved relevant to the primary objective. The summary of the questions and their focus as related to enhancing the sustainability through Customer Relationship Management as a solution to the sustainability of the independent short-term insurance broker, are as follows:

Question 1: Demographics
Question 2: Information technology utilisation
Question 3: Customer interaction
Question 4: Effectiveness evaluation
Question 5: Sustainability
Question 6: Service support and training
Question 7: Cloud computing and options
Question 8: Security

Question 9: Social media platforms

Question 10: Integration

The questionnaire was designed around a Likert scale depending on each question in the survey. This is supported where necessary by an option to clarify or provide additional information to questions that needs more deliberation. Appendix A is a sample of the survey designed in co-operation with Statistical Consultation Services of the North-West University, Potchefstroom Campus.

### 3.2.2 Gathering of data

After the survey questionnaire was designed and final adjustments were made, it was distributed to the sample candidates. The process involved the usage of the seven senior relationship managers in the North-West Province. They are situated in the Santam branches of Klerksdorp, Lichtenburg, Rustenburg, Brits and Potchefstroom. They were chosen as the vehicle to get the surveys to the independent short-term brokers identified as per the criteria in 2.3.1.1. The surveys were presented both in hard copy and as an electronic document. The relationship managers visited the short-term brokers individually and sat with them to explain the survey. The survey was completed by the brokers and their key administrative staff involved. The completed surveys were returned to the researcher via e-mail and printed out. Some of the surveys that were in hard copy format were scanned and e-mailed to the researcher from the respective branches. These surveys were all printed out and collected by the researcher.

A total of 75 surveys were distributed to sample candidates. Six individuals chose not to participate. One individual did not understand the survey at all and delivered an unusable result. Seven questionnaires were not returned before the deadline. As a final count, 61 usable questionnaires were received back and analysed.

### 3.2.3 Analysis of the data

The hard copies of the survey questionnaires were transferred to an Excel spread sheet from where Excel statistical functions could be applied. In the analysis the 61 responses were submitted to frequency analysis and descriptive statistics analysis. The data gathered were analysed by the Statistical Consultation services of the North-West University.

#### 3.2.3.1 Descriptive statistics and frequency analysis

With the statistical analysis process, the importance of the arithmetic mean as a measurement for central tendency, became apparent. This is used as the term mean or denoted ẋ. This is a commonly used method to assist in explaining the midpoint or average in a data set (Levine *et al*., 2008: 97).

In the frequency distribution measurement the standard deviation is a measurement that is important in this set of results. The greater the value of the standard deviation, the larger is the spread of the data, and the less the value is, the more concentrated the data spread is (Levine *et al.,* 2008:106).

#### 3.2.3.2 Data reliability and validity

Data used must be both valid and reliable. Before data can be interpreted and conclusions drawn, it is important to have the data tested for statistical significance and have it validated. This is of particular importance if relationships between variables are investigated.

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.8 and above is adequate. Single factors use KMO.

Statistical significance is p-value and practical significance is effect size. Ellis and Steyn (2003:51-54) describe effect size as being independent from sample size and a measure of practical significance. A small p-value of 0.05

and smaller is seen as statistically significant. Effect size can be seen as small 0.2, medium 0.5 and large 0.8, according to Cohen (1988).

Percentage distribution is a statistical method to describe a proportion of the sample or group that is preferable to the frequency distribution (Levine *et al* 2008:46). This method is used to highlight the percentage of the sample that is applicable to a certain variance described.

T–Test for correlation coefficient. This test is used to test statistically significant linear relationships between two factors (Levine *et al.,* 2008:452)

Cronbach's alpha coefficient is a means to determine the reliability of a test. A Cronbach's alpha statistic of .7 and higher is good and as low as .5 in this sample type is reliable. "Kline (1999) notes that although the generally accepted value of 0.8 is appropriate for cognitive tests such as intelligence tests, for ability tests the cut-off point of 0.7 is more suitable. He goes on to say that when dealing with psychological constructs, values below even 0.7 can, realistically, be expected because of the diversity of the constructs being measured" (Field, 2009:675). Due to the relevance of this test to questionnaires using Likert scales, it is utilised in this study on the factors and components of each question.

SST (sum of squares total) was used to identify and analyse factors composing the various components within the questions. This represents all the variation around the grand mean (Levine *et al* 2008:438). In this study the factors identified is discussed after the elaboration of the results' findings.

## 3.3 ELABORATION OF RESULTS

The questionnaires obtained data from respondents around ten questions relating to CRM as an enhancing factor in the sustainability of the

independent short-term broker. These questions are again segmented into various aspects relating to the topic of the question. A Likert scale was used mostly and depending on the aspects, designed to be broader in scale on some aspects than other.

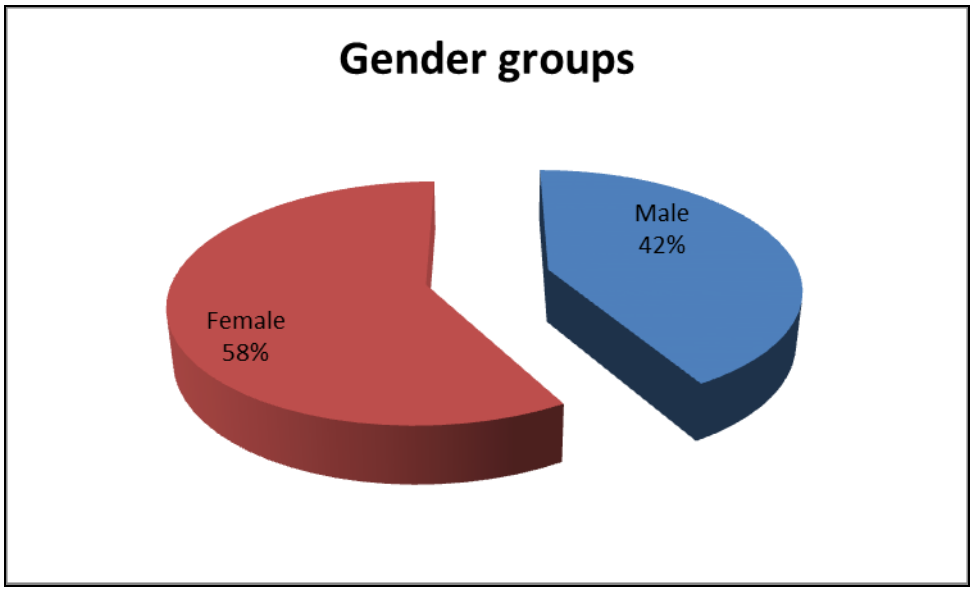
### 3.3.1 Biographical information results

Biographical results were used to assess the relationships between the respondents based on key biographical information such as age group, gender and years of experience, in relation to the nine other questions tested. From this, certain trends and patterns can be identified and conclusions can be derived.

#### 3.3.1.1 Gender

From the 61 respondents, one result was uncompleted in the gender question. The results prove 10 more female respondents than male respondents. The percentage responses show a 58.3% female response and a 41.2% male response.

**Figure 3.2: Gender groups**



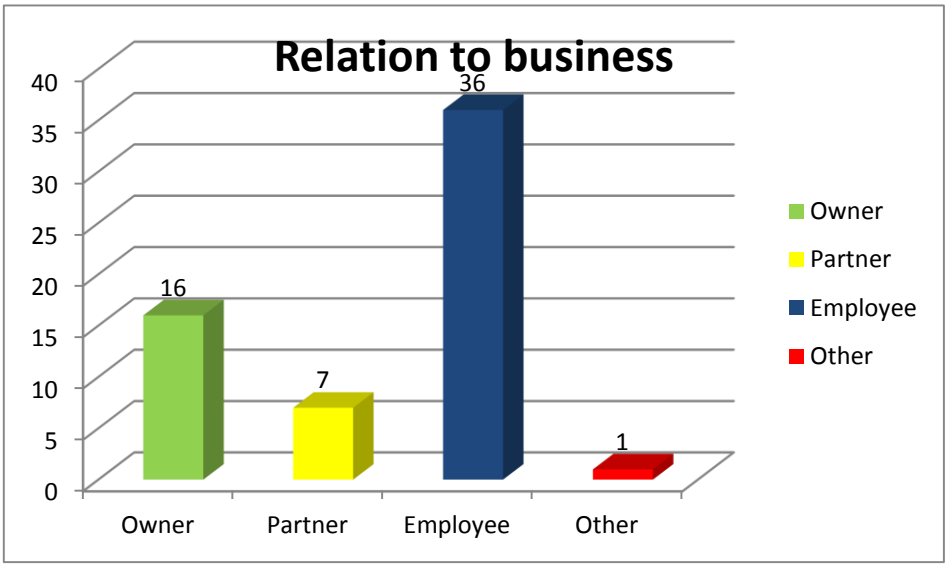
### 3.3.1.2 Age group

From the 60 respondents the mean of the data set on age is 39.51 years.

### 3.3.1.3 Relation to business

Within the sample, it is necessary to discriminate and clearly indicate that the respondents are indeed in a position within the business to have CRM interaction. The bands identified as most probable to be in a CRM interactive position are the owners, the partners and the administrative staff.

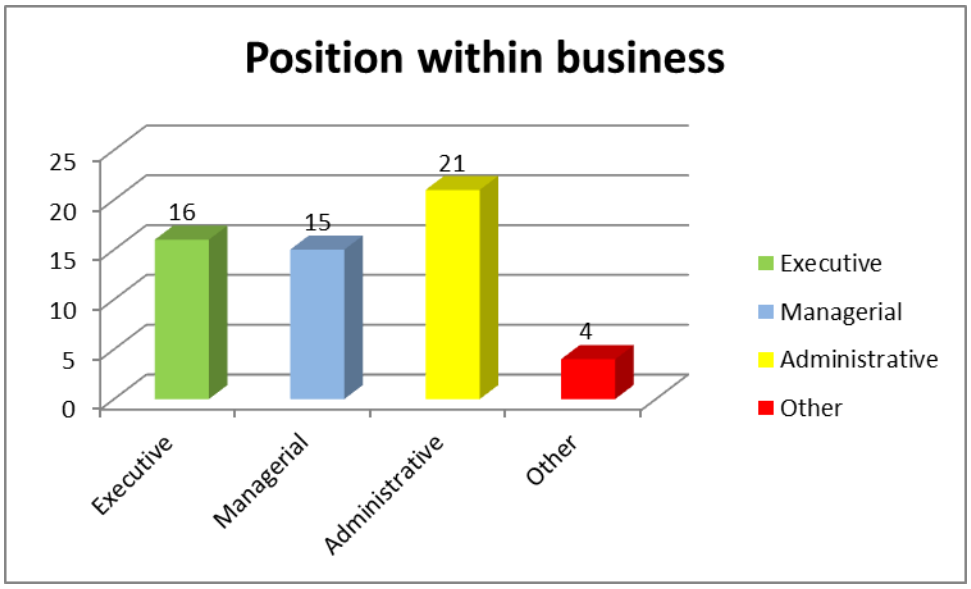
**Figure 3.3: Relation to business**




#### *3.3.1.3.1 Position within the business*

To determine where the respondents fit in to the business in terms of activity, a scale testing four possibilities were developed. A total of 56 respondents indicated their positions as per Figure 3.4: Position within the business.

Figure 3.4: Position within the business




The results depicted in Figure 3.4 indicate that the majority of respondents are indeed in a position exposed to CRM interaction. The executive, managerial and administrative personnel in a brokerage deal with customers and are exposed to information in this regard.

### 3.3.1.4 Qualifications and industry body involvement

This set of questions was designed to test the level of qualification and the involvement of the respondents in the short-term industry. Components to these general academic qualifications were obtained and segmented into more industry specific qualifications. The experience in years the respondents worked in the short-term insurance industry is also measured.

#### *3.3.1.4.1 Highest academic qualification*

The questionnaire was designed to be discriminatory in the approach to just measure the highest qualification in the scale. Five options were presented. The first being a grade 12 school qualification, the second a diploma, the third a basic degree, the fourth a post graduate qualification and the last an option for respondents falling outside the scope of the scale with an option to elaborate on this choice.

From the total of 57 respondents who made choices, only 2 were in the 'other' category. Due to the relative small response on 'other', the focus falls on the other 4 options.

**Figure 3.5: Highest academic qualification**

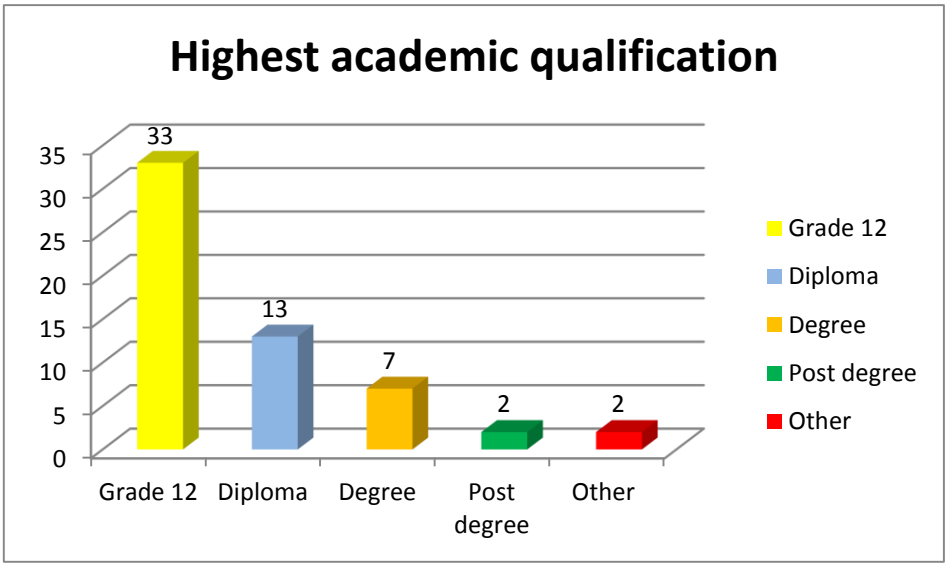



Figure 3.5 indicates that 38.5% of respondents were found to have qualifications above grade 12.

*3.3.1.4.2 Insurance industry qualifications*

Within the short-term insurance industry, a set of standard short-term insurance qualifications can be obtained. This is not a prerequisite to enable a broker to be registered as a FSP, but it does indicate the occurrence of such additional qualifications within the sample.

Only thirty respondents have indicated that they have qualifications specific to the short-term industry. The scale employed in the questionnaire has been ranked from basic to the more involved. The findings indicate that 12 respondents have completed the basic Certificate of Proficiency, followed by the next step, namely an Intermediate Certificate in Business studies with 6 responses. Becoming an associate of the Insurance Institute of South Africa

(IISA) followswith only 4 respondents that have this qualification. The most time consuming and most involved of the options is a Fellowship to the IISA, with only 1 respondent indicating completion of this qualification. The category ‘other’ has been completed by 7 respondents.

#### *3.3.1.4.3 Insurance industry compliance rating*

As described in Chapter 1, the compliance to the requirements set by the registrar, to be able to operate as a FSP, must be met by all short-term insurance brokers. This requirement is compulsory and strict timelines are prescribed to complete the compliance examinations. The basic requirements are Re 1 and Re 2 to be completed in this present timeframe set by the FSB.

Respondents indicating option 1 on the scale, do not indicate that they are not authorised to conduct a short-term insurance business, it is a mere indication that they are still in the process and at the time of completion of this questionnaire not yet in possession of their compliance results. This process will be completed by the FSB as the governing body by 2014 at a time to still be published in the Government Gazette.

Respondents who indicated their compliance status were 55 in total. Of these only 10 was still in process of completing compliance requirements. 45 obtained the first requirement and a total of 15 had successfully completed both compliance exams. This compliance however has no relevance to the tested factors and is not described any further. The main purpose was to establish that the majority of respondents comply with industry requirements. This indicates that the correct sample group was used as described above in the population and sample size discussion.

#### *3.3.1.4.4 Industry body involvement*

As members of the short-term insurance industry, the brokers have a wide choice of industry bodies to affiliate to and be involved in. These bodies are structured along the lines of the fields of expertise some brokers find

themselves in. Other bodies are more general in approach and serve as a forum to share industry news and developments on, as well as to act as a vehicle to assist in training needs in certain classes of insurance. The respondents who have completed this question number 57 in total. Of these, 30 have indicated that they do belong to these bodies and 27 do not belong to any bodies.

#### *3.3.1.4.5 Years short-term insurance experience*

Of the total of 58 respondents, the mean of the data sample is calculated at 15.25 years of experience. The data set is wide-spread with a standard deviation of 10.62. This indicates that this is an industry with well experienced representatives.

#### *3.3.1.4.6 Knowledge of CRM*

This factor is the first in a series of questions specific to the utilisation, understanding and interaction with CRM systems in the independent short-term broker's office. This question asks specifically if the respondent knows what CRM entails. 100% of the respondents took part in this question. The mean was calculated at 2.90 on a 4 point scale indicating a sound knowledge of what CRM is all about.

Of the 61 respondents no less than 30 indicated that they have knowledge of what CRM entails to a larger extent. It was also found that 13 had full understanding of CRM. Only 1 respondent had no knowledge of CRM. This confirms the validity of the sample as informed on the subject of CRM. In Figure 3.6 the findings of this question are illustrated.

**Figure 3.6: Knowledge of CRM**

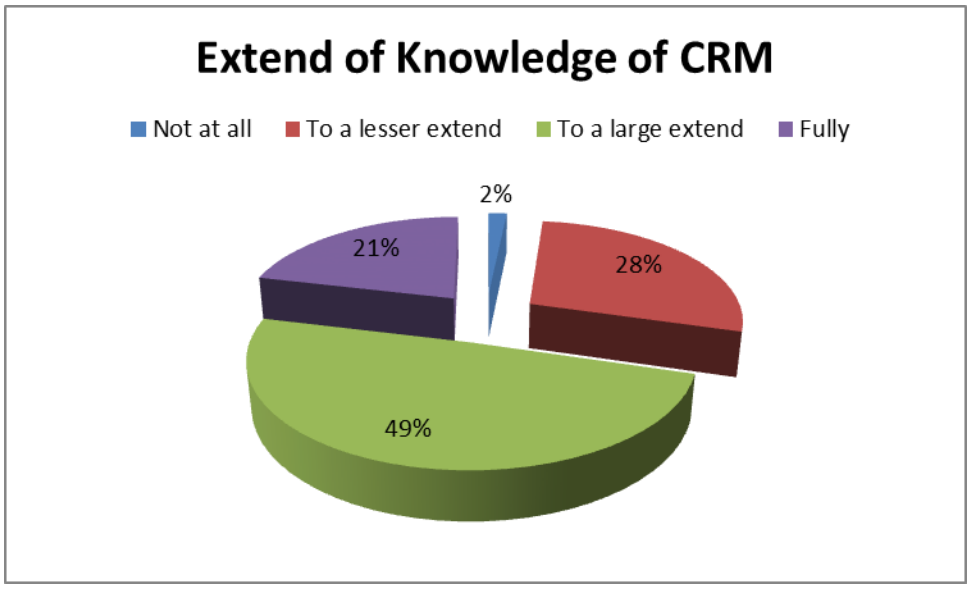



Figure 3.6 indicates that the larger portion of the sample combined with the full extent of the knowledge component, provide a rounded 70% to the knowledgeable side of CRM.

*3.3.1.4.7 Awareness of availability of CRM systems*

Closely connected to the knowledge of CRM, is the awareness of what options of CRM systems are available to the independent short-term broker. A response of 60 was received on this question. The mean of this sample response is 2.58. Only two respondents out of the 60 indicated that they were not aware of the various CRM options available to them. A total of 27 respondents indicated awareness to a lesser extent and 25 to a larger extend. Encouraging to this study was the 6 respondents who indicated full knowledge of various CRM systems available to them.

3.3.1.5 CRM perceived as a front office activity

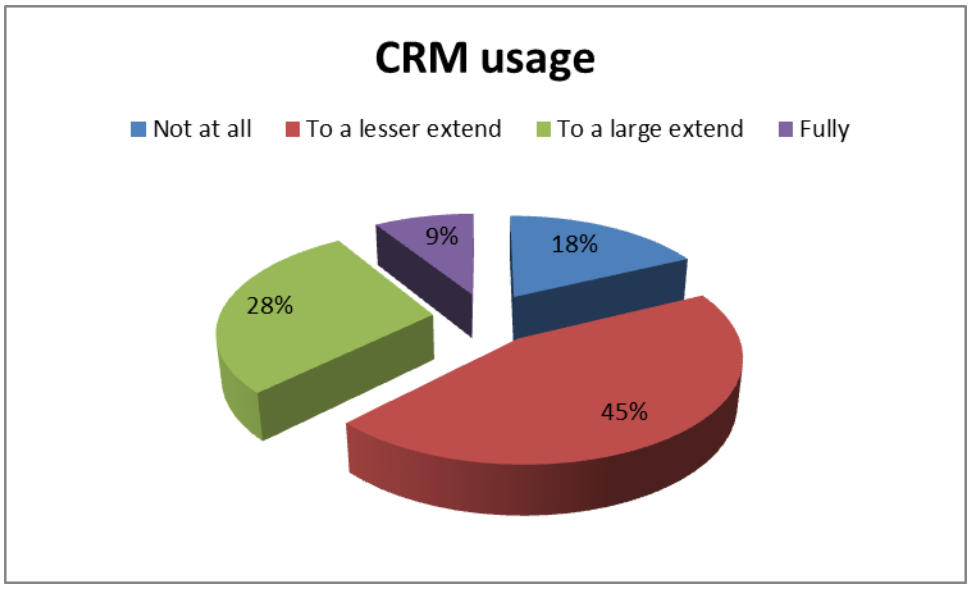
In Chapter two literature studies indicated that CRM is a vital front office activity. This was tested in the sample group, as well to evaluate the extent to which the independent short-term broker sees the CRM system as a front office activity.

A total of 58 respondents indicated their choice on this question. The finding is that 30 respondents or 51.7% indicated that they do consider CRM as a front office activity to a large extent. Respondents were stronger in their approach towards this question and 15 respondents indicated that they fully consider CRM to be a front office activity. Two respondents indicated that they do not consider CRM as a front office activity at all and 11 indicated the importance as to a lesser extent.

#### 3.3.1.6 CRM usage

The most relevant and important question asked is if the independent short-term broker make use of a CRM system. This question closely relates to 3.3.1.4.6.b and 3.3.1.5 where these responses have indicated that the brokers have knowledge of and are aware of CRM systems. This question tests the reality of the employment of CRM systems.

**Figure 3.7: CRM usage**




Visually, Figure 3.7 illustrates that the independent short-term brokers not using CRM or using it to a lesser extent, makes up the largest portion of the sample. The 56 responses received have a mean of 2.28 indicating a

tendency towards the lower end of the scale. The standard deviation is recorded at 0.867.
Considering that 25 of the respondents indicated that they use CRM systems to a lesser extent and 10 of them not at all, it is a strong inclination towards the lower end of the scale.

### 3.3.2. Question 2, IT utilisation

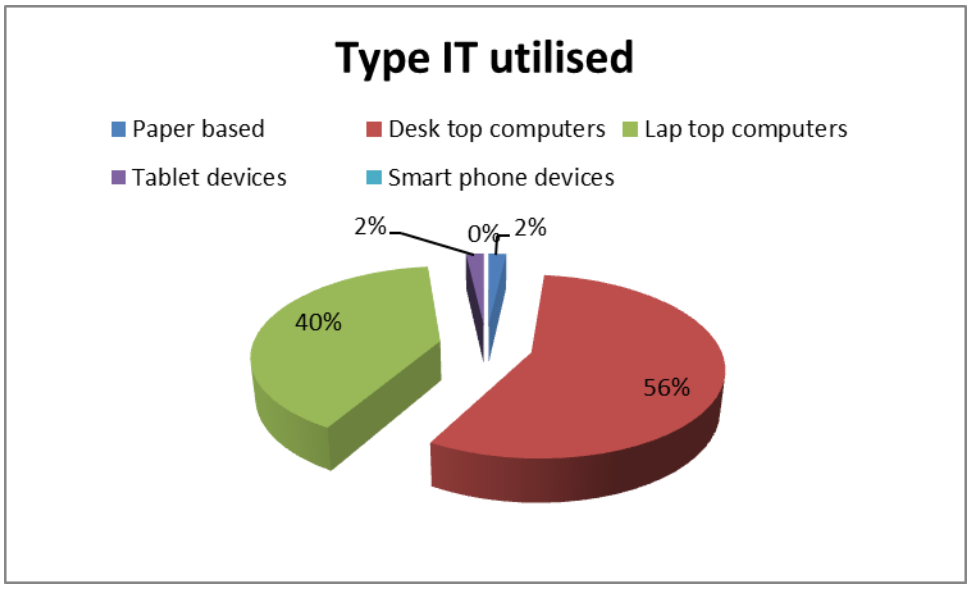
This question strives to measure the use of IT technologies, record keeping systems and complimentary systems. The questionnaire was designed to test the use, record keeping as well asthe types of technology used in question 2.3 in Appendix A. These questions resulted in three factors.

Factor one - the various types of more modern technologies used. Factor two - the dated, but still relevant desk top systems and lastly factor 3 - the basic paper system.

#### 3.3.2.1 Technology utilisation

The purpose of this question is to evaluate the type of technology in the office of the independent short-term broker utilised at present. A total of 55 responses were recorded and the order of the type of IT utilised was as indicated in Figure 3.8.

**Figure 3.8: Type of IT utilised**




From the findings, it is indicated that the vast majority of brokers use desk top computers and lap top computers. There are no technologies other than the options provided in use. Only one respondent indicated that they still use only a paper based system.

3.3.2.2 Means of customer data storage

In Chapter two, the literature study indicated that customer data is a most valuable resource. The means of storing that important data is tested in this question. The methods used at present are provided as options and the respondents indicated their method of customer data storage. The options provided are: paper files, own source computer files developed for own use based on Word and Excel documents as an example, package type systems, data saved on a centralised system or server, cloud based systems and other.

No respondent indicated the use of a different or other system than the options in use at present. The majority of the 52 respondents indicated that they use paper files to store customer data. Respondents indicating that they use their own developed data storage systems, were recorded at 13. None of the participants make use of package type storage systems and 11 use a centralised server. Only 2 respondents indicated that they use cloud based

data storage systems. The fact that the majority of respondents are storing customer data in paper files, are the most important observation in this question.

#### 3.3.2.3 Additional technologies utilised

In this question the usage of additional technologies is tested. This question was designed around three aspects or factors. The first being modern types of technology like Internet, tablet devices, mobile phones and social media. The next factor tested was the more traditional desk top devices and the final factor the ageing paper based options. The extraction method used was the principal component analysis. The Kaiser-Meyer-Olkin measure for sample adequacy delivered a .770 result. This result indicates the sample as adequate. Only one component was extracted. For this reason the solution could not be rotated.

Table 3.1 depicts the options and responses. This table also notes the arithmetic mean with the standard deviations. With these results, the tendencies and the exceptions are highlighted. From this table valuable insights have been gained and it becomes clear that although the brokers tend to utilise traditional desk top devices in their offices and paper based files to store customer information, they do take part in the use of more modern technologies.

**Table 3.1: Additional technologies utilised**

| Additional technologies utilised | | | | |
|---|---|---|---|---|
| | **Technology** | **Factor** | **Mean** | **Standard deviation** |
| 1 | Internet | Factor 1 Modern | 3.704 | 0.5872 |
| 2 | Tablet devices | Factor 1 Modern | 1.98 | 0.109 |
| 3 | Mobile phones | Factor 1 Modern | 3.069 | 1.1974 |
| 4 | Social media | Factor 1 Modern | 1.9286 | 1.00647 |
| 5 | Desk top computer | Factor 2 Traditional | 3.4211 | 1.08475 |
| 6 | Lap top computer | Factor 1 Modern | 3.3167 | 1.06551 |
| 7 | Paper based system | Factor 3 Aging | 3.44 | 0.88203 |

| | **Factor** | **Factor mean** | **Factor standard deviation** |
|---|---|---|---|
| 1 | Modern | 2.5154 | 0.70477 |
| 2 | Traditional/ desk top | 1.5789 | 1.08475 |
| 3 | Aging / paper | 1.5517 | 0.88203 |

From Table 3.1 it is noted that the use of modern technology is most utilised followed by traditional desktop technology and lastly paper based methods at a mean of 1.5517. In the section for the specific technologies it is noted that Internet use is the most utilised at a mean of 3.704. The use of tablet type devices is the lowest at only 1.98 or almost never. The use of social media is also indicated in this almost never category. Between the devices, it is noted that desk top computers outrank laptop computers at a mean of 3.4211. Lap top computers are found at 3.3167 whilemobile phones are found at 3.069.

### 3.3.3 Frequency of interaction and customer interphase

This question is firstly segmented to establish the overall frequency of interaction between customers and brokers in question 3.1, as seen in Appendix A. The second is a breakdown to one step lower in order to measure the frequency with which the broker seeks interaction with the customer in question 3.2. It is necessary to also measure interaction initiatives originating from the customer's side to understand the full picture as in

question 3.1. Question 3.3 measures the interactions from the customer's side. Lastly a measurement is done to establish whether the customers can during these interactions update their customer information without assistance from the broker on the brokers customer information system. This question was analysed by the extraction method: Principal Component Analysis and was found to be a single component, thus no rotation could be done.

The results indicate that the frequency of contact is at a mean of 2.586 in the weekly category of options provided. Slightly less than this at a mean of 3.22, is interactions initiated by the broker, and lastly at 3.45, we find interaction initiated by the customer.

Considering that the interaction frequency is largely indicated at weekly, question 3.4's importance becomes relevant. At these weekly interactions the ease of use and the opportunity for customers to update their own information, is lost due to the fact that a mean score of 3.2 or disagree with the statement that customers can update their own information.

### 3.3.4 Effectiveness evaluation

In this question we note the effectiveness in the manner the respondents perceive their CRM systems. The question was firstly analysed by the Kaiser-Meyer-Olkin sample adequacy measure and delivered a result of .753, indicating that the sample is adequate. A total of 18 questions that compose 3 factors, are tested. Factors were derived from principle component analyses resulting in 3 components. The initial Pattern matrix in Table 3.2.a indicates the initial result. The components were named: user interphase 1, user friendliness 2 and capability 3. Full discussions on these follow below.

The rotation method used is the Kaiser Normalization method and rotation converged in 24 interactions.

**Table 3.2a: Pattern matrix question 4**

| Pattern Matrix[a] | | | | |
|---|---|---|---|---|
| | Component | | | |
| | 1 | 2 | 3 | 4 |
| q4n14 | .963 | | | |
| q4n15 | .907 | | | |
| q4n5 | .884 | -.294 | -.252 | |
| q4n18 | .883 | | | |
| q4n17 | .639 | | .262 | .254 |
| q4n10 | .459 | | .348 | .234 |
| q4n2 | .233 | -.797 | | .256 |
| q4n1 | .512 | -.700 | | |
| q4n12 | | -.204 | .845 | |
| q4n11 | | .238 | .771 | -.305 |
| q4n8 | | | .535 | .273 |
| q4n3 | | -.304 | | .940 |
| q4n6 | | | | .851 |
| q4n13 | | .506 | | .556 |
| q4n16 | .285 | .371 | | .529 |
| q4n4 | .426 | | | .500 |
| q4n9 | .274 | | .414 | .448 |
| q4n7 | .284 | .344 | | .374 |

A Likert scale is used with the following options, namely 1: Strongly agree, 2: Agree. 3: Disagree and 4: Strongly Disagree. Over and above the 3 factors, questions 4.1, 4.2 and 4.3 as seen in Appendix A, test the theme of effectiveness in a specific manner.

In question 4.1 the respondents are asked to evaluate their satisfaction with the CRM systems they currently use. The greater majority of 53% indicated that they agree with the statement that they are satisfied with the present systems they use. This results in a mean of 2.2333 towards the satisfied side of the scale. This indicates that most respondents are indeed satisfied with their present systems.

The questionnaire was also designed in the effectiveness evaluation to also measure the perceived effectiveness of the customer query resolution in question 4.2. The respondents again indicated that the majority leans towards the side of the scale indicating satisfaction with their present resolution of queries. The respondents indicated 51% as agree and 16% as strongly agree. The mean score on this question is 2.266 7.

To drill down even deeper into the delivery of CRM effectiveness, question 4.3 was designed to test the effectiveness of customer information specific queries. The greater majority of 67% indicated that customer information related queries are dealt with satisfactorily.

The three themes that were identified in the factor analysis of this affectivity question, are firstly user interphase, secondly present system data dissection capabilities, and thirdly user friendliness and user support abilities.

#### 3.3.4.1 User interphase

The factor user interphase tests the aspects relating to the user of the CRM system and the interaction with the system itself. Table 3.2.b reflects that the questions tied into this factor as well as the results from the respondents on each question.

**Table 3.2b: User interphase factor**

| | | | Strongly Agree | Agree | Disagree | Strongly disagree | | |
|---|---|---|---|---|---|---|---|---|
| **Q nr.** | **Question** | **Total responces** | **Responces count** | **Responces count** | **Responces count** | **Responc** | **Mean** | **Standard deviation** |
| 4.4 | I can effectively filter through customer information to find specific information on request (i.e. residential postal codes) | 60 | 14 | 35 | 10 | 1 | 1.093 | 0.70089 |
| 4.6 | I consider data analysis capabilities as an important factor in CRM. | 60 | 20 | 36 | 4 | 0 | 1.767 | 0.5928 |
| 4.7 | I update my client details regularly | 58 | 19 | 36 | 3 | 0 | 1.707 | 0.56222 |
| 4.9 | During interactions with clients I use the opportunity to update CRM information | 59 | 19 | 32 | 6 | 2 | 1.864 | 0.75333 |
| 4.13 | Data quality is important for the sustainability of by business | 59 | 28 | 29 | 2 | 0 | 1.559 | 0.56542 |
| 4.16 | Speed in CRM data delivery is important to my business | 59 | 23 | 28 | 6 | 2 | 1.78 | 0.76717 |

This factor has a Cronbach's alpha statistic of 0.86. As seen in Table 3.2.b, the majority of respondents indicated a positive tendency towards agreeing

that they are satisfied with the overall user interphase and interaction with their present CRM systems.

#### 3.3.4.2 Present system data dissection ability

Table 3.3 presents the second factor in the affectivity measurement. The questions making up this factor is also presented in this table.

**Table 3.3: Present system data dissection ability**

| | | | Strongly Agree | Agree | Disagree | Strongly disagree | | |
|---|---|---|---|---|---|---|---|---|
| **Q nr.** | **Question** | **Total responces** | **Responces count** | **Responces count** | **Responces count** | **Responc** | **Mean** | **Standard deviation** |
| 4.8 | I have a system in place to pro-actively initiate interaction with my clients | 59 | 14 | 35 | 7 | 3 | 2 | 0.78784 |
| 4.11 | I have to sift through various sources to obtain CRM related information | 59 | 5 | 26 | 22 | 6 | 2.492 | 0.79596 |
| 4.12 | The reproduction of CRM data reduces the quality of the information | 57 | 5 | 27 | 20 | 5 | 2.439 | 0.7706 |

From Table 3.3 it is clear that there is still a majority tendency towards the “agree” option. However, it is interesting to note that the "disagree" option is stronger than in the second factor. This indicates that brokers are satisfied with their CRM system’s ability to dissect data, but to a slightly lesser extent. This factor’s Chromnach’s alpha statistic was calculated at .625.

#### 3.3.4.3 User friendliness and user support capabilities

In order to analyse the activities that contribute to effective CRM system effectiveness, a measurement of the users ease of interaction and system support must be taken. To measure this factor, the questions as presented in Table 3.4 were designed.

**Table 3.4: User friendliness and user support capabilities**

| | | | Strongly Agree | Agree | Disagree | Strongly disagree | | |
|---|---|---|---|---|---|---|---|---|
| **Q nr.** | **Question** | **Total responces** | **Responces count** | **Responces count** | **Responces count** | **Responc** | **Mean** | **Standard deviation** |
| 4.5 | My present CRM system provides me with good data analysis capabilities | 60 | 6 | 31 | 20 | 3 | 2.317 | 0.72467 |
| 4.10. | During interactions with clients I use the opportunity to obtain CRM information | 59 | 12 | 34 | 11 | 2 | 2.051 | 0.72928 |
| 4.14 | My CRM system is user friendly | 58 | 11 | 33 | 11 | 3 | 2.103 | 0.76525 |
| 4.15 | My CRM system allows me to segment- customer data | 58 | 9 | 27 | 19 | 3 | 2.276 | 0.79014 |
| 4.17 | My CRM system allows for timely turn- around times | 57 | 17 | 23 | 16 | 2 | 2.053 | 0.854 |
| 4.18 | My CRM system allows data to be extracted in a easily usable format | 59 | 15 | 29 | 12 | 3 | 2.051 | 0.8184 |

The respondents indicated in this factor a tendency towards the agree option. This factor's Cronbach's alpha statistic is calculated at 0.92.

#### 3.3.4.4 Time spent on CRM data reproduction

To measure the importance of the activity of reproducing CRM data in the broker's working day, question 4.14.b was designed as seen in Appendix A. This question was answered by 55 respondents and a mean score of 31.4 was achieved. Considering that in this measurement, the fact that brokers spend 31% of their day reproducing CRM information, cannot be ignored.

### 3.3.5 Sustainability

As an important part of the theme of this study, sustainability was tested on the hand of a set of questions set out in Appendix A, question 5. This question was designed to test two components key to sustainability, namely the cost component and a value judgement. These two factors were also isolated in the factor analysis that was done and is subsequently reported on here. The extraction method used was the principal component analysis and it produced these two components. The rotation method used was Oblimin with Kaiser Normalisation. It converged in 5 iterations.

#### 3.3.5.1 Cost

A question measuring the percentage of operational costs spent by the brokers on CRM, was designed. This question includes all costs from the acquisition of the CRM system through to the cost of use of the system. This question was answered by 49 respondents. The mean score is measured at 32%. This is a substantial amount of money indicating that a CRM operation is an important part of the total cost of a broker's business.

The component of cost tested, delivered results indicating a strong tendency towards positively enforcing the statement that the cost of a CRM system is important and necessary in the sustainability of the independent short-term broker. A mean score of 1.9814 was obtained with a standard deviation of .65006. This result was obtained from a total of 59 respondents.

#### 3.3.5.2 Value judgement on crm as a component to sustainability

This set of questions was designed to test the respondent's perception of the value they think a CRM system contributes to their businesses. The component summarised delivered a mean result of 1.375 and a standard deviation of .47574. This indicates that the tendency is towards the "agree" with the statement option in the questionnaire. It means that respondents see CRM as a valuable contributing factor to the sustainability of their businesses.

### 3.3.6 Service support and training

This component needed to be tested to obtain insight into the support and training of CRM systems. This is a single component question as confirmed by factor analysis. The questionnaire (Appendix A) was designed with four response options available. These were again based on statements tested against most suitable options. Table 3.5 is included to represent the questions and responses. This was analysed for components and found to be a single component question. No rotations were applied.

**Table 3.5: Service support and training**

| Q nr | Question | Respondents | Strongly agree | Agree | Disagree | Strongly | Mean | Standard deviation |
|---|---|---|---|---|---|---|---|---|
| 6.1 | I am trained in the use of computers | 60 | 30 | 29 | 0 | 1 | 1.5333 | 0.59565 |
| 6.2 | I am technically knowledgeable to operate my CRM system | 59 | 18 | 33 | 7 | 1 | 1.8475 | 0.69017 |
| 6.3 | I received sufficient training to operate my CRM system | 60 | 10 | 37 | 13 | 0 | 2.05 | 0.68223 |
| 6.4 | I am willing to undergo CRM training | 60 | 23 | 36 | 1 | 0 | 1.65 | 0.51503 |
| 6.5 | I have significant IT support for our CRM system | 59 | 11 | 35 | 13 | 0 | 2 | 0.64327 |
| 6.6 | I am proficient in obtaining CRM information from my system | 60 | 12 | 40 | 8 | 0 | 1.9333 | 0.57833 |
| 6.7 | I am proficient processing information obtained from my CRM system | 59 | 12 | 38 | 9 | 0 | 1.9492 | 0.59953 |
| 6.8 | My IT support staff are effective in the support they provide me with | 59 | 15 | 36 | 6 | 2 | 1.9153 | 0.70192 |

The component in total indicates a strong positive agreement with statements, as a mean of 1.8576 was calculated. The majority of respondents feel that they are well trained in their CRM systems and have enough technical knowledge to operate their systems. They also indicated that they have effective support systems in place and receive effective training. Considering the response option at 1 is strongly agree, and the option 2 is agree, the 1.87 mean indicates that the respondents feel quite strongly that they are well trained and effective support is provided to them in the CRM systems they utilise.

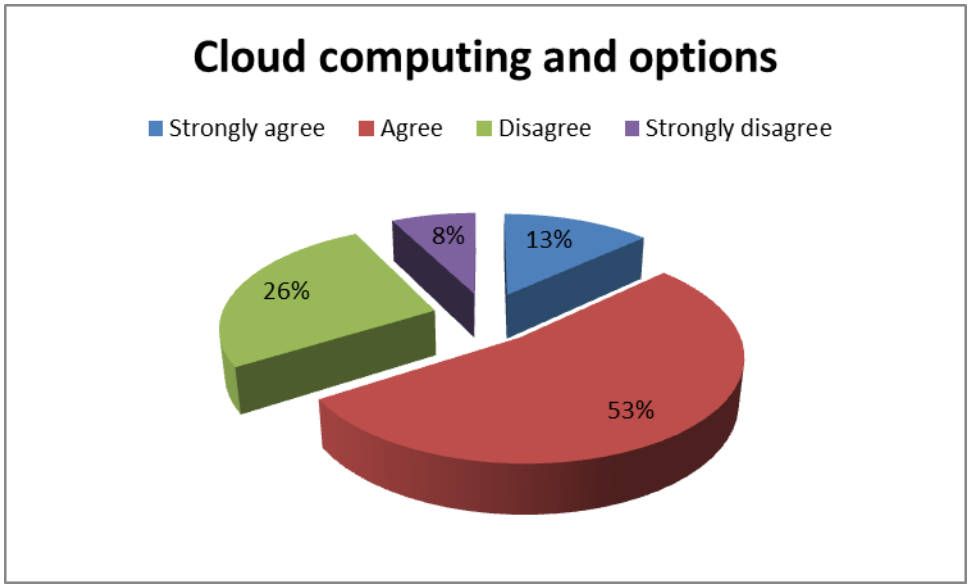
### 3.3.7 Cloud computing and options

In Chapter two the literature study indicated that cloud computing is a modern vital means of delivering effective CRM systems to a user. It was also found that various options of cloud computing is available to users. The questionnaire was designed with these literature supported findings in mind.

Since cloud computing is a development that is relatively new in South Africa, and even more so in the more rural areas, the mere awareness of the existence of cloud computing needed to be measured. Question 7.1 in the questionnaire as per Appendix A presents this question. Although the majority of respondents indicated that they are aware of cloud computing, it is interesting to note that 14 of the 58 respondents did not know and 4 did not

know at all. Figure 3.9 illustrates the findings of this question. This represents 34% of the respondents in the “disagree and strongly disagree” categories.

**Figure 3.9: Cloud computing and options**




The trend identified is consistent with the entire cloud computing question and delivers a factor analysis result for question 7 in total, as having a standard deviation of 0.58908 and a mean of 2.62. The total inclination of the cloud question indicates that the majority is unaware of the cloud and the options available within the cloud environment.

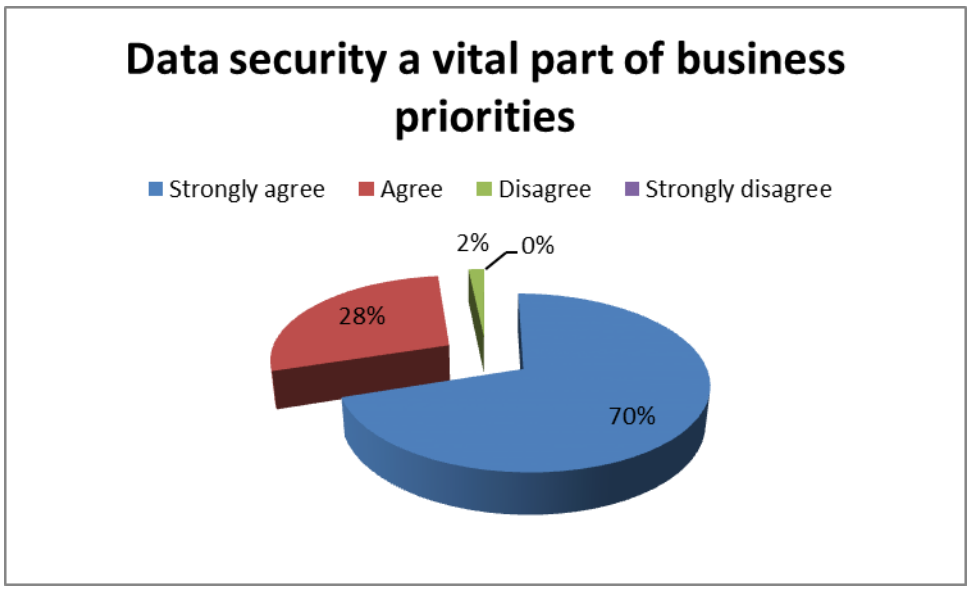
This question was also analysed with the principal component analyses method and found to be a single component question. Because of the single component found there was no rotation applied.

### 3.3.8 Security

Data was stated to be a most valuable resource to a business as described in Chapter two. Due to the importance of the safeguarding of data, the questions designed to measure this was developed along three components, making up the points of importance to this point. The first component is access to the data and systems of the broker, the second is present measures and the third is external user access.

In question 8.1 of the questionnaire respondents are tested on the level on which they agree with the statement that data security is a vital part of their business. A strong result was measured and 60 respondents indicated a choice on this question. The majority of 42 respondents indicated that they strongly agree. The second highest response was for the agree option where 17 respondents rated this as their choice. Only one respondent indicated that data security is not vital. Figure 3.10 depicts the findings.

**Figure 3.10: Data security, a vital part of business priorities**



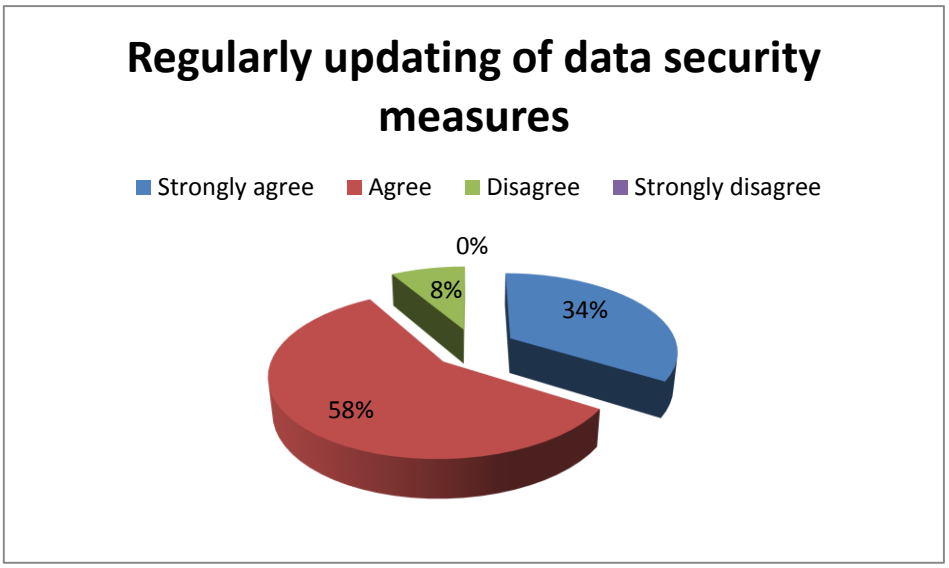

The next question tested the importance of customer data as a business resource. This closely follows the tendency in question 8.1. This question was answered by 59 respondents - 39 indicated that they strongly agree and 20 that they agree. No respondent disagreed or strongly disagreed.

This leads to the next question designed to test the importance of safeguarding data by employing data protection measures. Question 8.3 was responded on by 59 participants and again echos the tendency seen in the two previous questions. The mean of this question was calculated at 1.8, again indicating a tendency towards the strongly agree choice. Only 1 respondent indicated that no data protection measures are taken. The

standard deviation in this question is 0.60099. This confirms the close grouping of the tendency towards the strongly agree option.

To have a data protection program of some sort is just part of the protection of data task. These measures must be updated regularly to be effective. Figure 3.11 illustrates the findings from question 8.4 in Appendix A. This measurement indicated that out of the 60 respondents measured, 54 indicated either that they strongly agree or agree. The mean was calculated at 1.7833. Figure 2.10 expresses the results in percentage terms.

**Figure 3.11: Regular updating of data security measures**




The findings of these questions are represented in the findings of the component present data security measures. The mean score on the combined effects of this component is 1.8 and has a standard deviation of .61203. This indicates that having a data security program and updating it regularly, is very important.

Questions 8.5 and 8.6 measure the access that external users or customers may have to data. This is also grouped together in a component on its own. This component measured at a mean of 3.4125 and a standard deviation of .51836. This is an indication that the respondents' responses incline towards the strongly "disagree" end of the scale. The statements that make up this

component are firstly the test to establish if customers have access to firstly just the data of the broker, and secondly in question 8.6 to view data specific to them. The strong response and mean score to the disagree and strongly disagree side, indicates that the majority of customers do not have access to the broker's data or their own data on the broker's CRM system.

Closely tied to this component and on the theme of data protection, is the ability by external users to not only access data relating to themselves as customers but also to be able to change, amend or even interphase with the brokers' CRM systems. This component was tested by statements with options to strongly agree, agree, disagree and strongly disagree. The mean or central tendency of this last component was calculated at 2.2583, indicating that respondents see access of customers to their data as a threat to data security. Of the components tested, this one has the highest standard deviation, indicating that the spread of responses were not as close to the mean as the other two.

In summary, the components are statistically backed up and indicate that security measures are important and must be updated regularly. Access to data by customers is seen as a potential threat to data security.

### 3.3.9 Social media platforms

In the question 1 section, the use of modern types of information technologies were tested. Due to the findings in Chapter two on social media and modern devices as a means of CRM data sourcing, question 9 was designed. This question is a single component test and tests components of use of social media by the independent short-term brokers.

This component tests the respondent's answers by means of a five point scale. The options for responses are: 1 no or not applicable, 2 almost never, 3 sometimes, 4 often and 5 almost always. The tendency of the combined scores is towards the lower end of the scale at a mean of 2.6687 on a 6 point scale. This indicates that the frequency of interaction with social media as a

source of CRM information is quite low. The standard deviation of 1.05775 indicates a more dispersed distribution of responses. In Table 3.6 the questions and responses are noted.

Interesting to note is the fact that 29 out of 60 respondents indicated that they do not have a social media interaction capability where their customers can interact with them. Yet, in question 9.6 and 9.7, the means are close to the often response at 2.9167 for 9.6 and 3.0167 for 9.7 out of 5. This indicates that the majority tendency is leaning towards the opinion that social media is a valuable source of CRM information.

**Table 3.6: Social media platforms**

| | Question | Respondents | No/ Not applicable | Almost never | Sometimes | Often | Almost always | Mean | Standard deviation |
|---|---|---|---|---|---|---|---|---|---|
| 9.1 | I make use of social media in my day to day life | 60 | 9 | 5 | 20 | 18 | 8 | 3.1833 | 1.22808 |
| 9.2 | I interact with my customers via social media | 60 | 17 | 13 | 10 | 14 | 6 | 2.6333 | 1.36502 |
| 9.3 | My business has a social media platform to interact with our customers | 60 | 29 | 9 | 6 | 11 | 5 | 2.2333 | 1.36502 |
| 9.4 | I obtain CRM related information from them | 59 | 24 | 14 | 11 | 9 | 1 | 2.1186 | 1.14698 |
| 9.5 | I see social media interactions with my customers as an enhancing source of CRM information | 60 | 18 | 8 | 17 | 15 | 2 | 2.5667 | 1.12263 |
| 9.6 | I think that having a social media platform for my business is a valuable source of CRM information | 60 | 14 | 5 | 18 | 17 | 6 | 2.9167 | 1.29263 |
| 9.7 | I think that social media is a valuable resource to obtain customer lifestyle information | 60 | 15 | 2 | 18 | 17 | 8 | 3.0167 | 1.37152 |

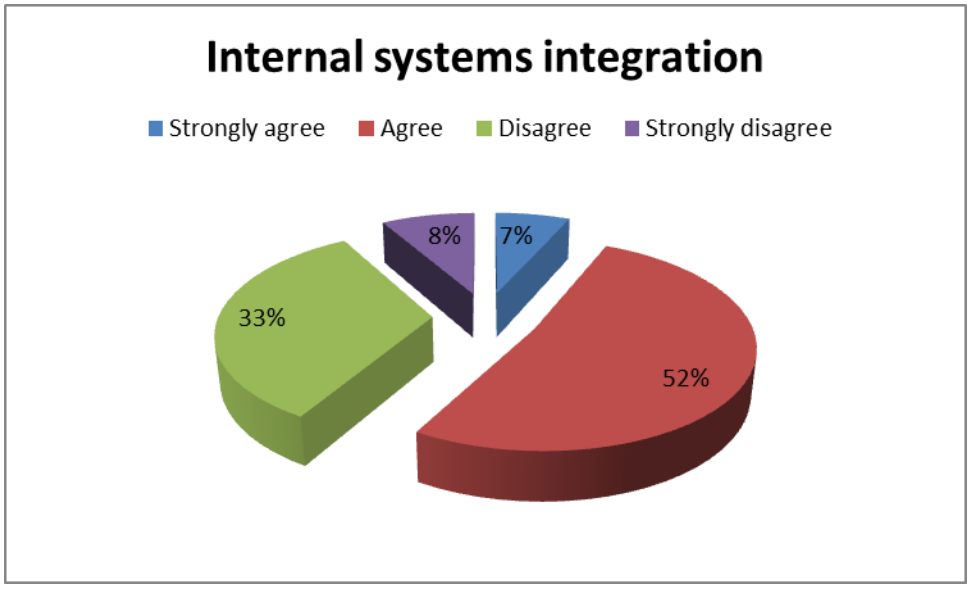
### 3.3.10 Integration

In Chapter two the importance of having integrated systems were found to be mentioned in literature on studies in CRM systems. This integration was both as internally with own business systems or externally enabling the user system to interact and be integrated with the systems of customers and

suppliers alike. The five questions in this component were all answered by 59 respondents.

This was also statistically analysed as a single component factor. The questionnaire was designed to test the internal integration within the respondents' own businesses with other business systems. As a single component of the mean score is calculated at 2.5492. This indicates that the respondents do consider the integration ability of their CRM systems with internal and external business systems as moderately important.

**Figure 3.12: Responses for internal integration.**




The integration of CRM systems with other own business systems is a practice in use by most of the respondents. Combined with the strongly agree group of respondents, 59% of respondents have integration of systems in place. This still leaves 41% of respondents with no integration of systems.

## 3.4 DEMOGRAPHIC AND COMPONENT CORRELATIONS

Due to the nature of the primary objective of this study and the components that were tested in the questionnaire, enhanced by the components isolated during factor analysis, it is important to discuss the correlations that exist

between the components, to be able to reach and validate the primary objective of this study.

### 3.4.1 Factors elaboration

As seen in 3.3 Elaboration of results, the 10 questions were analysed and found to consist of various factors within. The method of principal component analysis was used. The factors were analysed further by means of Obliminwith Kaizer Normalization as a rotation method and the convergence of iterations listed.

For completeness and to highlight the relationships, it is necessary to discuss the factors in a specific section. Most of the factors were mentioned but in this section additional statistics will be tied to the factors. The factors are seen in Table 3.7.

For this reason it is helpful to first name the factors found by statistical services in terms that are more recognisable and easier to bring into context with the questions they were isolated from. Table 3.8 indicates the question that led to the factors and then the name of the factor allocated for better clarity and description.

Question 1 is the demographics against which the factors in table 3.8 will be tested to find a pattern and correlation. As seen in table 3.8 there are questions that have single factors and no components other than the support of the theme of the question.

Table 3.7 also includes the Cronbach's alpha statistic for reliability for each factor. As mentioned in 3.2.3.2, reliability is attained at statistics from .75 and higher, and even as low as .5 in social sciences. Important to mention is that the statistics for all factors are above .757, with exception of question 2.3 that was found to be .0442, before the factors were detected as below and a reliability result above 0.5 was confirmed. This proves that the factors are all statistically reliable.

Question 2 tests IT utilisation, did indeed provide 3 valid factors from question 2.3 as seen in table 3.8. Questions 2.1 and 2.2 are standalone concepts that need to be discussed on their own. Question 2.3 grouped together modern technologies; 2.3.1 Internet; 2.3.2 Tablet devices; 2.33 Mobile phones; 2.3.4 Social media; and 2.3.6 Lap top computers. The two older options, namely 2.3.5 Desktop computers and 2.3.7 Paper based systems, were found to have no significant correlation to the older technologies, and thus each stands alone.

**Table 3.7: Factor description**

| Nr by statistical services | Number on Questionaire Appendix A | Description | N | Minimum | Maximum | Mean | Std. Deviation | Chronbach's alpha |
|---|---|---|---|---|---|---|---|---|
| q4n1 | 4.1 | Effectiveness evaluation | 60 | 1.00 | 4.00 | 2.2333 | .81025 | 0.86 |
| q4n2 | 4.2 | Effectiveness evaluation | 60 | 1.00 | 4.00 | 2.2667 | .88042 | 0.86 |
| factor_q3 | 3 | Customer interaction | 60 | 1.00 | 6.00 | 3.0861 | 1.67863 | 0.835 |
| factor_q6 | 6 | Service support and training | 60 | 1.00 | 2.88 | 1.8576 | .47379 | 0.899 |
| factor_q7 | 7 | Cloud and options | 58 | 1.50 | 4.00 | 2.6293 | .58908 | 0.93 |
| desktop_r | 2.3.5 | IT utilization | 57 | 1.00 | 4.00 | 1.5789 | 1.08475 | 0.757 |
| paper_r | 2.3.7 | IT utilization | 58 | 1.00 | 4.00 | 1.5517 | .88203 | 0.757 |
| Tech_use_modern | 2.3.1, 2.3.2, 2.3.3, 3.3.4, 2.3.6. | IT utilization | 61 | 1.29 | 4.00 | 2.5154 | .70477 | 0.442 |
| Factor_v5_waarde | 5 | Sustainability | 59 | 1.00 | 2.50 | 1.3475 | .47574 | 0.865 |
| Factor_v5_koste | 5 | Sustainability | 59 | 1.00 | 3.75 | 1.9814 | .65006 | 0.867 |
| Factor_v8_access | 8 | Security | 60 | 2.50 | 4.00 | 3.4125 | .51836 | 0.794 |
| Factor_v8_huidig | 8 | Security | 60 | 1.00 | 4.00 | 1.8000 | .61203 | 0.936 |
| Factor_v8_ekstern | 8 | Security | 60 | 1.00 | 4.00 | 2.2583 | .85614 | 0.757 |
| Factor_v9 | 9 |  | 60 | 1.00 | 4.57 | 2.6687 | 1.05775 | 0.917 |
| Factor_v10 | 10 | Integration | 59 | 1.00 | 4.00 | 2.5492 | .57126 | 0.839 |
| User_interface | 4 | Effectiveness evaluation | 61 | 1.00 | 3.00 | 1.8165 | .48801 | 0.86 |
| System_capability | 4 | Effectiveness evaluation | 59 | 1.00 | 4.00 | 2.3079 | .59194 | 0.92 |
| User_friendly | 4 | Effectiveness evaluation | 60 | 1.00 | 3.83 | 2.1506 | .66081 | 0.625 |

Question 3 consists of one factor, namely Customer interaction and all questions relate to this theme.

Question 4 evaluates the effectiveness of CRM systems in use, comprising of 3 factors and two stand alone questions. The factor user interphase is made up of questions, 4.4, 4.6, 4.7, 4.9, 4.13 and 4.16. The next factor system

capability comprises of questions 4.5, 4.10, 4.14, 4.15, 4.17 and 4.18. The last factor that was identified is user friendliness that is made up of 4.8, 4.11 and 4.12. Factor user interphase delivered a Cronbach's alpha statistic of 0.860 for reliability. Statistics of .7 and higher prove reliable, making this factor reliable for use in this study.

Question 4.14.b is evaluated on a Likert scale and tests the percentage of daily activity that is spent on CRM information reproduction activities.

Sustainability is the theme for question 5 and two components, namely value and cost are identified.

Question 6 is a single factor question testing Service support and training. Question 7 testing cloud and options in CRM, is also a single factor question.

Security is the theme of question 8 and tests 3 factors that contribute to security. The factors are present measures, access and external factors.

Question 9 is a single factor question. It supports the social media platform for CRM opportunities.

Finally, question 10 testing integration, is a single factor question.

## 3.5 CORRELATION BETWEEN DEMOGRAPHICS AND FACTORS

### 3.5.1 Gender tested against factors

As stated, a p-value of significance should be 0.05 and smaller to indicate significant differences. As a first observation, it is interesting to note that male and female respondents' approach to all variables seems quite close together. Only factor 7, testing cloud computing, and options with a p-value of 0.013 indicate significance and the use of modern technology with a p-value of

0.001. These findings warrant deeper investigation into the reasons for this significant score.

Neither male nor female respondents under valuated any of the factors and it thus can be concluded that no mentionable discrepancies are found between the genders' approaches to CRM.

**Table 3.8: Gender vs. Factors**

| Gender | | N | Mean | Std. Devia | Std. Error | p-value | Effect size |
|---|---|---|---|---|---|---|---|
| factor_q3 | male | 24 | 3.0417 | 1.77288 | 0.36189 | 0.85 | 0.05 |
| Customer interaction | female | 35 | 3.1286 | 1.65983 | 0.28056 | | |
| factor_q6 | male | 24 | 1.9063 | 0.46223 | 0.09435 | 0.479 | 0.18 |
| Service suppprt and training | female | 35 | 1.8202 | 0.49122 | 0.08303 | | |
| factor_q7 | male | 23 | 2.3967 | 0.50234 | 0.10475 | 0.013 | 0.63 |
| Cloud and options | female | 34 | 2.7757 | 0.60598 | 0.10393 | | |
| desktop_r | male | 23 | 1.913 | 1.23998 | 0.25855 | 0.79 | 0.44 |
| Q 2 Type technology | female | 33 | 1.3636 | 0.92932 | 0.16177 | | |
| paper_r | male | 24 | 1.7917 | 1.06237 | 0.21685 | 0.119 | 0.37 |
| Q2 Type technology | female | 33 | 1.3939 | 0.70442 | 0.12262 | | |
| q8n1_r | male | 24 | 3.5833 | 0.50361 | 0.1028 | 0.238 | 0.32 |
| security | female | 35 | 3.7429 | 0.50543 | 0.08543 | | |
| q8n2_r | male | 24 | 3.5833 | 0.50361 | 0.1028 | 0.242 | 0.3 |
| security | female | 34 | 3.7353 | 0.44781 | 0.0768 | | |
| Tech_use_modern | male | 25 | 2.8671 | 0.54938 | 0.10988 | 0.001 | 0.82 |
| Q2 Type technology | female | 35 | 2.2952 | 0.69848 | 0.11806 | | |
| Factor_v5_waarde | male | 24 | 1.4583 | 0.50898 | 0.10389 | 0.109 | 0.41 |
| Sustainablility | female | 34 | 1.25 | 0.43082 | 0.07389 | | |
| Factor_v5_koste | male | 24 | 1.9771 | 0.57369 | 0.1171 | 0.976 | 0.01 |
| Sistainability | female | 34 | 1.9721 | 0.71268 | 0.12222 | | |
| Factor_v8_access | male | 24 | 3.3021 | 0.58505 | 0.11942 | 0.225 | 0.3 |
| security | female | 35 | 3.4786 | 0.4672 | 0.07897 | | |
| Factor_v8_huidig | male | 24 | 1.7708 | 0.51031 | 0.10417 | 0.782 | 0.06 |
| security | female | 35 | 1.8143 | 0.68691 | 0.11611 | | |
| Factor_v8_ekstern | male | 24 | 2.25 | 0.80757 | 0.16485 | 0.874 | 0.04 |
| security | female | 35 | 2.2857 | 0.90168 | 0.15241 | | |
| Factor_v9 | male | 24 | 2.8323 | 0.95009 | 0.19394 | 0.379 | 0.21 |
| Sosial media platforms | female | 35 | 2.5918 | 1.1228 | 0.18979 | | |
| Factor_v10 | male | 24 | 2.5667 | 0.42392 | 0.08653 | 0.892 | 0.03 |
| Integration | female | 34 | 2.5471 | 0.66662 | 0.11432 | | |
| User_interface | male | 25 | 1.7695 | 0.56372 | 0.11274 | 0.579 | 0.13 |
| Q4 Effectiveness evaluation | female | 35 | 1.8449 | 0.43877 | 0.07417 | | |
| System_capability | male | 24 | 2.4306 | 0.42254 | 0.08625 | 0.176 | 0.29 |
| Q4 Effectiveness evaluation | female | 34 | 2.2304 | 0.68659 | 0.11775 | | |
| User_friendly | male | 25 | 2.1267 | 0.7092 | 0.14184 | 0.799 | 0.06 |
| Q4 Effectiveness evaluation | female | 34 | 2.1725 | 0.64288 | 0.11025 | | |

### 3.5.2 Age versus factors

The factor of age resulted in the use of Spearman's frame order correlations. The same factor descriptions are used as indicated in Table 3.7.

### 3.5.3 Industry body involvement versus factors

For consistency and ease of use the same descriptions for the factors were used as in Table 3.7. The findings of this demographic in relation to the factors yielded only one significant difference in the factors, namely cloud computing and returned options as statistically significant. The balance of questions did not deliver any results in value more significant than this factor.

***Table 3.9 follows on next page***

**Table 3.9: Industry body involvement vs factors**

| | | N | Mean | Std. Dev. | Std. Error Mean | p value | Effect size |
|---|---|---|---|---|---|---|---|
| factor_q3 | 1 | 29 | 3.2931 | 1.75009 | 0.32498 | 0.192 | 0.33 |
| | 2 | 27 | 2.716 | 1.51828 | 0.29219 | | |
| factor_q6 | 1 | 30 | 1.7778 | 0.37688 | 0.06881 | 0.242 | 0.27 |
| | 2 | 26 | 1.9375 | 0.58976 | 0.11566 | | |
| factor_q7 | 1 | 29 | 2.431 | 0.57047 | 0.10593 | **0.015** | 0.65 |
| | 2 | 25 | 2.8 | 0.51031 | 0.10206 | | |
| desktop_r | 1 | 27 | 1.5926 | 1.08342 | 0.2085 | 0.844 | 0.05 |
| | 2 | 26 | 1.6538 | 1.16421 | 0.22832 | | |
| paper_r | 1 | 28 | 1.5357 | 0.92224 | 0.17429 | 0.749 | 0.09 |
| | 2 | 26 | 1.6154 | 0.89786 | 0.17608 | | |
| q8n1_r | 1 | 30 | 3.7667 | 0.43018 | 0.07854 | 0.409 | 0.2 |
| | 2 | 26 | 3.6538 | 0.56159 | 0.11014 | | |
| q8n2_r | 1 | 30 | 3.7 | 0.46609 | 0.0851 | 0.646 | 0.12 |
| | 2 | 25 | 3.64 | 0.4899 | 0.09798 | | |
| Tech_use_modern | 1 | 30 | 2.544 | 0.7092 | 0.12948 | 0.762 | 0.08 |
| | 2 | 27 | 2.5996 | 0.66686 | 0.12834 | | |
| Factor_v5_waarde | 1 | 29 | 1.4138 | 0.46424 | 0.08621 | 0.281 | 0.28 |
| | 2 | 26 | 1.2692 | 0.51441 | 0.10088 | | |
| Factor_v5_koste | 1 | 29 | 1.9466 | 0.58614 | 0.10884 | 0.885 | 0.04 |
| | 2 | 26 | 1.9731 | 0.75063 | 0.14721 | | |
| Factor_v8_access | 1 | 30 | 3.4417 | 0.52392 | 0.09566 | 0.894 | 0.04 |
| | 2 | 26 | 3.4231 | 0.50877 | 0.09978 | | |
| Factor_v8_huidig | 1 | 30 | 1.6667 | 0.49712 | 0.09076 | 0.171 | 0.32 |
| | 2 | 26 | 1.9038 | 0.73511 | 0.14417 | | |
| Factor_v8_ekstern | 1 | 30 | 2.25 | 0.85853 | 0.15674 | 0.741 | 0.09 |
| | 2 | 26 | 2.3269 | 0.87112 | 0.17084 | | |
| Factor_v9 | 1 | 30 | 2.6992 | 1.00888 | 0.1842 | 0.918 | 0.03 |
| | 2 | 26 | 2.6703 | 1.05966 | 0.20782 | | |
| Factor_v10 | 1 | 30 | 2.44 | 0.54684 | 0.09984 | 0.176 | 0.36 |
| | 2 | 25 | 2.656 | 0.60696 | 0.12139 | | |
| User_interface | 1 | 30 | 1.7619 | 0.47652 | 0.087 | 0.642 | 0.12 |
| | 2 | 27 | 1.8236 | 0.51708 | 0.09951 | | |
| System_capability | 1 | 29 | 2.3218 | 0.66358 | 0.12322 | 0.69 | 0.1 |
| | 2 | 26 | 2.2564 | 0.54412 | 0.10671 | | |
| User_friendly | 1 | 29 | 2.0057 | 0.66441 | 0.12338 | 0.151 | 0.39 |
| | 2 | 27 | 2.2654 | 0.66708 | 0.12838 | | |

## 3.6 ONE WAY ANOVA STATISTIC

Used in cases for more than two groups with no structure, this statistic was employed to analyse the remainder of factors. These factors are: The ONE WAY factor_q3 factor_q6 factor_q7 desktop_r paper_r q8n1_r q8n2_r Tech_use_modern Factor_v5_waarde Factor_v5_koste Factor_v8_access Factor_v8_huidig (please note: actual variable names are used).

These are displayed in Appendix B, ANOVA. From the statistic no significant inter correlations could be found and no conclusions of substance can be derived from the remaining demographics vs. the factors.

## 3.7 CONCLUSION

Chapter one set the scene and elaborated on the title as a central theme for this study in to CRM as a solution. In Chapter two literature was explored for context and concepts supporting and making up the primary objective and secondary objectives. These were used to design a questionnaire that was conducted in a survey research method. The sample size was dictated by the industry segment involved, namely the short-term insurance broker that functions independently. It was also narrowed down by the geographical constraints as discussed before. A final number of 75 questionnaires were distributed to the selected participants fitting the criteria of the sample. In the end, a total of 61 were received back in usable condition and was used as basis for this study and the statistical analysis.

Due to complexities in this questionnaire and the factors supporting the objectives of the study, various statistics were employed to analyse the data for supportive patterns and results. Firstly, descriptive statistics were used to analyse and explore the demographical data. The arithmetic mean as well as standard deviation coupled with percentage distribution were used to provide focus in the descriptions of findings. Secondly, factor analysis was used to find the underlying structure in the dataset. Reliability is a key important

statistic thus the Cronbach's alpha coefficient was used to test reliability of the factors involved. Lastly, Spearman's rank order correlation was used to rest correlations in the data set.

Interestingly to note is that the ten questions or key concepts in the questionnaire resulted in no less than eighteen factors interrelated to the central theme. The results, mainly from all the questions in the questionnaires, were discussed firstly. This was done mainly by use of mean, standard deviation and percentage analyses. The factors were discussed next and brought into context. The correlations between key demographics and the factors were used to provide full context to the findings. It was interesting that the demographic aspects like gender, age, industry involvement and the remainder of demographics did not point to any significant variances in the sample. The approach that the respondents had towards the aspects relating to CRM, was such that the demographic variances were deemed to have too little of an effect to provide serious concern or variance between the factors.

The reliability test proved all factors and questions to be valid and statistically usable thus the findings can be taken as a true reflection of the respondents' reactions to the questions. This also means that the results can be used to derive valid conclusions from the responses.

## 3.10 CHAPTER SUMMARY

Chapter three is all about the design and execution of the empirical research needed for this study. The objective of the empirical research was to test the factors identified in the primary and secondary objectives as it would relate to CRM as a solution to sustainability of the independent short-term broker.

The results delivered clear reliable and valid measurements of the aspects tested. The findings are used in Chapter four to present conclusions, recommendations and concepts needing more in-depth study.

# CHAPTER 4

# CONCLUSIONS AND RECOMMENDATIONS

## 4.1 INTRODUCTION

The primary objective of this study is to promote a Customer Relationship System as a solution to the sustainability of the independent short-term insurance broker in the North=West Province of South Africa. In this final chapter, conclusions are drawn based on findings from the literature study and results from the empirical research. The conclusions also include the secondary objectives determined in Chapter 1.

Limitations of the research are also discussed as derived from the literature study as well as findings from the empirical research. During the literature review various aspects in support of and contributing to the primary and secondary objectives were discussed.Conclusions on those aspects are reached in this chapter.

Lastly this chapter will be used to recommend further research and practical recommendations and conclusions to the short-term broker environment. A framework for CRM is drawn and places these aspects in context.

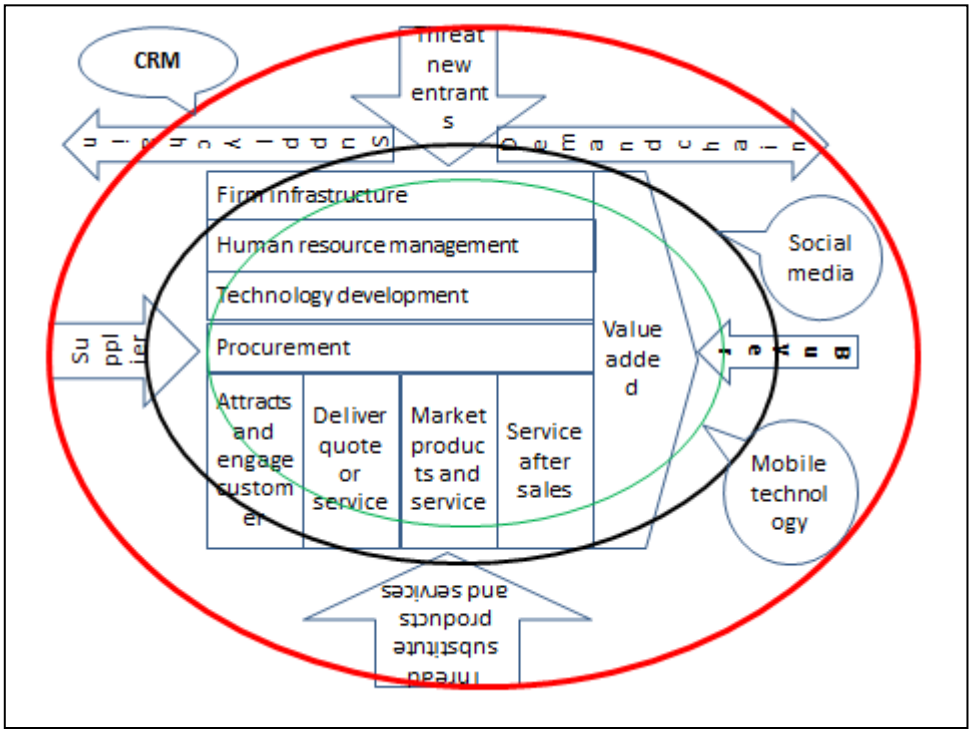
## 4.2 CONCLUSIONS REACHED FOR THE PRIMARY OBJECTIVE

The primary objective to this study is to promote a Customer Relationship System as a solution to the sustainability of the independent short-term insurance broker in the North-West Province of South Africa. This objective clearly consists of various interrelated concepts and parts. In Chapters 2 and 3 of this study these concepts were dissected and studied by means of literature and in Chapter 4, tested by empirical research. All the key concepts were found to be interrelated and in support of the theme. It is factually correct

to draw the conclusion that a CRM system enhances sustainability of the independent short-term broker.

Figure 4.1 illustrates the all-encompassing role CRM plays as an enhancing factor in sustainability to the independent short-term broker holds.

**Figure 4.1: Position of CRM in the value chain**




Source: Own illustration based on conclusion for primary objective

## 4.3 CONCLUSIONS REACHED FOR SECONDARY OBJECTIVES

Secondary objectives identified in section 1.4.2 were to find out if brokers presently have CRM systems, where these are based and how the systems are used. Cloud computing is fastly becoming the backbone of information technology and one of the objectives waso test the brokers' knowledge of cloud computing and the options available within the cloud environment. The power and distribution of social media as a possible contributing factor to CRM needed to be tested as an objective and finally the opportunity to track and grow the customer base of the broker by CRM had to be investigated.

The objective to find out if brokers have CRM systems and where these are based, was done througha questionnaire. They were tested on their knowledge of CRM systems. Out of 60 respondents, only two did not have knowledge of CRM systems, 27 had knowledge to a lesser extent and 25 to a larger extent. Respondents indicating that they had full knowledge were 4. The conclusion drawn is that with a mean score of 2.58, the majority of brokers have knowledge of CRM systems. A next question tied into this tested if they considered CRM activity as a front office activity.Again the majority indicated that they do. The same inclination was found and proved when they were asked if they use a CRM system. The mean of 2.28 indicates that CRM systems are being used, ranging from small to full extent.

On the nature of systems used, it was interesting to find that out of 52 respondents who answered this question, 50% have paper based systems and 25% have their own developed systems on desk top computers.

The conclusion is reached that although they know about the CRM systems' availability they do not fully use it in conjunction with modern technology. They know it is there and available and know it will be beneficial, yet they do not act on this knowledge.

In the secondary objective and the literature study cloud computing as a valuable method of housing and driving a CRM system became evident as seen in 2.5. In the empirical research in Chapter 3, it was proven by the respondents that cloud computing is the manner by which to conduct a CRM system, as seen in Figure 3.8. In conclusion the finding is that they again know about cloud computing and its benefits, yet the uptake is not extensive.

With the extent of modern technologies, social media and devices were found through the literature study to be an unexplored field when it came to support of CRM systems in the short-term insurance brokers' businesses. As described in Chapter 2, very little industry specific studies relating to CRM in the short-term insurance industry in South Africa, could be found. This is

equally true of the utilisation of social media as an enhancing technology to conduct CRM in. This aspect was also specifically tested in the empirical research. In question 9 of the survey, the use and frequency of use of social media were tested. The use and frequency of use was indicated as quite frequent, yet when tested on the cross pollination of social media with CRM, the results were quite low.

Derived from this is the fact that the brokers use social media and mobile technologies, yet they do not use it to obtain, update or maintain CRM information yet. This supports the last secondary objective's finding - that the conclusion is reached that, although CRM is available, and the brokers know about it, and even have a CRM system of sorts implemented, they do not utilise the available modern technologies like cloud computing and social media to track and grow their customer base and CRM information.

## 4.4 CONCLUSIONS FROM THE LITERATURE STUDY

In Chapter 2 a literature study was undertaken to review research into CRM systems in the short-term broker's businesses. A safe conclusion reached is that very little research relating to both CRM and short-term insurance brokers could be found in South African sources. This literature study also pivoted around the key aspects enhancing CRM.

Aspects that were highlighted were:

1. Investigation into the statement that information is a strategic business asset.
2. Single integrated customer view.
3. Data types used in short-term insurance.
4. Challenges in user capabilities and data integrity.
5. Cloud computing and options
6. Mobile and social technology.
7. Systems integration.
8. Data security.

### 4.4.1 Information as a strategic business asset

In the literature study (2.1) it was found that various authors made this comment, namely that customer information is an important resource in a business. In Chapter 3, with the empirical study it was laid before the respondents under the sustainability questions. 57 responded of which 75% indicated that they strongly agree that customer information is an important resource in their business. It can be concluded that this is true and supported both by literature and empirical evidence.

### 4.4.2 Single integrated customer view

Primarily a concept was discussed in the literature study 2.3.1 - this concept boils down to the design in a data system that is integrated in other systems that provides easy access to the user to view all relevant customer data as easily as possible. This concept ties in with both the integration question in the empirical research as well as 4.4.7, and will be discussed under that heading.

### 4.4.3 Data types used in short-term insurance

The purpose is to indicate the type of data used in a short-term insurance business. These are the aspects of descriptive data, contextual and behavioural data. In the literature study, this data was indicated as central to be able to conduct a short-term business. This is a valid description of the type of data used.

### 4.4.4 Challenges in user capabilities and data integrity

In the literature study, this item was isolated as being crucial in the effective utilisation of a CRM system. It was also tested in the empirical research where user capabilities were tested. In conclusion it was found that most users were trained in the systems they used and that training was also available to them.

System support is confirmed to be available. Question 6 in the questionnaire tested the aspects surrounding this and at a mean of 1.8, the majority indicated Agree with the statements testing the aspects. The standard deviation of .473 also indicated that respondents opinions were closely placed to the agree option. In question 4, the effectiveness evaluation also provided 3 factors that underlined the concept. All were found to be valid. To conclude - user capabilities and training in the CRM systems are important beyond a doubt.

### 4.4.5 Cloud computing and options

Cloud computing was found valid and the utilisation thereof true. It is discussed in the findings of the secondary objectives in 4.3.

### 4.4.6 Mobile- and social technology

Mobile- and social technology were also discussed in the secondary objectives section, 4.3.

### 4.4.7 Systems integration

Complimentary to 4.4.2, the integrate-ability and measure to which a system can integrate, not only to systems internally but also downstream to customers and upstream to suppliers, is a valuable ability that can contribute to a system's abilities. Question 10 of the survey discussed this aspect. Not less than 62% of respondents indicated that they agree that a CRM system should have integration capabilities. In fact, it is a vital ability. Only 17 respondents indicated that they disagree, of which only 3 strongly disagree. In conclusion then, systems that are able to integrate are vital to a CRM system.

### 4.4.8 Data security

At the confirmation that customer information is a short-term broker's most valuable resource, it became apparent that securing this data should be

investigated. The literature study proved that data should be protected and various issues surrounding data protection was brought into the design of Question 8 on security in the survey. Three factors were isolated in the empirical research. The first was access to data, where 60 participants took part. The mean score of 3.41 indicates that they do not allow unrestricted access to their data. The second factor tested the present data protection measures and it was found that the majority strongly agree in regularly updating measures that protect data and that they employ sound data protection measures. The third factor revolves around access to data for external entities. Here the respondents indicated they do not want external users on their systems. In conclusion, it can be stated that data security for internal, external users as well as protection of data are important.

## 4.5 CONCLUSIONS FROM EMPIRICAL STUDY

The findings of the empirical study were captured in Chapter 3 under both the specific question results and the factors identified. The correlations between factors were also discussed.

Conclusions derived from the empirical study are presented in order mirroring the questionnaire, Appendix A.

Question 1 - Biographical information provided a clear breakdown of the sample in terms of gender, age group, relation to the business, position held in the business, qualifications, industry body involvement and years' experience. From these demographics correlations were done in terms of the factors as seen in Chapter 3, but no significant deductions could be made from the various options available. In conclusion, the data presented was interesting but does not indicate any propensity towards any factor based on biographical dissections.

Looking at the questions in isolation, the results indicate that it can be concluded that respondents know of CRM, have some sort of system, and yet they do not know how to fully utilise it.

In Question 2 where IT utilisation is tested, it can again be concluded that respondents have enabling technologies yet they seldom use CRM specifically designed programs and options. They still use paper based files and own developed customer data systems on their desk-top computers. They also all know about and use enhancing technologies but not in support of CRM.

Customer interaction opportunities are investigated in terms of frequency of actions in question 3. It can be concluded that the respondents interact from their side more regularly at a mean of weekly with the customers than the customers interact with the broker at a mean of monthly. Again this interaction does not entail a CRM update function and is largely operational.

Question 4 tested effectiveness of the CRM systems in use at present. It was found that there are 3 factors that support overall effectiveness. They were user interphase, present system data dissection abilities and user-friendliness. These factors proved valid and reliable in the statistical analysis and it is thus concluded that the majority of the respondents were inclined towards the agree option on all the factors. Therefore for a system to be effective, it must be user-friendly, able to dissect and analyse data and provide effective user interphase.

Question 5 testing sustainability was found to contain two factors relating to sustainability, namely value and cost. The findings were that these are relevant to the sustainability question and the responses indicated that , both cost and value are important to the brokers. On a 4 point Likert scale with 1 being strongly agree, the mean was established at 1.34 for value and ar 1.98 for cost. The conclusion is therefore that cost and value are important in attaining sustainability for a CRM system.

Question 6 concerned service support and training and also indicated that respondents see themselves as trained, have training available and have support for their CRM systems at hand.

Cloud and options available as found in question 7, was discussed at length and it can be concluded that although most respondents are aware of it, only a few utilise it at present.

In question 8 Security was highlighted and concluded in 4.4.8, social media in 4.3 and question 10 covered integration in 4.4.7.

## 4.6 LIMITATIONS OF STUDY

Limitations were found within the literature study and the empirical study and are discussed below.

### 4.6.1 Limitations of literature study

The first key observation is the limited amount of research done in the short-term insurance industry in South Africa. Research becomes even scarcer when focusing on CRM within this industry segment. This leaves opportunity for additional studies based on this topic in abundance.

### 4.6.2 Limitations of empirical study

The very actions of the design, sample population and the correlations tested, present limitations. Due to the lack of short-term industry specific literature, the questionnaire was designed from the beginning and based on aspects as seen in Chapter 2 that was found to relate to CRM, insurance and small businesses in general. This means that the questionnaire is a first attempt at testing CRM specifically in this industry.

The sample and population was also found to be limited in terms of quantity of possible participants that was approved under the criteria for participation. This is further challenged, given the geographical spread of the participants in the North-West Province.

The statistical analyses in correlations were found to be numerous due to the design of the questionnaire. The amount of questions and interrelated factors proved numerous possibilities in correlation with the challenges that the researcher faced in terms of time and resources available for full comparisons of factors and questions.

## 4.7 RECOMMENDATIONS FOR FURTHER STUDIES

Due to the shortage of research in the field of CRM in the short-term industry in South Africa, it is strongly advocated that additional studies shoud be conducted on the full extent of CRM utilisation. As an additional study, the method of having a test and control group researched in the real cost implications, effectivity increases and business enhancement factors CRM may enable in this field.

Studies that may provide interesting industry specific results may be warranted in the social media specific field. The interest and use of technologies in this field is huge but the effective incorporation into the other business functions like CRM is not realized at present.

During the literature study, the hampering effect of compliance cost to industry members also came forth. This study did not focus on that side of sustainability but it will surely provide thought provoking and useful information.

## 4.8 RECOMMENDATIONS FOR INDUSTRY ROLE-PLAYERS

Chapter 3 provided empirical results specific to the support of the investigation into the primary objectives of this study. In Chapter 4, these results were contextualized and conclusions derived. With this knowledge in hand it can be recommended to independent short-term brokers to:

1. Invest more into CRM systems tailor made for the purpose.
2. Back this system up with training and support.
3. Renew the CRM systems in use to at least modern computer based systems.
4. Investigate enhancing technologies that may interphase with your CRM system.
5. Optimise customer interactions to update and maximise CRM information update opportunities.
6. Obtain the most user friendly CRM system that you can.
7. The CRM system you employ should have proper data analysis capabilities.
8. Test the cost vs. the value a CRM system will entail.
9. Consider cloud computing as an option for housing your CRM system.
10. Invest in the best security measures to protect your data as the most valuable resource you have.
11. Acquire a CRM system that is able to interphase up- and downstream with other systems.
12. The value social media may provide in terms of lifestyle data and CRM specific data must be considered when applying social media.

Enhancing the sustainability through Customer Relationship Management as a solution to the sustainability of the independent short-term insurance broker, may very well be realized with these factors in mind.

As a key final observation the analysis and conclusions lead to what Stair and Reynolds (2012:537) refer to as Customer Resource Management. This study

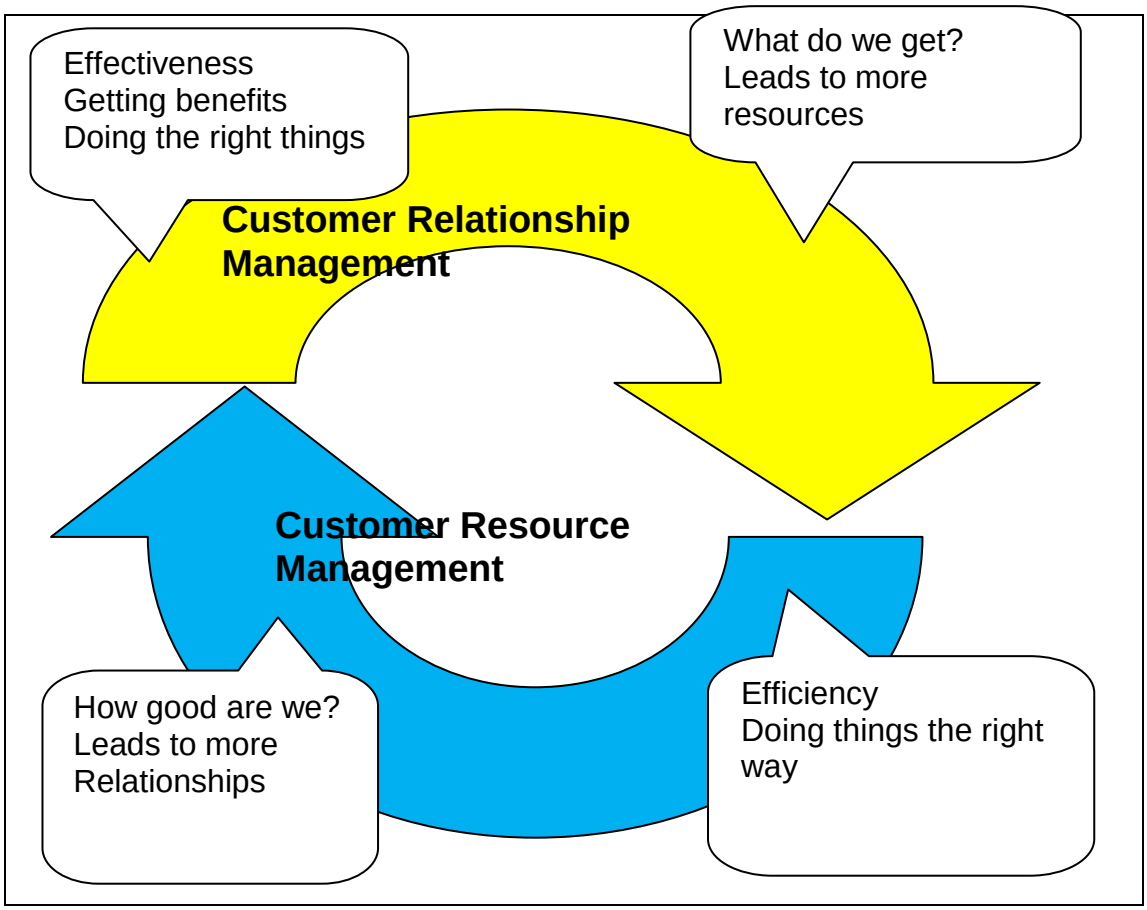
confirmed that information and customer information in particular is a valuable resource to the independent short-term broker. Figure 4.2 illustrated the link between Customer Relationship Management and Customer Resource Management.

A Google Scholar search delivered no research results on the theme of Customer Resource Management. In summary, this is when the relationship with the customer reaches the point where the customer and his/her information is no longer just a relationship being maintained, but becomes a resource.

This resource, if developed and managed correctly, again leads to more information that may enhance additional growth in the business and customer base. As these new customers provide information, the business obtaines additional resources and so the circle continues and the business grows sustainably.

***Figure 4.2 follows on next page***

**Figure 4.2: CRM or CRM**




## 4.9 CONCLUSION

The majority of independent short-term brokers were found to be aware of CRM systems. All brokers have a system for keeping CRM information, even if it is as simple as paper files. It was also found that some brokers developed programs and files on desk-top computers using basic programs like Word and Excel. These files are filled with valuable customer information. It was found that very few have official CRM systems in place, yet they are in possession of all this information. The brokers just do not know how usable this information can become in a CRM system. The possibilities are almost endless.

The limitations of the study proved that lots of additional study opportunities still exist within the short-term insurance industry. This study is but a small

beginning in a vast field that can add great value not only to the broking community but to the economy as a whole.

A recommendation to the independent short-term broker is definitely to invest in CRM. As proven by both literature and empirical research and concluded in this chapter a CRM system is an enhancing factor in sustainability of the short-term broker.

## 4.10 CHAPTER SUMMARY

With the framework of the primary objectives, supported by the secondary objectives and the results from the literature study and empirical research, this chapter draws the conclusions derived from these preceding activities.

The conclusions drawn and recommendations made are done in the same structure as the process described. The theme which is the primary objective, consists of various aspects that underline and support the primary objective. These are listed as the secondary objectives. This formed the frame for a literature study that resulted in more contributing and supporting factors to be identified. These were then tested by empirical research and the results were presented.

From these results, ten conclusions were derived that again line up with the primary objective, secondary objective and the literature and empirical research. These conclusions confirmed without a doubt what the theme set out to investigate and confirm: “Enhancing the sustainability through Customer Relationship Management as a solution to the sustainability of the independent short-term broker.”

# REFERENCES


Baird, C. & Parasnis, G. 2011. From sosial media to social customer relationship management. *Strategy & leadership.* 39(5):30-37.

Balasubramanian, R. & Aramudhan, M. 2012. Security issues: Public vs Private vs Hybrate Cloud Computing. *International Journal of Computer Applications (0975-8887),* 55(13). http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aci&AN=83863133 Date of access: 11 April 2013.

Baltzan, P. Phillips, A. & Haag, S. 2006. Business Driven Technology. 3rd ed. New York. McGraw-Hill.

Band, W. 2005. Best practices for crm deployment. Forrester research, Inc. http://www.asc.upenn.edu/courses/comm530/secure/Fall%202006/CRM.pdf

Bently, L.D. & Whitten, J.L. 2007. Systems analysis and design for the global enterprise. 7th ed. New York, NY: McGraw-Hill Irwin.

Boban, M., Ivkovic, M., Jevtic, V. & Milanov, D. 2011. The data quality in customer relationship management systems: strategy and privacy. *International Conference on Information Society Technology and Management.* http://bib.irb.hr/datoteka/514103.285-883-1-PB1.pdf Date of access: 24 April 2013.

Boyer, E. 2003. More small businesses try CRM to track clients and grow sales. *New Orleans Citybusiness*, 28 April. http://nwulib.nwu.ac.za/login?url=http//search.ebscohost.com/login.aspx?=true&db=f5h&AN=9714739. Date of access: 6 Feb. 2013

Cohen, J. 1988. Statistical power analysis for behavioural sciences. 2nd ed. Hillsdale, NJ: Erlbaum.

Coleman, A., Herselman, M.E. & Coleman, M. 2012. Improving computer-mediated synchronous communication of rural communities through

cloud computing: A case study of rural hospitals in South Africa. *International Journal of Computer Science & Information Technology,* 4(5). http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aci&AN=83371448 Date of access: 11 April 2013.

Collins, J. 2001. Good to great 1st ed. London: Random House.

Cooper, P. 2011. Business masters. Introduction to short term insurance. http://www.businessmasters.co.za/content.php/210-Introduction-to-short-term-insurance

Du Plessis, L. & Roberts-Lombard, M. 2013. Customer loyalty in the Sout African long-term insurance industry. *Acta Commercii* 13(1), 167-175. http://dx.doi.org/10.4102/ac.v12i1.167. Date of access 5 August 2013.

Ellis, S.M. & Steyn, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values). *Management Dynamics,* 12(4):51-53.

Fernekees, B. 2011. Effective CRM for small/mid-size businesses. *CRM Magazine ,*15(11):Pwp2-Wp2. http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=67370124 Date of ecces: 6 Feb. 2013.

Field, A. 2009. Discovering statistics using SPSS. 3rd ed. London: Sage.

First National Bank Bureau for Economic Research. 2013. Consumer Confidence Index. http://www.fnb.co.za/economics. Date of access: 18 April 2013.

FNB BER ***See*** First National Bank Bureau for Economic Research.

Garrison, G. Kim, S. Wakefield, R. L. 2012. Success factors for deploying cloud computing. *Communications of the ACM,* 55(9):62-68

Gerber, M.E. 1995. The E-Myth revisited. 3rd ed. New York, NY: HarperCollins.

Gil-Lafuente, A.M. & Luis-Bassa, C. 2011. Using fuzzy models to migrate from Customer Relationship Management (CRM) to Customer Experience Management (CEM). *Far East Journal of Psychology and Business,* 2(3):1-22.

Godin, S. 2009. Seth Godin on social networking and how to do it right http//:smallbizbee.com/index/2009/03/15/seth-godin-on-social-networking-and-how-to-do-it-right Date of access: 8 January 2011

Indrawan, P., Budianto, S., Ridho, N.M. & Sari, R.F. 2013. Face recognition for social media with mobile cloud computing. *International Journal on Cloud Computing: Services and Architecture,* 3(1). http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aci&AN=86013285 Date of access: 11 April 2013.

Jacobs, R.F., Chase, R.B. & Aquilano, N.J. 2009. Operations and supply management. 7th ed. New York, NY: McGraw-Hill.

Khandekar, A.N. & Deshmukh, U.M. 2012. CRM (Customer Relationship Management) practices in insurance companies. *Golden Research Thoughts*, 2(1):1-9.

KPMG. 2013. The South African insurance industry survey 2013. http://www.kpmg.co.za. Date of access 15 August 2013.

Lascelles, D. & Patel, K. 2013. Insurance banana skins 2013. http://www.csfi.org Date of access 25 September 2013.

Leavitt, N. 2009. Is cloud computing ready or prime time? *Growth,* 27(5):15-20.

Lee, T. & Jun, J. 2007. Centextual perceived value? Investigating the role of contextual marketing for customer relationship management in a mobile commerce context. *Business Process Management Journal,* 13(6):798-814.

Levine, D.M. Stephan, D.F. Krehbiel, T.C. & Berenson, M.L. 2008. Statistics for managers. 5th ed. Upper Saddle River, NJ: Pearson Prentice Hall.

McDonnell, J. & Bartlett, J.L. 2009. Marketing to change public opinion on climate change: a case study. *The International Journal of Climate Change: Impacts and Responses*, 1(3):64-73.

Mietzner, R., Metzger, A., Leymann, F. & Pohl, K. 2009. Variability modeling to support customization and deployment of multi-tenant-aware Software as a Service application. *Proceedings of the 2009 ICSE workshop on Principles Of Engineering Service Oriented Systems*. http://dl.acm.org/citation.cfm?id=1564722 Date of access: 1 May 2013.

Mohr, P., Fourie, L. & Associates. 2008. Economics for South African students. 4th ed. Pretoria: Van Schaik.

Oghojafor, B.E.A., Aduloju, S.A. & Olowokudejo, F.F. 2011. Information technology and customer relationship management (CRM) in some selected insurance firms in Nigeria. *Journal of economics and international finance*, 3(7):452-461.

Peltier, J.W., Schibrowsky, J.A. & Zhao, Y. 2009. Understanding the Ancedents to the Adoption of CRM Technology by Small Retailers : Entrepeneurs versus Owner-managers. *International Small Business Journal,* 27(3):307-336.

SA ***See*** South Africa.

Sayer, P. 2005. Microsoft's CRM package targets small businesses. http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.asp?direct=tre&db=buh&AN=17580127 Date of eccess: 6 Feb. 2013.

Shiyuan, D. 2011. CRM Services for Small Businesses. *PC World,* 29(11):31-32.

Song, M., Shia, B., Yao, H., Wang, W. & Fang, K. 2012. Small and medium enterprises risky prediction system based on cloud computing. *Journal of Software,* 7(10):2236-2240

South Africa. 2000. Short-Term Insurance Act 53 of 1998 (Ammended in 2002). Pretoria: Government printers.

South Africa. 2002. Financial Advisory and Intermediery Act 37 of 2002. Pretoria: Government printers.

Spinelli, L. 2006. CRM making life easier for CPA firms, small businesses. http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&dbAN21334267 Date of access: 6 Feb. 2013.

Stair, R.M. & Reynolds, G.W. 2006. Principles of information systems. 7th ed. Boston, MA: Thompson.

Stair, R.M. & Reynolds, G.W. 2012. Information systems. 10th ed. Boston, MA: Thompson.

Welman, C., Kruger, F. & Mitchell, B. 2005. Research methodology. 3rd ed. Cape Town: Oxford University.

**APPENDIX A: QUESTIONNAIRE**

**Mark your relevant choice in the most appropriate block with an "x"**

**QUESTION 1: BIOGRAPHICAL INFORMATION**

1.1. GENDER

To which gender do you belong?

| Male | 1 | Female | 2 |
|---|---|---|---|

1.2. AGE GROUP

Your age in years? ☐

1.3. RELATION TO BUSINESS

| Owner | Partner | Employee | Other |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

*In case of other please specify*.

_____

_____

_____

1.3.2. I am in an

| Executive position | Managerial position | Administrative position | Other |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

*In case of other please specify*.

_____

_____

1.4. QUALIFICATIONS AND INDUSTRY BODY INVOLVEMENT

1.4.2. Highest academic qualification.

| Grade 12 ( matric) | Diploma | Degree | Post-Degree | Other |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

*Please specify other*_____

1.4.3. Insurance industry qualifications

| Certificate of proficiency (COP) | Intermediate Certificate In Business Studies (ICIBS) | Associate to Insurance Institute of South Africa ( AIISA) | Fellowship to Insurance Institute of South Africa (FIISA) | Other |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

*In Case of other please specify*.

_____

_____

1.4.4. Insurance industry compliance rating

| None | RE 1 | RE 2 | Both |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

1.4.5. Industry body involvement. I am a member of a short- term insurance industry- body.

| Yes | 1 | No | 2 |
|---|---|---|---|

1.4.6. How many years' experience in the short- term insurance industry do you have?

| |
|---|
| |

1.4.6. Do you know what customer relationship management entails?

| Not at all | To a lesser extent | To a larger extent | Fully |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

1.4.7. Rate your awareness of customer relationship management systems available to you.

| Not at all | To a lesser extent | To a larger extent | Fully |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

1.5. Do you consider customer relationship management as a front office activity in your business?

| Not at all | To a lesser extent | To a larger extent | Fully |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

1.6. Do you make use of a customer relationship management system?

| Not at all | To a lesser extent | To a larger extent | Fully |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

**QUESTION 2: IT UTILISATION**

Please indicate your response to the following questions/statements with regards to your company or place of employment

2.1. In this office we mostly use the following technologies (choose only one - most used technology)

| Paper based | Desktop computers | Lap top computers | Tablet devices | Smart phone devices |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

2.2. We mostly keep customer data records by means of …..(Choose only the one option that most frequently applies)

| Paper files | Own source computer files ( Word / Excel documents of own design ) | Package type system | Centralised system on a server. | Cloud based system. | Other |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |

Please specify other.

_____

_____

_____

2.3. We make use of the following additional technologies:

| | | Never | Seldom | Often | All the time |
|---|---|---|---|---|---|
| 2.3.1 | Internet | 1 | 2 | 3 | 4 |
| 2.3.2 | Tablet devices | 1 | 2 | 3 | 4 |
| 2.3.3 | Mobile phones | 1 | 2 | 3 | 4 |
| 2.3.4 | Social media | 1 | 2 | 3 | 4 |
| 2.3.5 | Desk-top computer | 1 | 2 | 3 | 4 |
| 2.3.6 | Lap-top computer | 1 | 2 | 3 | 4 |
| 2.3.7 | Paper based system | 1 | 2 | 3 | 4 |

## QUESTION 3: CUSTOMER INTERACTION

Please indicate your response to the following questions/statements with regards to your company or place of employment

| | | Daily | Weekly | Monthly | Quarterly | Bi -annually | Annually | Less than annually |
|---|---|---|---|---|---|---|---|---|
| 3.1 | We interact with our clients on a …. basis | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3.2 | How often do you initiate contact with clients | | | | | | | |
| 3.3 | How often does the customer initiate contact with you | | | | | | | |

3.4. Our customers can update their information on our system without my assistance

| Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

## QUESTION 4: EFFECTIVENESS EVALUATION

Please indicate your response to the following questions/statements with regards to your company or place of employment

| | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| 4.1 | I am satisfied with the CRM system I presently use. | 1 | 2 | 3 | 4 |
| 4.2 | I believe present customer queries are resolved as a result of my CRM system | 1 | 2 | 3 | 4 |
| 4.3 | I believe current customer information related queries are satisfactorily resolved | 1 | 2 | 3 | 4 |
| 4.4 | I can effectively filter through customer information to find specific information on request (i.e. residential postal codes) | 1 | 2 | 3 | 4 |
| 4.5 | My present CRM system provides me with good data analysis capabilities | 1 | 2 | 3 | 4 |
| 4.6 | I consider data analysis capabilities as an important factor in CRM. | 1 | 2 | 3 | 4 |
| 4.7 | I update my client details regularly | 1 | 2 | 3 | 4 |
| 4.8 | I have a system in place to pro-actively initiate interaction with my clients | 1 | 2 | 3 | 4 |

| | | | | | |
|---|---|---|---|---|---|
| 4.9 | During interactions with clients I use the opportunity to update CRM information | 1 | 2 | 3 | 4 |
| 4.10 | During interactions with clients I use the opportunity to obtain CRM information | 1 | 2 | 3 | 4 |
| 4.11 | I have to sift through various sources to obtain CRM related information | 1 | 2 | 3 | 4 |
| 4.12 | The reproduction of CRM data reduces the quality of the information | 1 | 2 | 3 | 4 |
| 4.13 | Data quality is important for the sustainability of by business | 1 | 2 | 3 | 4 |
| 4.14 | My CRM system is user friendly | 1 | 2 | 3 | 4 |
| 4.15 | My CRM system allows me to segment- customer data | 1 | 2 | 3 | 4 |
| 4.16 | Speed in CRM data delivery is important to my business | 1 | 2 | 3 | 4 |
| 4.17 | My CRM system allows for timely turn- around times | 1 | 2 | 3 | 4 |
| 4.18 | My CRM system allows data to be extracted in a easily usable format | 1 | 2 | 3 | 4 |

4.14b. How much time (percentage %) in the working day do you spend on reproducing customer relationship management information?

**QUESTION 5: SUSTAINABILITY**

5.1. What percentage of your operational cost do you spend on customer relationship management? (Include acquiring- , storing -, uploading- and updating of customer data)

Please indicate to what extend you agree with the following questions/statements with regards to your company or place of employment

| | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| 5.2 | Customer information is an important resource in my business | 1 | 2 | 3 | 4 |
| 5.3 | Having a CRM system in my business is a factor contributing to my sustainability | 1 | 2 | 3 | 4 |
| 5.4 | I am aware of the cost implications in acquiring a CRM system | 1 | 2 | 3 | 4 |
| 5.5 | I am willing to spend a portion of my profits in | 1 | 2 | 3 | 4 |

| | | | | | |
|---|---|---|---|---|---|
| | acquiring or updating( if already have one?) a CRM system | | | | |
| 5.6 | I am aware of the cost implications of the various cloud computing options available to me | 1 | 2 | 3 | 4 |
| 5.7 | I am aware of the cost in securing my data | 1 | 2 | 3 | 4 |
| 5.8 | In this business we monitor the cost of information technology carefully | 1 | 2 | 3 | 4 |

**QUESTION 6: SERVICE SUPPORT AND TRAINING**

Please indicate to what extend you agree with the following questions/statements with regards to your company or place of employment

| | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| 6.1 | I am trained in the use of computers | 1 | 2 | 3 | 4 |
| 6.2 | I am technically knowledgeable to operate my CRM system | 1 | 2 | 3 | 4 |
| 6.3 | I received sufficient training to operate my CRM system | 1 | 2 | 3 | 4 |
| 6.4 | I am willing to undergo CRM training | 1 | 2 | 3 | 4 |
| 6.5 | I have significant IT support for our CRM system | 1 | 2 | 3 | 4 |
| 6.6 | I am proficient in obtaining CRM information from my system | 1 | 2 | 3 | 4 |
| 6.7 | I am proficient processing information obtained from my CRM system | 1 | 2 | 3 | 4 |
| 6.8 | My IT support staff are effective in the support they provide me with | 1 | 2 | 3 | 4 |

## QUESTION 7: CLOUD AND OPTIONS

Please indicate to what extend you agree with the following questions/statements with regards to your company or place of employment

| | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| 7.1 | I am aware of cloud computing | 1 | 2 | 3 | 4 |
| 7.2 | I am aware of the various options of cloud computing available to me | 1 | 2 | 3 | 4 |
| 7.3 | I make use of cloud computing at present | 1 | 2 | 3 | 4 |
| 7.4 | I plan to utilise cloud computing in the future | 1 | 2 | 3 | 4 |
| 7.5 | I am aware of the cost implications of cloud computing | 1 | 2 | 3 | 4 |
| 7.6 | I am aware of open source systems | 1 | 2 | 3 | 4 |
| 7.7 | I am aware of open source CRM systems available | 1 | 2 | 3 | 4 |
| 7.8 | I am aware of the cost of open source CRM systems | 1 | 2 | 3 | 4 |

## QUESTION 8: SECURITY

Please indicate to what extend you agree with the following questions/statements with regards to your company or place of employment

| | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| 8.1 | I consider data security a vital part of my business priorities | 1 | 2 | 3 | 4 |
| 8.2 | I consider customer data to be a valuable resource in my business | 1 | 2 | 3 | 4 |
| 8.3 | I am confident in my present data protection measures | 1 | 2 | 3 | 4 |
| 8.4 | I update my data security measures regularly | 1 | 2 | 3 | 4 |
| 8.5 | My customers have access to my data | 1 | 2 | 3 | 4 |
| 8.6 | My customers have access to view their data on my system | 1 | 2 | 3 | 4 |
| 8.7 | I see customers having access to my system to change their own data as a threat to data security | 1 | 2 | 3 | 4 |

| | | | | | |
|---|---|---|---|---|---|
| 8.8 | I see customers having access to view their own data as a threat to data security | 1 | 2 | 3 | 4 |

## QUESTION 9: SOCIAL MEDIA PLATFORMS

Please indicate to what extend you agree with the following questions/statements with regards to your company or place of employment

| | | No/ Not applicable | Almost never | Sometimes | Often | Almost always |
|---|---|---|---|---|---|---|
| 9.1 | I make use of social media in my day to day life | 1 | 2 | 3 | 4 | 5 |
| 9.2 | I interact with my customers via social media | 1 | 2 | 3 | 4 | 5 |
| 9.3 | My business has a social media platform to interact with our customers | 1 | 2 | 3 | 4 | 5 |
| 9.4 | I obtain CRM related information from them | 1 | 2 | 3 | 4 | 5 |
| 9.5 | I see social media interactions with my customers as an enhancing source of CRM information | 1 | 2 | 3 | 4 | 5 |
| 9.6 | I think that having a social media platform for my business is a valuable source of CRM information | 1 | 2 | 3 | 4 | 5 |
| 9.7 | I think that social media is a valuable resource to obtain customer lifestyle information | 1 | 2 | 3 | 4 | 5 |

**QUESTION 10: INTEGRATION**

Please indicate to what extend you agree with the following questions/statements with regards to your company or place of employment

| | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| 10.1 | My CRM system is integrated with other business information systems in my business | 1 | 2 | 3 | 4 |
| 10.2 | My CRM system is integrated with my customers' systems | 1 | 2 | 3 | 4 |
| 10.3 | My crm system is integrated with other entities like insurance providers systems | 1 | 2 | 3 | 4 |
| 10.4 | My crm system is capable of integration with other systems | 1 | 2 | 3 | 4 |
| 10.5 | I consider integration capabilities to be a vital component of a crm system | 1 | 2 | 3 | 4 |

## APPENDIX B: ONE-WAY ANOVA

| Appendix B | | | | | | |
|---|---|---|---|---|---|---|
| ANOVA | | | | | | |
| | | Sum of Sq | df | Mean Squ | F | Sig. |
| factor_q3 | Between Groups | 16.795 | 4 | 4.199 | 1.661 | 0.19 |
| | Within Groups | 63.19 | 25 | 2.528 | | |
| | Total | 79.985 | 29 | | | |
| factor_q6 | Between Groups | 0.15 | 4 | 0.038 | 0.116 | 0.976 |
| | Within Groups | 7.786 | 24 | 0.324 | | |
| | Total | 7.936 | 28 | | | |
| factor_q7 | Between Groups | 0.186 | 4 | 0.046 | 0.109 | 0.978 |
| | Within Groups | 9.802 | 23 | 0.426 | | |
| | Total | 9.988 | 27 | | | |
| desktop_r | Between Groups | 1.517 | 4 | 0.379 | 0.412 | 0.798 |
| | Within Groups | 21.162 | 23 | 0.92 | | |
| | Total | 22.679 | 27 | | | |
| paper_r | Between Groups | 2.279 | 4 | 0.57 | 1.042 | 0.407 |
| | Within Groups | 12.579 | 23 | 0.547 | | |
| | Total | 14.857 | 27 | | | |
| q8n1_r | Between Groups | 0.099 | 4 | 0.025 | 0.105 | 0.98 |
| | Within Groups | 5.694 | 24 | 0.237 | | |
| | Total | 5.793 | 28 | | | |
| q8n2_r | Between Groups | 0.209 | 4 | 0.052 | 0.197 | 0.937 |
| | Within Groups | 6.343 | 24 | 0.264 | | |
| | Total | 6.552 | 28 | | | |
| Tech_use_modern | Between Groups | 2.44 | 4 | 0.61 | 1.662 | 0.19 |
| | Within Groups | 9.174 | 25 | 0.367 | | |
| | Total | 11.613 | 29 | | | |
| Factor_v5_waarde | Between Groups | 0.323 | 4 | 0.081 | 0.3 | 0.875 |
| | Within Groups | 6.204 | 23 | 0.27 | | |
| | Total | 6.527 | 27 | | | |
| Factor_v5_koste | Between Groups | 1.443 | 4 | 0.361 | 0.703 | 0.598 |
| | Within Groups | 11.799 | 23 | 0.513 | | |
| | Total | 13.242 | 27 | | | |
| Factor_v8_access | Between Groups | 0.213 | 4 | 0.053 | 0.147 | 0.962 |
| | Within Groups | 8.696 | 24 | 0.362 | | |
| | Total | 8.909 | 28 | | | |
| Factor_v8_huidig | Between Groups | 0.733 | 4 | 0.183 | 0.631 | 0.645 |
| | Within Groups | 6.974 | 24 | 0.291 | | |
| | Total | 7.707 | 28 | | | |
| Factor_v8_ekstern | Between Groups | 5.162 | 4 | 1.291 | 2.155 | 0.105 |
| | Within Groups | 14.372 | 24 | 0.599 | | |
| | Total | 19.534 | 28 | | | |
| Factor_v9 | Between Groups | 2.884 | 4 | 0.721 | 0.563 | 0.692 |
| | Within Groups | 30.733 | 24 | 1.281 | | |
| | Total | 33.617 | 28 | | | |
| Factor_v10 | Between Groups | 2.277 | 4 | 0.569 | 1.644 | 0.197 |
| | Within Groups | 7.963 | 23 | 0.346 | | |
| | Total | 10.24 | 27 | | | |
| User_interface | Between Groups | 0.134 | 4 | 0.034 | 0.123 | 0.973 |
| | Within Groups | 6.822 | 25 | 0.273 | | |
| | Total | 6.956 | 29 | | | |
| System_capability | Between Groups | 1.495 | 4 | 0.374 | 0.794 | 0.541 |
| | Within Groups | 10.822 | 23 | 0.471 | | |
| | Total | 12.317 | 27 | | | |
| User_friendly | Between Groups | 2.377 | 4 | 0.594 | 1.46 | 0.245 |
| | Within Groups | 9.769 | 24 | 0.407 | | |
| | Total | 12.146 | 28 | | | |

## APPENDIX C: LETTER FROM LANGUAGE EDITOR


November 14, 2013

**TO WHOM IT MAY CONCERN**

**Re: Letter of confirmation of language editing**

The dissertation **"Enhancing the sustainability through Customer Relationship Management as a solution to the sustainability of the independent short-term insurance broker"** by Jan Adriaan Oeschger (Student number: 11120150) was language, technically and typographically edited. The sources and referencing technique applied was checked to comply with the specific Harvard technique as per North-West University prescriptions. Final corrections as suggested remain the responsibility of the student.

**Antoinette Bisschoff**
Officially approved language editor of the NWU since 1998