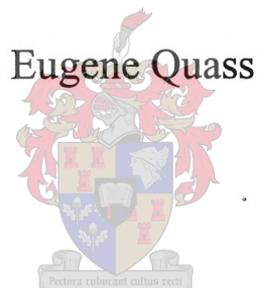


**Leveraging Customer Relationship Management
through a Knowledge Creation process**



Assignment presented in partial fulfilment of the requirements for
the degree Master of Commerce at the University of Stellenbosch.

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Declaration

I, the undersigned, hereby declare that the work contained in this assignment is my own original work and has not previously in its entirety or in part been submitted at any university for a degree.

Abstract

It is generally accepted that profitable relationships with customers are increasingly important in determining the long-term success of the modern enterprise. Customer relationship management (CRM) is widely considered as an appropriate methodology for building strong and mutually beneficial relationships with customers and, therefore, the study established the definition and scope of CRM.

Customer knowledge could be considered a cornerstone of any CRM strategy and the ability of the enterprise to create and leverage customer knowledge is viewed as a source of competitive advantage. The study aimed at establishing clarity on the methodologies and approaches to the organizational knowledge creation process. Finally, the integration of knowledge creation and leverage processes into the CRM strategy was considered.

Scrutiny of the available literature revealed a comprehensive description of the concept of CRM. The various models of CRM presented in the study clearly illustrated the different focus areas and components of CRM. The most prominent characteristics of a CRM strategy were found to be an emphasis on strategy, the networking of key stakeholders, customer intimacy and the use of appropriate technology.

The approaches to the creation of organizational knowledge were analysed and it was found that the conversion between tacit and explicit knowledge is key to the creation of organizational knowledge. The generally accepted principles for the leverage of knowledge were adapted for possible incorporation into a CRM strategy.

The salient conclusion of this study was that a knowledge creation process could be used to build the enterprise's stock of customer knowledge. It was found that the principles of knowledge leverage could be applied to the customer knowledge base in order to build lasting and profitable customer relationships.

Recommendations were offered for the improved leverage of a CRM strategy through the integration of knowledge creation, knowledge leverage and CRM methodologies and principles. Finally, suggestions were made for further academic research on the anatomy and implementation of CRM.

Opsomming

Dit word algemeen aanvaar dat kliente verhoudingsbestuur 'n toenemende rol sal speel in die lang termyn sukses van die moderne onderneming. Kliente verhoudingsbestuur word wyd erken as 'n gepasde metodologie om sterk en wedersyds voordelige verhoudinge met kliente te bewerkstellig. Die studie het ten doel gehad om om die definisie en omvang van kliente verhoudingsbestuur te bepaal.

Kliente kennis is 'n hoeksteen van enige kliente verhoudingsbestuur strategie en die onderneming se vermoë om kliente kennis te skep en te benut word gesien as 'n bron van kompeterende voordeel. Die studie het gepoog om duidelikheid te verkry oor die metodologieë en benaderings wat gevolg kan word in die ondernemingskennis skeppingsproses. Ten slotte is die oorvleueling tussen die kennis skeppingsproses en die kliente verhoudingsbestuur strategie ondersoek.

Gebaseer op die studie van die relevante literatuur is 'n omvattende definisie van kliente verhoudingsbestuur blootgelê. Die onderskeie modelle van kliente verhoudingsbestuur wat ondersoek is in die studie, het die fokus en verskeie komponente van kliente verhoudingsbestuur uitgelig. Die mees prominente karakter eienskappe van die kliente verhoudingsbestuur strategie is aangedui as die fokus op ondernemings strategie, netwerke van belangegroep, kliente intimiteit en die gebruik van toepaslike inligtingstechnologie.

'n Analise van die benaderings tot kenniskepping in die onderneming het uitgelig dat die oorgang van ontasbare kennis na tasbare kennis die kern uitmaak van

ondernemingskennis skepping. Die algemeen aanvaarde beginsels tot die benutting van kennis is daarna aangepas vir die moontlike gebruik in die kliente verhoudingsbestuur strategie.

Die belangrikste gevolgtrekking van hierdie studie was dat 'n kennis skeppingsproses gebruik kan word om die onderneming se kliente kennis uit te brei. Daar is ook gevind dat die beginsels van kennis benutting toegepas kan word op bestaande kliente kennis ten einde langtermyn winsgewende verhoudings met kliente te bewerkstellig.

Aanbevelings is gemaak vir die verbeterde benutting van die kliente verhoudingsbestuur strategie deur middel van die integrasie van kennis skepping, kennis benutting en kliente verhoudingsbestuur metodologieë en -beginsels. Ten slotte is voorstelle is gemaak vir verdere akademiese studies aangaande die struktuur en implementering van kliente verhoudingsbestuur.

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This thesis would not have been possible without the support and understanding of my spouse, Annamarie. Those closest to us share most of our sorrows, frustrations, joy and successes and it is in this sharing that the quality and enjoyment of our life's journey is improved.

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CHAPTER 1 : INTRODUCTION

1.1 Background

Prominent authors contend that the focus of the enterprise in the 21st century will be to create and deliver superior value to the customer (Weinstein & Johnson, 1999). Many marketing practitioners have a sound knowledge of the influence of perceived value on the customer's behaviour and this has developed to the stage where customer value delivery has become a strategic imperative. It is suggested that sustainable financial and market success is dependent upon the creation of outstanding customer value (Coopers & Lybrand, 1998). The challenge for the future will be in the changing nature of the relationships between organisations and their clients. These changes are brought about by changing business conditions (Buttle, 2000).

A number of factors have contributed to the increasing importance of customers and the concomitant focus on customers. Firstly, the competition for clients is becoming more intense and geographical barriers are being rapidly transformed by technologies such as the Internet. Markets are also becoming more fragmented with the simultaneous move away from mass marketing (Peppers & Rogers, 1997). Customers are purportedly also becoming more demanding and have developed zero tolerance for defects in products or associated services. It has also become easier for customers to compare experiences with best-in-class expectations (Buttle, 2000). Lastly, as product quality has been improved to new levels this is no longer a distinguishing factor in the client's selection process and, therefore, the potential of future relationships, or the quality of the existing ones become vital competitive forces for the organisation (Buttle, 2000).

According to Prahalad and Ramaswamy (2000) major discontinuities, such as deregulation, globalisation and technological convergence, are changing the manner in which companies interact. This change further influences the roles that companies play in the changing business landscape and in practice this led to the integration of suppliers into the operation of companies such as Ford Motor Corporation (Prahalad & Ramaswamy, 2000).

Coupled with the rapidly changing markets in which organisations compete is the notion that the fashion in which organisations are managed, is changing dramatically. The evolution of management and strategy studies has resulted in several resource based theories of the business enterprise (Barney, 1996, Collis & Montgomery, 1995, Grant, 1991, Hamel & Prahalad, 1990). Davenport and Prusak (1998) suggest that managers used to value the knowledge of workers long before the emergence of modern day theories of “core competencies”, “the learning organisation”, “expert systems” or “strategy focus”.

Rapid environmental change and business development coupled with the ever-increasing sophistication of consumers are giving rise to knowledge becoming a competitive advantage (Davenport & Prusak , 1998). It is suggested that knowledge – more than structure or financial capital – will be the provider of sustainable advantage in future (Nonaka, Reinmoeller & Senoo: 1998). Weinstein and Johnson (1999) state in a recent survey that most top executives ranked customer satisfaction as the most important business goal. It is further suggested that customer satisfaction is achieved

through being customer orientated, aligning processes to add customer value, managing service quality and appropriate pricing.

The increasing importance of customer knowledge and the concomitant move to customer focussed organisations form the background to this study and will be discussed in the following section.

1.1.1 The Increasing Importance Of Customer Capital And Customer Relationship Management

Fickenscher (1999) describes customer data as the new capital of the 21st century. This implies that organisations should be able to store and retrieve as much data as possible on their clients. Information is described as data endowed by relevance and purpose (Drucker, 1998). This further implies that knowledge is needed to convert data to information. Customer information can thus be viewed as an integral component of the total customer capital of the enterprise.

It is widely suggested that the primary measure of the desirability of customers is the lifetime value of those customers (Peppers & Rogers, 1997, Xavier, 2000, Buttle, 2000, Stone, 2000). It would be simplistic to suggest that the sum of customer capital could be contained in the net present value of all future cash flows from a specific customer or set of customers. It is, however, clear that not all customers are equally profitable (Peppers & Rogers, 1997, Buttle, 2000) and thus represent different levels of capital to the organisation.

Underlying the concept of Lifetime Value (LTV) is the concept of customer loyalty. Peppers & Rogers (1997) suggest that the use of three building blocks would enable the organisation to retain its clients. 1. Enabling technology allows the enterprise to gather and retrieve more information about its customers. 2. Interactive technology enables dialogue and it is thus easier for the enterprise to learn from its clients. 3. Mass customisation technology enables the firm to establish tailor made client specific solutions. The use of these three building blocks ensures a client feedback loop that should be integrated with the production and delivery processes of the organisation in order to capitalise on feedback received during its interaction with the clients (Peppers & Rogers, 1997).

To suggest that the value of customers should only be measured by their LTV, is simplistic and assumes that the longer a client remains loyal to the enterprise/brand/product the higher the LTV of that client will be. This assumption does not make provision for alternative ways in which clients may be of some value to the organisation.

It is suggested that customers are in fact a source of competence to the enterprise (Prahalad & Ramaswamy, 2000) and that they could contribute to the enterprise in other ways than merely purchasing their products. In this regard customers are seen as a part of the larger business network. Customers could, therefore, co-create and extract business value (Prahalad & Ramaswamy, 2000). To leverage the possible contribution of customers, Prahalad and Ramaswamy (2000) suggest that customers be engaged in a dialogue of equals, that they be organised into customer communities, that customer

diversity be managed and that customers be encouraged to co-create personalised experiences (Prahalad & Ramaswamy, 2000).

In order to shed further light on the capital that may be contained in a customer base, it is necessary to define clients not only in terms of long and short term profitability, but also in terms of other ways they may contribute to the organisation. In this regard Wilson and Jantrania (1994) suggested that the value of relationships could be measured in three dimensions, viz. economic, strategic and behavioural. It is evident that LTV resorts within the first dimension and that there may be values in client relationships beyond the more measurable economic factors.

It is posit that a study of the knowledge creation process may highlight the strategic value of client interactions and relationships. It is further posited that it is not only a question of what could be learned from customers, but also how that knowledge could be utilised in generating even more value than the obvious economic benefit that stems from selling products and services.

1.1.2 The Convergence Of Knowledge Management And Customer Relationship Management

Before one could even attempt to discover the impact that knowledge management may have on customer relationship management, it is necessary to define knowledge. Davenport and Prusak (1998) provides the following practical definition of knowledge:

“ Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and

incorporating new experiences and information. It originates and is applied in the minds of knowers. In organisations, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practises and norms.”

Whilst epistemologists may ponder the definition of knowledge and the meaning of what has been learned, it may well be in this practical approach that one could endeavour to find meaning in the area of customer relationship management.

Next, it needs to be determined why knowledge may be important. Zack (1999) contends it is context-specific, tacit knowledge that is embedded in organisational routines, practises and norms, that tend to be unique and difficult to imitate and duplicate. Competitive advantage in the context of this discussion should therefore be derived from knowing more about customers than the competition does (Zack, 1999).

Probst (1998) suggests that knowledge goals exist on three levels, namely normative, strategic and operational knowledge. It would appear that effective knowledge management depends on the successful formulation of knowledge goals on all three levels. When extended to customer relationship management, it would seem that CRM goals should be similarly defined on all three levels.

1.1.3 Case Study : Seven Eleven Japan

The convergent strategies of CRM and KM are best illustrated by a case study done by Nonaka, Reinmoeller and Senoo (1998) and presented in the next paragraphs.

Seven Eleven Japan is not only setting the standard in the efficient retail sector in Japan but is doing so world-wide. In doing so it has become the most profitable retailer in Japan. In understanding how this is done it is important to note that Seven Eleven does not operate stores as a matter of business, but rather provides services as a franchiser. It thus sells information and knowledge. In return it is paid for services provided and for royalties, trademarks, technology and equipment that is supplied.

In providing these services to franchisees Seven Eleven Japan uses quintessential explicit knowledge, such as manuals for operations, recruitment, and training. This use of explicit knowledge distinguishes Seven Eleven from other players in the Japanese retail market.

In addition to this Seven Eleven Japan oblige employees to socialise with customers by way of a dialogue with them. The output of this process is that customer information is captured in 7000 Seven Eleven stores. This socialisation process keeps employees abreast of the fast changing needs of customers.

Information is shared in staff interactions, interactions with supervisors and in weekly managerial meetings. Employees are further encouraged to gather information by wandering around and discovering new knowledge. It is clear that these two processes contain an element of tacit knowledge.

Furthermore a state of the art point of sale system is used to capture customer information into a continuously expanded explicit knowledge base. This explicit

knowledge is used to conduct profitability studies and to determine which products are not meeting minimum profitability requirements.

Seven Eleven further uses a graphical user interface (GUI) to facilitate the easy extraction of data from its database. It is considered a useful tool to analyse this data in order to formulate hypotheses on what may be required from the business. Each hypothesis is tested against actual results as it is recorded in the point of sale database, which contains the accumulated explicit knowledge of Seven Eleven Japan.

The dissemination of successful hypotheses throughout the company thus leads to the further expansion of the company's knowledge base. Knowledge is internalised by intensive training and simulations of in-store situations. Whilst the point of sales system is viewed as one of the world's best and serves as the depository for explicit knowledge, Seven Eleven emphasises the importance of human insights.

From the case study above it could be deduced that customer capital goes beyond mere customer loyalty and understanding of the customer's requirements, to include the organisation's climate, culture and capabilities (Band, 1995). By including the organisation's capabilities in the equation, the importance of organisational learning and transfer of knowledge is raised.

It is clear from the preceding discussion that CRM deals with the gathering of explicit customer knowledge and its use to strengthen relationships in order to create exit barriers for customers. It is not immediately clear though whether tacit knowledge

could be used in CRM and what would possibly be the best practice in utilising knowledge creation to leverage CRM.

1.2 Problem Statement

From the preceding paragraphs the increasing importance of customers and customer capital for the modern organization emerge. Whilst other sources of capital have all received the attention of scholars and practitioners alike, the marketplace is turning to customer capital in order to provide the competitive advantage of the next century.

The term Customer Relationship Management (CRM) has emerged from the above and whilst the combination of these words have different meanings to marketers, customer service practitioners and strategists it has been implemented in some form in an increasing number of organisations. The focus of most CRM strategies seems to be the extent to which explicit knowledge is stored, retrieved and shared in the relevant organisation.

Studies focused on Knowledge Management (KM) devote attention to describing the differences between tacit and explicit knowledge. Scholars describe the knowledge creation process and also emphasise the importance of not only what is obviously manageable in explicit knowledge, but also to manage tacit knowledge.

It becomes clear that both CRM and KM deal with knowledge in its different formats. It would thus seem logical that there should be a convergence of the principles that apply to both fields, and the following could be considered:

(a) It would be important to obtain clarity on the definition and application of CRM.

An investigation into the building blocks of CRM would further provide an improved understanding of the concept and would indicate its possible shortcomings.

(b) In the context of intellectual capital the study of knowledge management has focussed primarily on KM for the sake of managing intellectual capital either in conjunction with other sources of capital, or in isolation. With the rising importance of customer capital the question could be raised whether or not using knowledge creation principles and methodologies could enhance customer knowledge.

1.3 Objective Of The Study

The objective of the study is firstly to provide a critical analysis of the relevance of customer relationship management to the organizational knowledge creation process, and secondly to indicate how a knowledge creation process could leverage CRM initiatives in a business enterprise.

1.4 Scope of the Study

The study will provide insight into the concept of customer relationship management (CRM) by providing an analysis of international literature on the topic. Whilst a large number of technology companies are providing product solutions for CRM and most consulting companies currently have a CRM capability, it is thought prudent to include a combination of academic as well as practice related sources in the research.

The focus of the research is the strategic importance and application of CRM, rather than the operational implementation of technologies and processes to facilitate enterprise wide CRM. Practical sources on the topic of CRM are freely available in most developed economies and in this regard the study should have universal application.

The study acknowledges that the knowledge management construct needs to be studied as a whole to include the overlap with intellectual capital management. The focus would, however, be on the methodologies that could be employed to specifically enhance the enterprise's knowledge of its customers and how this could possibly be leveraged through the implementation of a CRM strategy. In this context the study of KM will be restricted to the knowledge creation process, emphasising a practical approach to the implementation of the knowledge creating process.

Finally, in the words of Peppers and Rogers (1997), it should be noted that every organisation that has a client could be considered an enterprise. Thus an enterprise wide CRM should relate to all sectors of the economy, regardless of the nature of the business to which the enterprise relates.

1.5 Research Methodology

In order to achieve the objective of this study, a review will be undertaken on secondary sources of information and will include published books, articles, websites, research reports and other available documents. The sources have been collected by way of library searches and Internet research. From this it follows that the study is deductive

by nature and that it endeavours to collate thoughts and ideas on two separate, but parallel constructs.

The assimilated material is presented in a logical order that clearly describes each construct in such a manner that the convergence and synergies of the two fields could be discussed clearly and logically. This leads to some meaningful analysis and evaluation.

The research aims to find the relationship and complimentary aspects between knowledge creation and CRM relevant in achieving enterprise goals. In solving the relevant conceptual challenges reference is made to practical and theoretical models that enhance the understanding of the constructs of CRM and KM.

1.6 Preliminary Structure

The study is presented in six chapters, which was briefly discussed.

Chapter 1 is presented as an introduction to the study. This chapter consists of the background to this study and states the research challenge. The objective of the study is subsequently described and leads to the discussion of the scope and methodology of the research. Finally the structure of the study is presented with the purpose of delineating the contents presented.

Chapter 2 analyses and clarifies the practice of Customer Relationship Management by investigating the extant definitions and descriptions of CRM. The purpose of this section is to synthesise current thought of what CRM entails and how it be implemented in the enterprise.

Chapter 3 provides the rationale for having a CRM strategy in an enterprise. The potential value that CRM may add to the enterprise is scrutinised, and the approaches to such value creation are analysed.

Chapter 4 is an analysis of the available literature on knowledge creation with the purpose of delineating processes that would enable the enterprise to create new customer knowledge with a view to leveraging that knowledge for economic gain.

In chapter 5 the relationship between CRM and the knowledge creation process is discussed. By fusing the two fields, this chapter provides a synthesis of CRM and knowledge creation.

In chapter 6 the summary, conclusions and recommendations are presented. Recommendations for the improved formulation and implementation of enterprise-wide CRM are provided. Recommendations are made regarding possible research to contribute to the theoretical base of this field of study.

1.7 Summary

Chapter 1 provides the background of the study and highlights the main research challenge which preceded the formulation of the research objective. The scope and methodology of the study are outlined and the structure of presentation of the main arguments is provided.

CHAPTER 2 : THE CONCEPT OF CUSTOMER RELATIONSHIP MANAGEMENT

2.1 Introduction

Customer Relation Management is a prominent topic today and is viewed with different levels of urgency by business. The two dominant schools of thought are firstly that CRM is the most important strategic differentiator and that it is growing at a rapid rate. The opposing view is that CRM is a declining technology and will be replaced by more interactive technologies (Buhrman, 1999).

In terms of being a strategic differentiator, it is suggested that the era of business process re-engineering and corporate cost cutting and downsizing is now in effect a matter of the past and that companies are now increasingly focusing on customers to secure competitive advantage in the marketplace (Campbell, 2000).

The question of a declining technology is answered by observing the development of business systems that have developed significantly over the past thirty years. In the 1960s mainframe systems formed the backbone of organisations. In the 1970s the importance of information technology was realised and used primarily in the effort to cut production costs (www.crmxchange.com). The emergence of databases occurred during this period. The 1980s were characterised by process reengineering and corporate downsizing (Simms, 2000). This era also saw the implementation of client server software as a replacement for mainframe systems. The emergence of Enterprise

Resource Planning (ERP) software and methodologies enabled better production and resource management during this decade.

While all of these system developments focused on the supply chain of the enterprise, the emergence of CRM transferred the emphasis to the demand side of operations (www.crmxchange.com). The focus consequently shifted to the enterprise's front office activity and the improved efficiency of customer interaction. There is no doubt that further technological development will take place and that old technologies would be improved or replaced. The contention is that this is of little importance as CRM focuses more on strategy than on technology.

Various authors (Higgo, 1999, Simms, 2000, Campbell, 2000) have reiterated that CRM is not a technology application or solution, but rather an enterprise strategy. Although technology is an important enabler of CRM strategy, the wide range of technologies like business intelligence, front-office software, call centre technology and ERP software may make it quite a daunting task to find a CRM solution in technology. An Ovum Report (Higgo, 1999) supports the notion that strategy should be defined first and that technology decisions should follow later.

2.2 Towards a Definition

CRM comprises of business strategies designed to optimise profitability, revenues and customer satisfaction (Gartner Group, 2000). To achieve successful CRM, enterprises should dispose of the processes, technology and behaviour that are aimed at coordinated customer interactions across all sectors of the business (Gartner Group: 2000). In this sense CRM focuses on relationships rather than transactions and is aimed

at the integration of the marketing, sales and service functions of the enterprise. According to the Gartner Group (2000), CRM is a multi-layered strategy that may start off with different separate initiatives but these are later combined to provide consistent customer focussed processes across all business units.

An Ovum report suggests that companies should focus on their corporate customer relationship strategy rather than on technology solutions (Higgo, 1999). It is further suggested that companies should identify and stratify their customers and then implement strategies to retain the profitable customers (Higgo, 1999).

From the definitions discussed above it would be possible to draw the following definition of CRM:

Customer Relationship Management

- includes business processes that are customer focused,
- is implemented across various traditional functional areas of the business,
- is a key driver of profitability,
- is focused on selected profitable customers and
- is supported by appropriate technology.

There would appear to be consensus on the primary building blocks of CRM, but it should be conceded at the same time that the relationships of these parts are not clear. The following section will endeavour to clarify the anatomy of the CRM concept.

2.3 Major Models of CRM

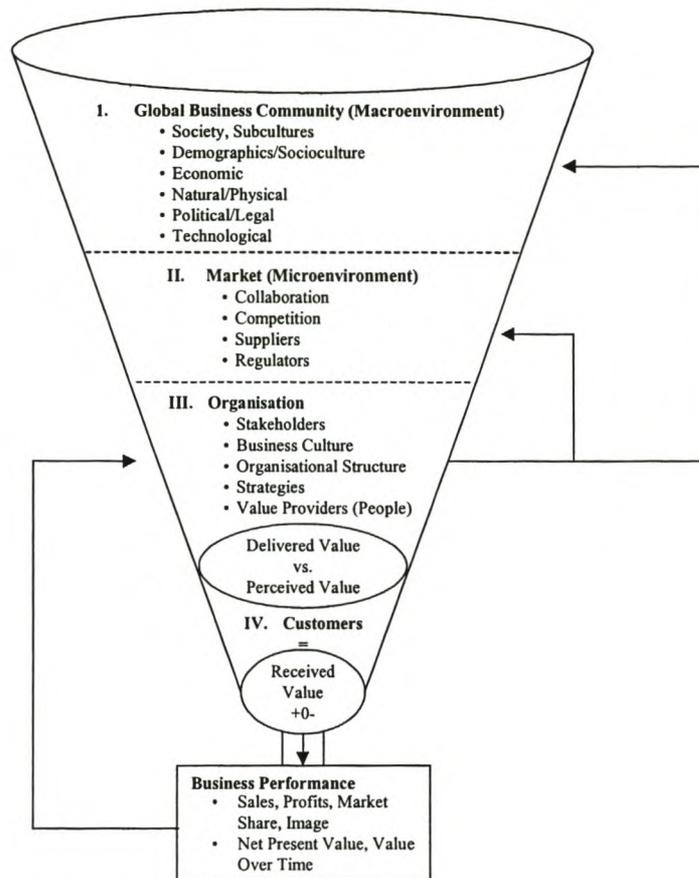
There is a proliferation of literature on the topic of CRM, particularly since the mid-1990's, presented mainly by practitioners and consultants but also by scholars (Weinstein, 1999, Buttle, 2000, Von Ruben, 1999 and Anderson Consulting, 2000). In order to present a balanced approach, the concept of CRM the discussion will be limited to five prominent models that other authors support, either partly or completely.

2.3.1 Customer Value Funnel

In order to understand what position CRM takes in terms of the chain of total value creation for customers it is important to observe the process of designing and delivering superior customer value. The customer value funnel is one method of understanding where and how customer value is created (Weinstein, 1999). This framework suggests that the enterprise needs to deal with macro issues, as well as customer specific issues in order to remain competitive (Weinstein, 1999).

The model has four levels, each of which is interdependent. There is also an overlap between the levels of the model, indicated by the dotted lines in figure 2. 1.

Figure 2. 1 : The Customer Value Funnel



Source : Weinstein, 1999

According to the value funnel model, value is created for customers when delivery exceeds the expectations of customers (Weinstein, 1999). Positive net transaction values would come about, which would in turn increase the lifetime value of the client. The feedback loops in this model indicates that adaptation is required in order to consistently deliver customer value.

From the preceding discussion it could be argued that CRM is implemented on levels three and four of the Customer Value Funnel. The main purpose of CRM in this model would be to create customer value by capturing information from the macro and

microenvironment and funnelling it through the organisation structure to create value for customers.

The model is not clear on the methods of interaction and sharing that needs to take place in order to create consistent customer experiences regardless of the point of contact between the customer and the enterprise.

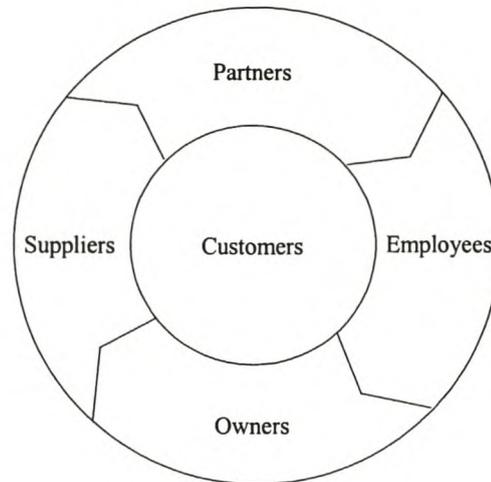
2.3.2 The SCOPE model of CRM

The SCOPE model's point of departure is the customer (C) as the focal point. In addition to the customer, the model comprises of the other stakeholders, these being suppliers (S), owners/investors (O), employees (E) and external partners (P). It is suggested that relationships between the peripheral constituents represent the cost factors in the enterprise and that only relationships with the core (customers) will result in revenues. The model is graphically presented in figure 2. 2. Buttle (2000) also suggests that in various phases of the enterprise lifecycle the various components may have differing degrees of importance.

The SCOPE model posits that companies do not compete as separate entities but that competition rather occurs between networks and that these networks typically consist of the four components namely suppliers, owners, employees and partners.

* *The SCOPE model of CRM was developed by Francis Buttle of the Manchester Business School.*

Figure 2. 2 : SCOPE of CRM



Source : Buttle, 2000

This combination of suppliers, owners, employees and partners creates value for customers and leads to long-term profitable relationships being formed. These four constituencies will now be briefly discussed.

- **Suppliers**

Suppliers are defined as those entities that provide items such as raw materials, components, technologies, funding, people and knowledge to the enterprise. In the past suppliers were compared to each other and decisions between various suppliers were made on a variety of important criteria. This resulted in a large variety of suppliers that may be called on to deliver any form of input to the company's value chain. This trend is changing however, and there is currently a move by some major corporations such as IKEA, Shell and the Ford Motor Corporation to narrow the choice of suppliers and rather to build meaningful relationships with these suppliers.

This reduction in the number of suppliers results in enhanced supplier performance by means of improved communication, faster problem resolution and joint investment in providing better customer solutions. There should also be a trend towards lower purchasing costs as the total acquisition cost is decreased through limited search. Finally, the increased co-operation between supplier and distributor should result in increased value being delivered to the end customer.

- Owners / Investors

A long term profitability view is a prerequisite in establishing the CRM network. This long term focus comes as a trade-off with short term profitability as this may be required to invest in technology and at the same time to terminate those customer relationships that do not display the potential of delivering long term value.

It is important for owners and investors to make profits in the short term and it is clear that the ability to do so may be affected by the implementation of a CRM strategy. It is, therefore, of vital importance that investors be educated and that the correct type of core owners be attracted. Only in doing so will CRM be able to deliver on its promise to yield higher shareholder value in the long conduct.

- Employees

It is posited that employee behaviour could enhance or damage the value perception of customers. Employee satisfaction and good human resource management are viewed as essential to create positive customer perceptions of quality. A supportive

culture for excellent customer service is seen as one which is less bureaucratic, more customer focussed and more supportive of individual initiatives.

It was found that employee relations mirrored customer relations and consequently it is suggested that superior employee relationships are required to foster excellent customer relationships. It would thus be essential that suitable performance measures and rewards are set for employees. Management should also create an environment in which employees are empowered to deliver solutions to customers.

The process of internal marketing (IM) is suggested as a method of winning over employee support for customer centricity. The IM process may include activities, such as improving management style, improving recruitment processes, and involving employees in the planning cycle, open communication policies and the empowerment of front-line staff.

- Partners

Partnering arrangement may take various forms such as value-adding partnerships, strategic alliances and joint ventures. The purpose of partnerships should always be to combine the complementing strengths of the partners in order to deliver additional value to customers.

The benefits of partnerships could be found in a variety of situations. In some cases costs may be shared by partners to enhance their cost efficiency. Shared and interchanged knowledge and technology ultimately deliver better products. The

combination of skills may accelerate the product development lifecycle, thus contributing to an improved competitive situation.

It is assumed that a fundamental aspect of CRM is to improve the value proposition to meet and exceed the expectations of customers. According to the SCOPE model this value proposition could be delivered through the networked interaction of the four peripheral components which are focused on the first constituent – the customer. The model, therefore, provides some insight in the parties involved in value creation and some insight into the methods of interaction that are required.

2.3.3 Focusing on Customer Equity : The Anderson Consulting Model

Most leading companies have identified their customers as the major source of revenue and a sustainable growth for the future. In order to create a truly customer driven enterprise it is imperative that the enterprise should understand the importance of customer equity (Anderson Consulting, 2000).

Customer equity is defined by Anderson Consulting as the measure that reflects the intrinsic value of customer relationships and the contribution these relationships could make to the future earnings of the enterprise. It is suggested that customer equity is the aggregate value of:

- Market Share – increasing the number of customers.
- Customer Share – selling more to each of those customers.
- Customer Lifetime Value – extending the duration of each customer relationship.

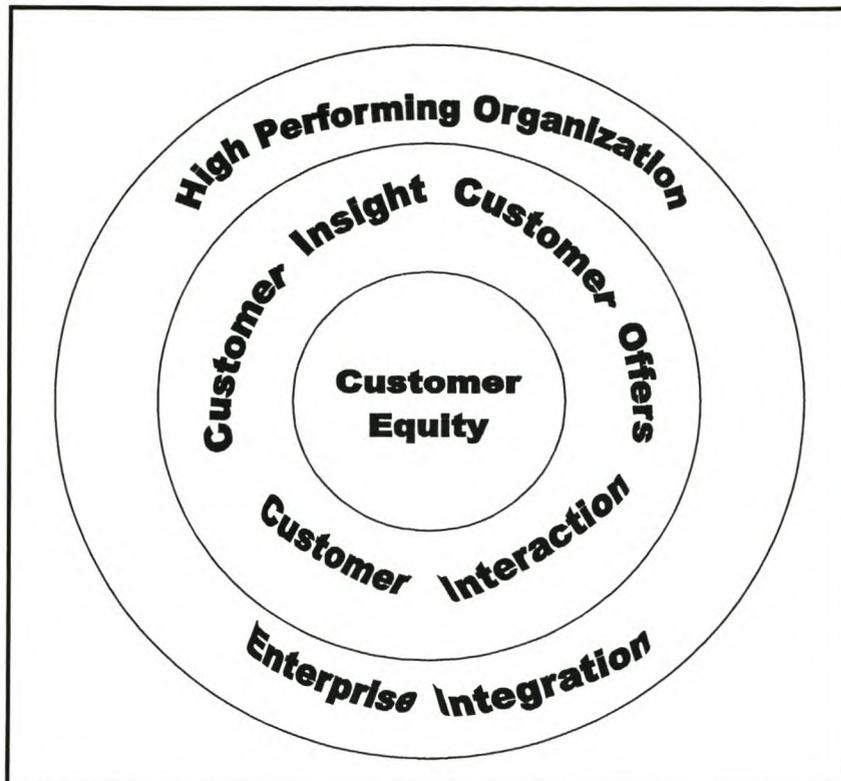
Customer equity thus becomes a measure of the long-term compatibility between an enterprise and its customers and the profits this relationship could create for the enterprise.

In order to build customer equity the enterprise is required to move from being an “inside-out” to an “outside-in” organisation. This implies that the organisational focus should shift from the historic delivery of products through fragmented customer interaction to a more holistic approach of delivering consistent experiences across all delivery and interaction channels.

The aim of an enterprise should consequently be to have an end-to-end view of all customer interactions. This in turn should result in processes that transcend departmental barriers and silos and provide a complete and coherent picture of all the interactions between the enterprise and each customer.

The customer-driven approach suggested by Anderson Consulting requires certain capabilities which is represented in figure 2.3.

Figure 2.3 : Anderson Consulting CRM Model



Source : www.ac.com/services/crm/

Customer Insight: The customer-driven enterprise will know its customers better than it knows itself. This implies that the enterprise will know exactly with what customers it would wish to conduct business also what exactly it is that those customers would require of the company.

Customer Interaction: The key is to personalise each customer interaction regardless of the method of interaction. The emergence of the worldwide web has added another dimension to customer interaction and the challenge is to provide a consistent experience by knitting together all the possible channels of customer interaction. Companies should also develop the skills and technologies to enhance such various interaction channels.

High Performing Organisation: Key to the delivery of high quality and consistent interactions is the need for good quality personnel. Companies will have to focus not only on financial and structural capital, but will also need to be successful in attracting and managing human capital. This implies that the “outside-in” focussed enterprise will be developing, empowering and rewarding employees for quality interactions with customers.

Enterprise Integration: Once again it should be noted that CRM is not a stand-alone solution and that it is facilitated by integrating all areas of the business seamlessly. It is imperative that all areas of the business focus on delivery to the customer, as the failure to do so will result in escalating costs and a decline in customer satisfaction. Enterprise integration is as much a case of organisation design as one of information systems design.

The Anderson Consulting model provides insight into the four activities required to increase customer equity in the enterprise. Customer equity is briefly described as being the sum of market share, customer share and lifetime value of the client base. The model is not clear as to how the activities are performed, in what sequence or how these are supported, but it clearly describes the required outcomes.

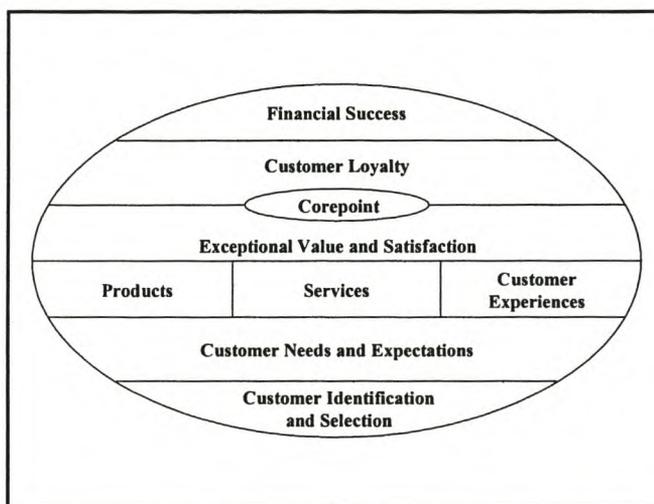
2.3.4 The IBM Model

It is interesting that IBM presents CRM as “customer relationship management – the next generation ERP” (Von Ruben, 1999). This implies that IBM may view CRM as an extension of the earlier ERP technologies. In the IBM model the role of CRM is to

bring the customer in contact with the enterprise's entire resources and to provide the mechanism for seamless interaction with the customer.

The graphic presentation of the IBM model, as shown in Figure 2. 4, suggests that the first step in the process of CRM is the identification and selection of the correct customers and then to understand the selected customers' needs and expectations. The enterprise is then in a position to align its products, services and customer interaction to meet the individual expectations. These three steps are pre-requisites for value creation and, therefore, customer loyalty. It is further suggested that financial success is built on this customer loyalty.

Figure 2. 4 : IBM CRM Model



Source : Von Ruben, 1999

It comes as little surprise that the IBM model suggests the use of some technology platform to tie together the various customer front-end activities and also product management and back-office administration. The suggestion is that CRM should open

the enterprise to effectively capture the inputs of customers and to then use these inputs in product and service delivery. Whilst this model does not contribute any additional components of CRM other than those already mentioned, its commercial viability serves as confirmation of the views expressed in the academic literature on the topic of CRM.

2.4 Customer Portfolios

From the discussion of the approaches to CRM it is quite apparent that some effort is required in the implementation of CRM, whether that may entail the re-engineering of business processes, the implementation of new technologies or the changing of products to suit customer needs. In addition it is suggested by Peppers and Rogers (1997) that not all customers are equal, and this notion is supported by other authors (Simms, 2000, Stone, 2000, Buttle, 2000 and crmuk. co. uk).

It would thus stand to reason that the enterprise should not waste these efforts on unprofitable customers. The main issue seems to be that companies need to focus on a customer portfolio rather than on revenues from product sales (Stone, 2000).

2.4.1 Customer Portfolio Approach

The Customer Portfolio Approach (CPA) suggests that the enterprise may have some “bad”, but also some “good” customers. Whilst not much mention is made of the characteristics that make customers undesirable Stone (2000) suggests that “bad” customers may be those who steal from the enterprise (retail shrinkage), who do not pay

their debts to the enterprise (bad debt) and who are not able to explain their reasons for consistent complaining.

Simms (2000) suggests that the customer lifetime value is a portfolio of assets that provides a revenue stream in the future. Using the projected lifetime value of a customer it would be possible to categorise customers into four strategic groups (Buttle, 2000) :

- **Divest** – these are the customers with no current value and who will also not have any future value to the enterprise.
- **Re-engineer** – customers in this group are not currently profitable, but if the business processes or interaction with them are re-engineered they may become profitable in the future.
- **Invest** – this is the group of customers who have high current and future value to the enterprise.
- **Nurture** – in some instances customers may be profitable currently but have little future value. These customers may require nurturing strategies to re-energise the relationship.

From the discussion of the Customer Portfolio Approach it is clear that the challenge for the enterprise is to attract the correct type of customers and to retain those customers. It could be argued that the challenge would be to identify those customers who may be

attractive and profitable to the enterprise. This requires a brief discussion of the attributes that attractive customers may have.

2.4.2 Characteristics Of “Good” Customers

A great deal of emphasis has been placed on the long-term profitability of customers, but there may be some other characteristics that could make individual customers attractive to the enterprise. Stone (2000) has identified the following characteristics:

The moral fibre of customers may determine their attractiveness to the enterprise. It could generally be stated that customers who are law abiding could be deemed to be valuable to the enterprise.

Customers who are prudent and live within their means would generally be able to settle debts and pay for services. Punctuality is the characteristic that increases the probability of timely payment of bills. It may also relate to the dependability of the customer.

Customers who are responsive to targeted marketing and other means of communication may well be attractive to the enterprise. This characteristic could be combined with the propensity to ignore those messages that do not contain the required appeal.

Finally “good” customers could also be described as those who have sober habits, who have healthy lifestyles and who observe the rights of others in society. They will only complain when it is absolutely necessary and commend good products and services to friends.

It would stand to reason that the focus of CRM should be on the portfolio of desirable and attractive prospective and current customers of the enterprise.

2.5 Summary

The prominence of the topic of CRM raises the key question of what comprises the concept of CRM. A further issue is the extent to which CRM fits into the current business environment and what activities are included or excluded from CRM. Succinctly it is a question of definition and anatomy that needs to be answered.

From the literature no single definition or anatomical model emerged as presenting the answer to both anatomy and definition. The purpose of the chapter was to provide an overview of the perceptions of CRM in order to enhance the understanding of CRM. In this regard four models were presented, namely the customer value funnel, the SCOPE model, the Anderson consulting model and the IBM model.

The analysis in this chapter indicated that CRM starts by extracting information from the macro- and microenvironment and then funnels it through the organisation structure in order to create customer value.

The various parties involved in the value creating process were identified by the SCOPE model. It was indicated that these parties to customer value creation should be linked in a dynamic manner in order to act as a competitive network in the market.

The Anderson consulting model defines the concept of customer equity as the intrinsic value of the enterprise's customer base. It is posited that customer insight, customer interaction, a high performing organisation and enterprise integration are key components of the CRM strategy.

The IBM model places significant emphasis on the implementation of appropriate technology to enhance CRM and views the latter as an extension of ERP technology.

Finally, attention was devoted to the concept of strategically significant customers, as these types of customers constitute the core of any CRM strategy.

CHAPTER 3 : THE RATIONALE FOR CUSTOMER RELATIONSHIP MANAGEMENT

3.1 Introduction

This chapter serves as a background to the study of CRM and provides the rationale for investing in CRM. The chapter outlines the potential contribution of CRM to customer value. It constructs a case for customer value creation as a major imperative for the modern enterprise. In addition to an analysis of the constituencies of customer value, it is demonstrated that CRM is a prerequisite to enable these value drivers.

A key influence on the way in which the enterprise interacts with customers in the modern economy is the ownership of the customer relationship. The new role of the enterprise in the market is described and this leads to the discussion of the role of the customer in co-developing solutions.

For the purpose of providing a rationale for the implementation of CRM, the analysis culminates in a description of the notion of customer intimacy. In conclusion this chapter indicates that the enterprise can only survive in the long term if it is able to compete in the arena of customer value creation. It is also shown that CRM is a strategy that underpins most, if not all customer value creation initiatives in the enterprise.

3.2 Customer Value Creation

It is suggested by Woodruff (1997) that the primary purpose of the enterprise is to create value for its customers and that without this capability the enterprise has no *raison d'être*, and will also fail. This notion is supported by Naumann (1995) who states that the priority objective of the enterprise should be “to maximise customer value and strive to increase value continuously.” There is also proof that customer value creation pays as it costs about five times as much to recruit a new customer as it does to keep an existing one (Manning, 1989, Quinn, 1992).

The traditional view of value creation has assumed that value is developed by the enterprise and delivered to the customer (Fitchett, Saren & Tzokas, 1999). Certain authors hold a contrary view, contending that value is co-created by the customer and the enterprise (Norman & Ramirez, 1993 and Prahalad & Ramaswamy, 2000). The latter view will be discussed in section 3.3.1 of this study.

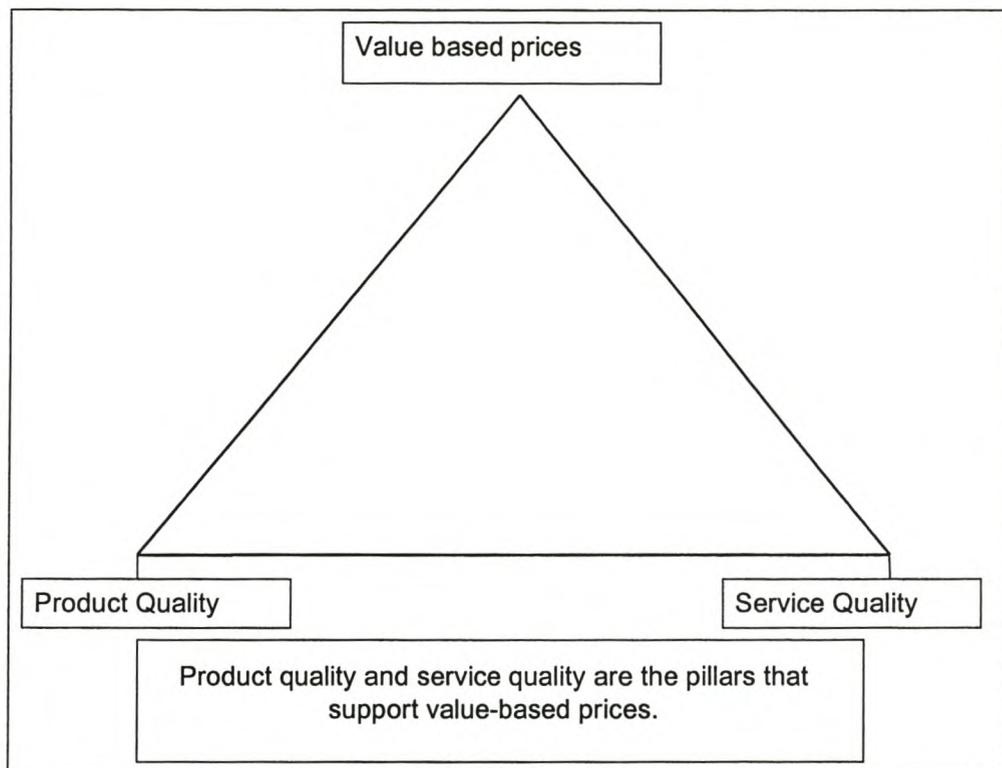
3.2.1 The Customer Value Triad Model

Naumann (1995) contends that the concept of customer value is a simple one but, as the customer defines it, it is inherently ambiguous. It is suggested that customer value is created by providing product quality, service quality and value-based prices. Only when the expectations of customers are met or exceeded in achieving these three areas, is customer value delivered (Naumann, 1995).

In the customer value triad, presented in Figure 3.1, product quality and service quality support value-based pricing. It is then reasoned that, should one of the supporting

constituents not perform according to customer expectations, the value based price will be detrimentally affected.

Figure 3. 1 : The Customer Value Triad



Source : Naumann, 1995

In this model it may be important to consider that value-based pricing is regarded as a “game” by game theorists (Nagle & Holden, 1995). Consequently pricing policy is not only determined by the economic value of the product or service, but also by the way in which customers respond to it. The purpose of value-based pricing, therefore, is that the enterprise should profit by capturing more value (Nagle & Holden, 1995).

Treacy and Wiersema (1993) suggest that the notion of the enterprise selling value is correct but that customers have developed new ways of defining value. The modern

customer has an expanded view of value that goes beyond the quality and price paradigm. The new value paradigm now includes convenience of purchase, after sales service and dependability of the product or service (Treacy & Wiersema, 1993).

It is further suggested by Treacy and Wiersema (1993) that companies that are industry leaders, typically focus on one of three areas of excellence: operational excellence, product leadership and customer intimacy whilst maintaining minimum standards in the remaining two constituents of customer value.

In the review of literature on customer value creation it has become clear that certain principles underpin the constituents of customer value. The following section is a short categorisation and summary of the key principles that underlie customer value creation.

3.2.2 Principles of Customer Value creation

There are five generally accepted principles of customer value creation found in the literature. These principles are:

- **Principle 1 : Enterprise activities should enhance value.**

According to Manning (1989) there are two imperatives in value creation and these are increasing customer value and containing cost to the enterprise. The customer defines the required product and service quality coupled with a reasonable price for the utility offered (Naumann, 1995). It is, therefore, suggested that the enterprise should not attempt to guess what customers expect, but rather implement an

organised system of capturing customer expectations of product quality, service quality and reasonable pricing (Naumann, 1995).

- **Principle 2 : Benchmarking customer opinion.**

Naumann (1995) suggests that customers' value perceptions are formed relative to the offerings of competitors. It would consequently be necessary to survey and benchmark the value perceptions of not only the enterprise's own customers but also those customers who conduct their business with competitors. In this fashion the enterprise will act as a systemic organism with continuous design and redesign of its business systems (Norman & Ramirez, 1993).

- **Principle 3 : Customer value is a moving target**

Customer expectations are dynamic and ever changing with a resultant need to continuously update customer information (Cannie & Caplin, 1991). It is posited that customer satisfaction levels would only be maintained if the enterprise should engage in a continuous process of generating new customer knowledge (Naumann, 1995).

- **Principle 4 : Customer value creation involves all parties in the channel**

This implies that all parties – from suppliers to intermediaries – should be involved in the same quality process for delivering value. To demonstrate this the Toyota Lexus division serves as an example :

The Toyota Lexus division adopted a customer-driven approach based on all three legs of the value triad. Lexus emphasised product quality by utilising the six sigma approach to manufacturing quality. Service quality was achieved by treating each customer as a guest in one's home and by pursuing person-to-person relationships. Lexus put its product and service on the market at a price that was competitive with its closest rivals and integrated the total project with the theme of a: "...Relentless Pursuit of Perfection" (Naumann, 1995).

- **Principle 5 : Total Enterprise commitment.**

The fifth and final principle of customer service delivery is that all entities and parties in the enterprise should be committed to maximise customer value. This commitment should be on all organisational levels, from the executive to the sales representative to the administrative clerk (Manning, 1989). This implies an integration between traditional departments such as the sales, marketing and customer service departments (Naumann, 1995).

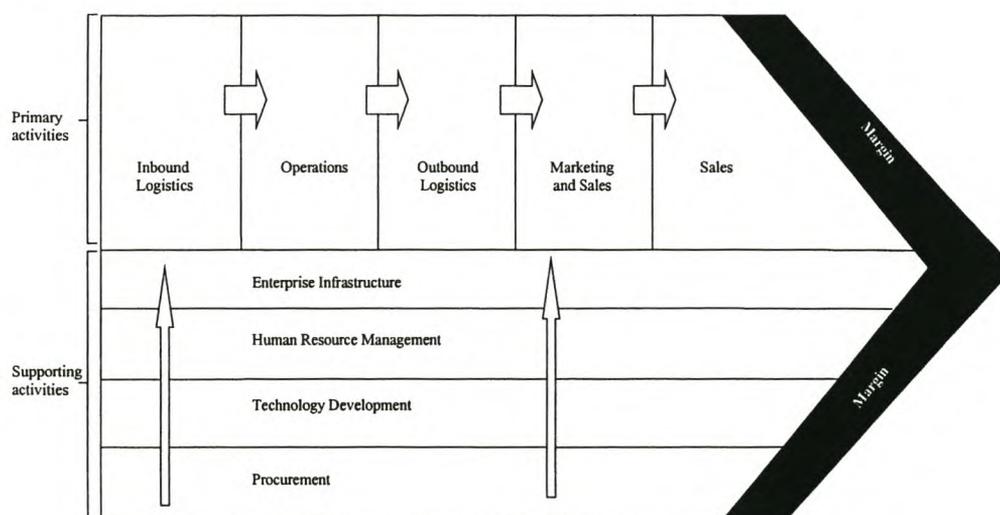
This section outlined the constituent parts of the customer value creation process and included the principles that underpin this process. From this section it would be possible to commence with a more detailed analysis of the value creation process and the value chain from the customer's perspective.

3.3 The Customer Value Chain

The concept of a value chain was conceived by Porter (1985) and value was defined as the amount that customers were willing to pay for what the enterprise provided to them. Porter further identified two criteria by which customers judged value. “Use criteria are specific measures of what creates buyer value. Signalling criteria are measures of how buyers perceive the presence of value” (Porter, 1985).

The value chain proposed by Porter comprises of value creating activities, broadly categorised into primary activities and support activities. Primary activities could include inbound logistics, operations, outbound logistics, marketing and sales and service. These primary activities could be supported by the support activities, such as enterprise infrastructure, human resource management, technology development and procurement (Porter, 1985).

Figure 3. 2 : Value Chain of the Enterprise

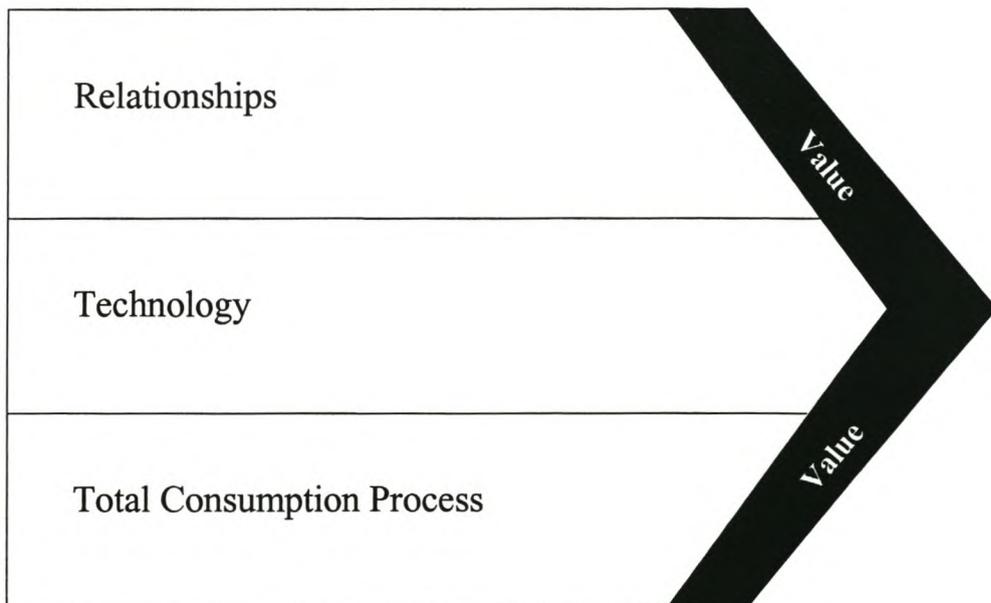


Source : Porter, 1985

Criticism of the Porter value chain is that it depicts a functional division of the enterprise and that this has limited relevance in an economy where the emphasis is increasingly placed on enterprise wide customer focus (Tzokas & Saren, 1997).

Tzokas and Saren contend that the customer should be viewed in the context of the market place and that a correspondent value chain could be conceptualised. It is stated that customers engage in the market place with primary activities such as the total consumption process and support activities such as relationships and technology (Tzokas & Saren: 1997).

Figure 3. 3 : The Customer Value Chain



Source : Tzokas & Saren, 1997

The total consumption process is described as comprising of activities that vary from awareness to search and evaluation to the functional use and symbolic consumption of

the product. Technology is described as including human technologies such as culture, and material technologies such as products (Tzokas & Saren, 1997).

Relationships are not only the relational links between the individual and other groups, but also include the relationship with the enterprise. In this regard reference should be made to Gummesson's taxonomy of relationship types and its impact on the customer's behaviour (Gummesson, 1994). This description of relationships provides a platform whence the customer may be viewed in a holistic perspective. In the context of the Customer Value chain it could be stated that the nature of the relationships in which the customer is engaged, supports the manner in which products and services are consumed and consequently the manner in which value is derived and experienced.

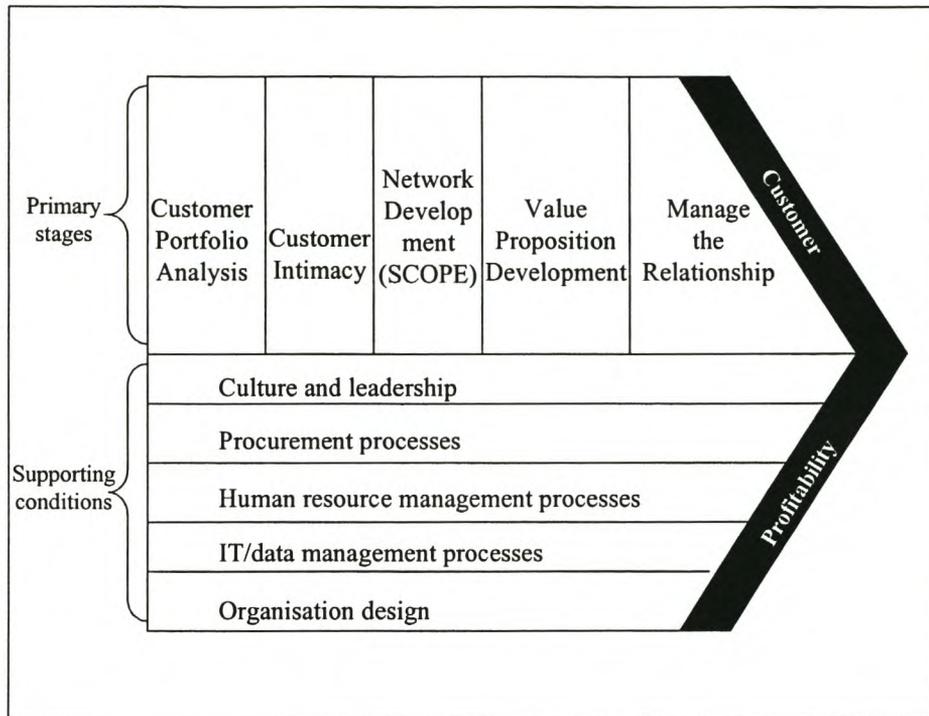
3.3.1 The CRM Value Chain *

The CRM value chain model has been tested in a number of business-to-business (B2B) as well as business-to-consumer (B2C) environments. The CRM value chain is presented as a tool to assist in determining the value that a CRM strategy may add to the enterprise (Buttle, 2000).

The purpose of the CRM value chain is to ensure that the enterprise builds long term relationships with strategically significant customers. At its most advanced this model presents a framework through which the primary questions such as "who should we serve?" and "what should we serve them?" and "how should we serve them?" may be answered (Buttle, 2000). The CRM value chain model is represented graphically in Figure 3. 4.

* *The CRM Value Chain was developed by Buttle (2000).*

Figure 3. 4. : The CRM Value Chain



Source : Buttle, 2000

The five steps to customer profitability are defined as customer portfolio analysis, customer intimacy, network development, value proposition development and managing the relationship. These steps can be seen in Figure 3. 4 as the primary stages of the CRM value chain.

These steps could briefly be described as follows:

Customer Portfolio Analysis: This step acknowledges that not all customers are equal. This step forces the enterprise to identify strategically significant customers and to conduct client segmentation.

Customer Intimacy: This implies that the enterprise should start utilising the masses of data that are available on customers. This will in turn lead to a better understanding of customer behaviour.

Develop the Network: The assumption is that competition is not between companies, but rather between networks of companies, suppliers, investors and employees. The implication is that CRM implementation requires all partners in the network to commit themselves to the CRM strategy.

Value Proposition Development: The traditional point of departure would be that the product is the primary supplier of value. However, an increasing number of companies are finding that the value proposition revolves more about people, processes and service delivery. This stage should therefore focus on what combination of the building blocks of the total value proposition would be offered.

Managing the Relationship: The final stage requires the enterprise to re-align its processes and structures to be more conducive to managing customer relationships. Included in the re-alignment is the empowerment of front-line staff and the adjustment of the marketing function to include customer acquisition, customer retention and customer development plans.

The contribution of the CRM value chain is that it endeavours to logically tie in the sequence in which the previously identified value creating processes should be performed. The CRM value chain provides a logical flow of value creating processes to reach the ultimate objective of profitably managing the customer.

3.4 IKEA Case Study

IKEA is arguably the largest retailer of home furnishings in the world. It is a world-wide competitor in an industry where retailers rarely have more than a national network. The significance of the IKEA business is not only apparent in its more than 100 retail outlets world-wide, but also its more than 1800 suppliers in 50 countries and its vast warehouse network.

What transformed IKEA from a small Swedish mail-order company to be such a giant is, at first glance, probably the low cost and low price offerings to its customers. The less obvious cause for IKEA's phenomenal growth may be found in the way this enterprise transformed its business processes in order to enable customers to co-create value.

The co-creation of value is the result of the re-defining of roles, relationships and organisational practises of the furniture business. The most prominent aspect in this regard is the way in which IKEA re-defined its relationship with customers. Customers who agree to take on certain tasks which were traditionally performed by the retailer – such as delivery and assembly of furniture – will in turn receive the assurance that IKEA will consistently deliver well designed products at lower prices.

In addition to the delivery of technically well designed furniture, IKEA offers customers other services such as supervised childcare, playgrounds, cafés and restaurants. In this way IKEA serves not only as a furniture store, but also as recreation destination. These services could be described as amenities in the traditional sense, but in the IKEA business model they perform a more significant role. It is IKEA's strategic intent to

understand how customers may create their own value. IKEA's goal is to mobilise their customers' value-creating activities.

It is clear that the IKEA business model facilitates the congruence of products and services. The question arises: does IKEA sell products or services? The answer would probably be that the distinction between physical products and intangible services is breaking down. Very few offerings could be defined as one or the other anymore. It would seem as if offerings increasingly involve a complex mixture of product and service.

IKEA's value innovation made possible a transformation in the way that value is created. Rather than presenting a classic value chain as the core of the IKEA business, it is possible to argue that the re-arrangement of roles of customers and suppliers has created a network in which IKEA performs a co-ordinating role in the total value creating process.

From the business logic presented by the IKEA case study follows three strategic implications for modern business (Norman & Ramirez, 1993):

- In a new business model where value no longer occurs in sequential chains but rather in complex networks, the role of business is changing. A possible new role for the enterprise would be to mobilise customers to create value for themselves.

- If the key to co-creating value is to mobilise customers then the only source of competitive advantage is to conceive a totally new value system. This implies the re-arrangement of business roles, relationships and activities.
- Finally, as value offerings become more complex and varied the need arises for more complex relationships. It could be argued that attractive offerings could involve customers, suppliers, allies and business partners in ever changing combinations. This would result in the enterprise's strategic task being the reconfiguration of its business systems and relationships.

3.5 The New Role of the Enterprise

The preceding discussion on customer value creation and the IKEA case study makes a compelling case for a changed role of the enterprise in creating customer solutions. Vandermerwe (1996) confirms this notion and suggests that the era of linear logic is now past. The value of a product can no longer be assumed to be the accumulation of what went into making and moving the product.

3.5.1 Customer Ownership

Value has been defined as the utility that the customer obtains from consuming or using a specific product (Tzokas & Saren, 1997). Customers also derive utility or value from products over a period of time rather than at a specific point in time only (Vandermerwe, 1996).

From this follows that customers “own” themselves and that the enterprise cannot claim to “own” the customer. The ability of the enterprise to “own” customers is consequently directly linked to its ability to extract value from products for customers rather than just pushing new and improved products through the market (Vandermerwe, 1996).

It also emerges that it is immaterial what the input into a product is, because the focus is in reality on extracting value for customers. This ability to extract customer value could be viewed as the only determinant of the customer’s lifetime value to the enterprise.

3.5.2 The Enterprise as Gateway

It could be argued that if the focus for the enterprise is to provide solutions to customers, then this new enterprise would in effect sell “applied performance” (Vandermerwe, 1996). The concept of applied performance is described by a executive of Grace Chemicals :

“Customers don’t want speciality chemicals (to treat their water). They can get that from one of several suppliers. They want to turn on the tap and get the correctly treated water at the correct time and price in the correct quantity and at the correct temperature. ” (Vandermerwe, 1996).

It follows that the enterprise becomes a gateway by extending its solution beyond the boundaries of the core product or service. If the enterprise cannot deliver specific components of the solution, then that component could be delivered by another partner in the value delivery network.

According to Vandermerwe (1996) the following characteristics form an integral part of the enterprise that acts as a gateway to customer value delivery:

- They focus on pro-actively delivering new value creation opportunities to customers, rather than focussing on reactive problem solving. This would imply the ability to create new market space by exploiting new value curves and looking across industry boundaries to complementary and substitute products for value delivery (Kim & Mauborgne, 1999).
- Various solutions and components of solutions will flow through the enterprise. The enterprise acting as gateway, would add its value to these solutions and produce a total solution for its customers.
- Various solutions are connected and integrated in the enterprise and this integration is extended to include other companies and industries in order to provide a total customer solution.
- They become a nucleus in an extended network or web of customer value creation and move away from merely being a dominant partner in a linear supply chain.

It may be concluded that the enterprise, in fulfilling its new role as gateway, needs to be particularly competent in facilitating the flow of information between its customers externally and the internal organisation of the enterprise. The ability of the enterprise to extract meaningful information from its interaction with customers will determine its ability to deliver enhanced value offerings, even if those offerings should fall outside the operational capability of the enterprise. It follows that the enterprise should become

adept at capturing the correct information from every customer interaction and that it should be able to extract and present that information for future use.

3.6 Customer Competence and Collaboration

The realisation that product features are subordinate to the customer experience should change the way in which product development is approached. In personalising customer experiences, there should be some emphasis on the delivery of a large variety of customer solutions. In this regard it would be important to distinguish between delivering a variety of customer experiences as opposed to a variety of products (Prahalad & Ramaswamy, 2000).

It is suggested that customers are given the opportunity to create their own solutions by enabling future modifications as requirements evolve over time. This implies the harnessing of customer competencies in order to create and deliver value.

3.6.1 Customer Competence

The utilisation of customer competence is illustrated in the software industry where Microsoft used customer input on its beta version of the Windows 2000 platform to refine the product before being released on the market. Another example may be the development of the Linux operating system which was co-created by a number of clients in an interactive Internet environment.

Harnessing the competencies of the customer is probably not an easy task considering that most companies are still trying to come to grips with their internal competencies.

Prahalad and Ramaswamy (2000) suggest the following realities in harnessing customer competence :

- *Encouraging Active Dialogue:* It would appear that the dialogue between the enterprise and the customer is increasingly becoming a dialogue between equals. Active dialogue creates the opportunity to extract information in subtle ways and through the evolution of the dialogue itself.
- *Mobilising Customer Communities:* The importance of customer communities could be illustrated by the existence of web forms and chat communities. By tapping into these communities the enterprise could leverage from the energy of spontaneously formed customer groups. The case is proved by the participation of Phillips Electronics in a website set up by one of its customers. The website, in exploring ways to make the Phillips product more user friendly, created value for both Phillips and its customers. It is also suggested by Prahalad and Ramaswamy (2000) that the major benefit of customer communities may be the speed with which they can be mobilised. Given participation by the enterprise, this presents a powerful way of conveying a specific message to customers.
- *Managing Customer Diversity:* As the enterprise embraces the market as a forum the reality, faces in reality a world of increased customer diversity. Two determinants of this customer diversity may be technology and the understanding thereof and also the increasing globalisation of business.

- *Co-Creating Personalised Experiences:* It would be important to remember that the product is an object regarding which the customer may have certain experiences. Customers increasingly have a need to shape those experiences individually or with the help of experts or other customers.

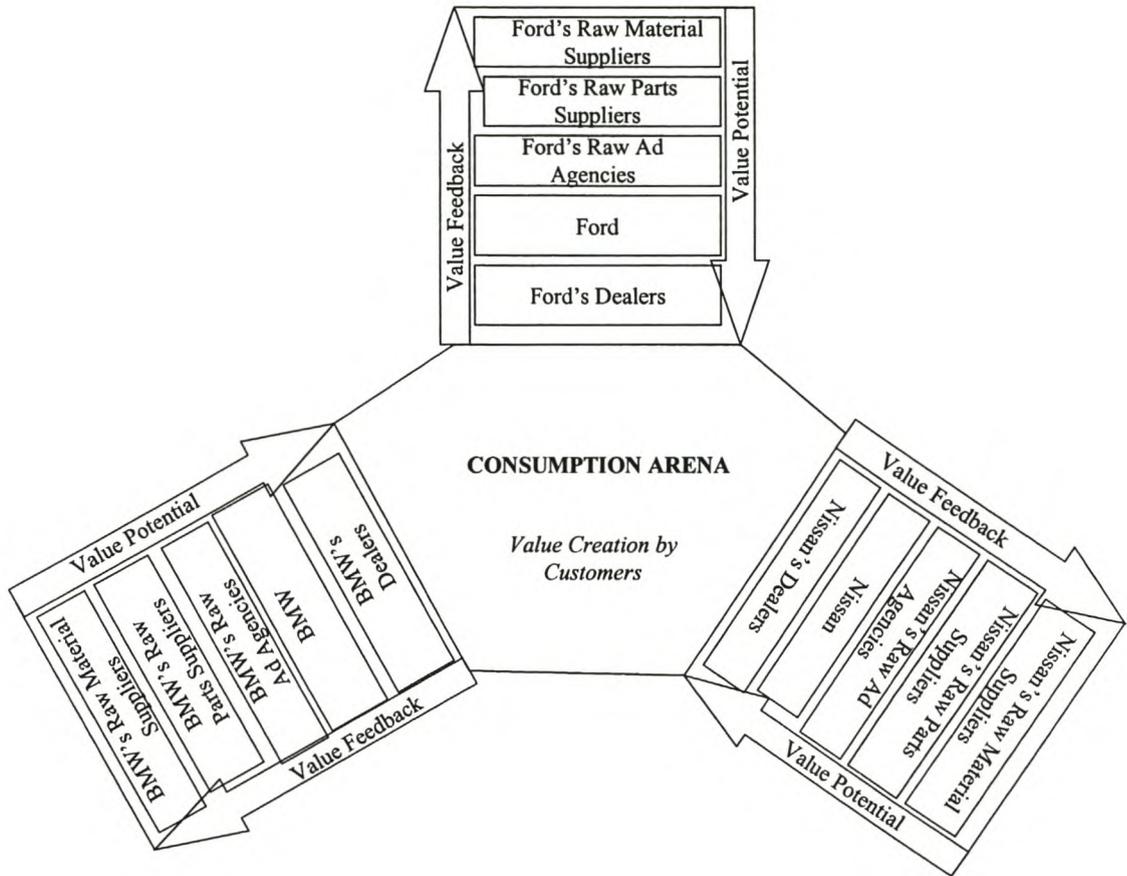
Following from the above it could be argued that the enterprise needs to find ways of extracting and leveraging some knowledge from dialogue with customers and by participating in customer forums. The enterprise will also have to manage increasing levels of customer diversity and should create the space in which customers may create their own value.

3.6.2 Customer Collaboration

From the discussion of the enterprise as a gateway, it follows that rival firms may engage in relationships in order to add value to the customer. It is further argued that value is only realised when the customer utilised the offering. Fitchett et al. propose that – just as the enterprise’s value adding activities creates greater value potential for the customer – the customer’s value creation activities feed back to the enterprise. This enhances the value creation process by the enterprise and represents a form of customer collaboration. This interaction is presented graphically in figure 3. 5.

The manner by which the enterprise could extract information from the proposed customer consumption area would be of particular interest for the purpose of this study. It could be argued that relationships revolve around the reciprocal flow of information between the participants in the relationship. CRM could, therefore, be used to facilitate the flow of information between the customer consumption area and the enterprise.

Figure 3.5 : A Framework for Customer Collaboration



Source : Fitchett et al. (1999)

3.7 Customer Intimacy

Treacy and Wiersema (1993) describe customer intimacy as the combination of detailed customer knowledge and operational flexibility. This combination could enable the enterprise to respond to changing customer requirements, thereby engendering tremendous customer loyalty. The enterprise that is customer intimate could discover

unsuspected problems, detect unrealised potential and create considerable dynamic synergy with customers (Wiersema, 1996).

Responding or pre-empting customer needs may be expensive to the enterprise, but the organisation that is aware of the customer's lifetime value would be willing to make the investment required for long term success.

A principle that is seen as a prerequisite for engendering customer intimacy is the understanding of the difference between the profitability of a transaction against the lifetime value of a customer. It could be reasoned that it would be important for the enterprise to identify and differentiate between the different levels of lifetime value on an individual customer level.

In order to create customer intimacy, it may be necessary for the enterprise to create the appropriate organisational structure and to shape the appropriate supportive corporate culture. In addition, the appropriate information systems need to be developed and leveraged, and finally motivated people are required to implement the strategy (Wiersema, 1996).

Achieving customer intimacy requires that customer information could be accessed and more importantly, be updated irrespective of where the data is needed or is generated. This implicitly requires a framework that reaches beyond functional departments in the enterprise. Wiersema (1996) suggests that within the customer-intimate enterprise, information technology and systems should empower the learning process. It is further

suggested that the more the enterprise has learned about the customer, the better its solutions and results are bound to be.

3.8 Summary

The objective of this chapter was to provide the rationale for the investment in a CRM strategy. The discussion was initiated by a description and analysis of customer value. It was suggested that customer value creation and customer intimacy was an imperative for the enterprise and that customer relationships and therefore CRM, formed an integral part of customer value creation and customer intimacy.

It was demonstrated that the traditional view of the value chain could be expanded upon to create a customer value chain and ultimately a CRM value chain. The CRM value chain identifies and describes the steps required for a CRM strategy.

To illustrate the new way of customer value creation a case study, involving IKEA, was analysed. It demonstrated the new role of the enterprise and the need not only for more complex relationships with customers but also the need to manage these relationships. It was concluded that CRM had pertinence in the management of complex customer relationships.

The IKEA case study indicated that the enterprise plays a changing role in customer value creation. The enterprise as a gateway pre-supposes the ability of the enterprise to act as a conduit for information flow between the customer and the internal organisation and to underline the relevance of CRM.

Customer competence and collaboration were shown as key sources of competitive advantage and the extraction, capture and presentation of information underpin the ability of the enterprise to utilise customer competence and to enter into customer collaboration arrangements. CRM assumes an important role in enabling customer collaboration and mobilising customer competence.

Customer intimacy was finally presented as the key determinant of the lifetime value of customers. It was suggested that the enterprise needs to pre-empt and respond to changing customer requirements in order to engender customer loyalty. The potential contribution that CRM could make to the enterprise was thus confirmed.

CHAPTER 4 : THE KNOWLEDGE CREATION AND LEVERAGE PROCESS

4.1 Introduction

The present chapter will critically discuss the knowledge creating process and knowledge leverage within the context of accepted knowledge management practice. The analysis of knowledge creation is undertaken specifically because CRM strategy encompasses the management of customer information and knowledge. CRM is viewed as a recent development and an emerging information-intensive strategy which is organised around customer information that is seen as a key corporate knowledge asset.

In view of the objective of this study to indicate how a knowledge creation process enhances a CRM strategy, it is contended that knowledge should be captured, shared and re-used in order to create value. Before analysing the creation of knowledge one should consider the following characteristics of knowledge (McDermott, 1999):

- Knowledge is a human act,
- Knowledge is the residue of thinking,
- Knowledge is created in the present moment,
- Knowledge belongs to communities,
- Knowledge circulates through communities in many ways, and
- New knowledge is created at the boundaries of the old.

From this it follows that the leveraging of knowledge should involve a combination of human and information systems.

It is posited that knowledge is a source of competitive advantage and that the knowledge landscape within which the enterprise functions is continually changing (Roos, 1997). Evolution in the fast changing knowledge landscape requires of the enterprise to engage in knowledge creation, dissemination and embedding it in new products and business processes (Nonaka, 1991).

4.2 Categories of Knowledge

In determining the knowledge creation needs of the enterprise, it would be appropriate to initialise the process by determining the organisation's current knowledge position. Categorising what the enterprise needs to know in order to be competitive in its industry is not a simple undertaking, but the following classification could assist in the process (Zack, 1999).

- *Core Knowledge:* This category of knowledge is defined as the minimum level of knowledge required by the enterprise to simply participate in the "game". It is not posit that this level of knowledge would ensure the long term competitiveness of the enterprise, but it could act as an entry barrier to new participants.
- *Advanced Knowledge:* In the advanced knowledge category the enterprise may generally have the same level, scope and quality of knowledge as its competitors but the specific content may be differentiated. The options in this instance would be for

the enterprise to compete head-on by simply having more knowledge or alternatively by creating a high level of differentiated knowledge. Probst (1998) further refers to strategic knowledge as a determinant of the enterprise's competence portfolio.

- *Innovative Knowledge*: This is the category of knowledge that enables the enterprise to differentiate itself from the competitors. It is the knowledge that facilitates the moving and breaking of industry boundaries – it enables the enterprise to change the rules. Innovative knowledge may lead to new methods of conducting business.

In addition to the above categories of knowledge, one should add that knowledge is not static and that current innovative knowledge will quickly become the core knowledge of the future (Zack, 1999). This infers that the enterprise would be required continually to acquire and create new knowledge.

4.3 Model of Knowledge Creation

The following section will analyse a model of knowledge creation in the enterprise as presented by Nonaka (1991) and expanded by others, such as Von Krogh (1998) and Nonaka, Reinmoeller and Senoo (1998).

It is suggested that all knowledge is initiated at the individual level and it is noted that innovations and new products are generated by individuals and implemented by the enterprise. It follows from the above that a key activity of the knowledge creating enterprise would be the transfer and sharing of individual knowledge in communities

(McDermott, 1999). Von Krogh (1998) further elaborates on this sharing of knowledge and posits that the initial sharing of knowledge, experience and practises among team members forms the first stage of the knowledge creation process.

In defining the knowledge creation process, Nonaka (1991) distinguishes between explicit and tacit knowledge. Explicit knowledge is presented as the formal, systematic and quantifiable data, codified procedures and universal principles of the enterprise. The measurement of explicit knowledge would generally be confined to quantifiable factors such as increased efficiency, decreased costs and an improved return on investment.

Nonaka (1991) presents tacit knowledge as having a strong cognitive dimension and it thus relies on mental models and beliefs that are so ingrained that it is difficult to articulate them. Von Krogh (1998) suggests that the cognitive model considers knowledge to be a representation of actual objects or events. Therefore, knowledge is universal and separate cognitive systems should have the same representations of the same object or event. In this context knowledge creation would be the development of increasingly complete representations of objective reality (Von Krogh, 1998).

It is submitted that in the development of increasingly accurate representations of objective reality the enterprise and individual would need to share and disseminate knowledge in its various forms in order to create new knowledge.

4.3.1 The Knowledge Spiral

Nonaka (1991) indicates that the knowledge conversion process is central to the knowledge creation process. Knowledge creation is further presented as a knowledge spiral through which knowledge is not only converted between the tacit and explicit domain, but is also transferred between individuals and communities. The knowledge conversion process, according to Nonaka (1991), is divided into the following four basic phases:

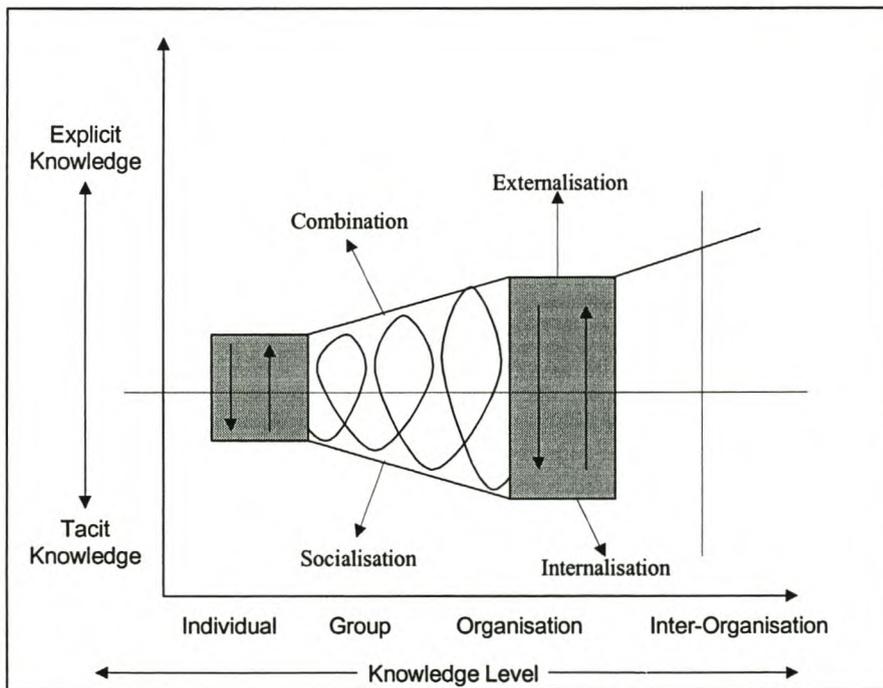
- *From Tacit to Tacit* : It is possible for an individual to share tacit knowledge with another individual through observation, imitation and practise. In sharing this tacit knowledge, it is internalised by the “learning” individual. The tacit to tacit phase of knowledge creation is rather limited in its ability to create useful knowledge as it lacks systemic insight and thus cannot be leveraged by the enterprise.
- *From Explicit to Explicit* : Discrete pieces of information could be combined to present a new body of information. An example may be the collection of customer information in separate databases such as a demographic and a transactional database. When these sources of information are combined in a new report, knowledge is synthesised but the actual knowledge base is not expanded.
- *From Tacit to Explicit* : It is the exchange between tacit and explicit knowledge that is a powerful source of new knowledge. During the conversion from tacit to explicit the foundation of the tacit knowledge is articulated, thus allowing it to be shared with the rest of the enterprise. An example of this may be the marketer or sales

person who – through the tacit knowledge accumulated over years – is able to develop a new strategy for selling or marketing products and services to customers.

- *From Explicit to Tacit* : When explicit knowledge is shared in the enterprise it is also internalised by other individuals in the enterprise. This process of absorbing explicit knowledge may contribute to the broadening, expansion and reframing of the individual’s tacit knowledge base.

It is suggested that in the knowledge creating enterprise, these four phases exist in dynamic interaction with each other. The continuous process of conversion of knowledge leads to the creation of a knowledge spiral where knowledge is created on ever increasing levels of complexity, as represented in figure 4.1.

Figure 4. 1 : Spiral of Organisational Knowledge Creation

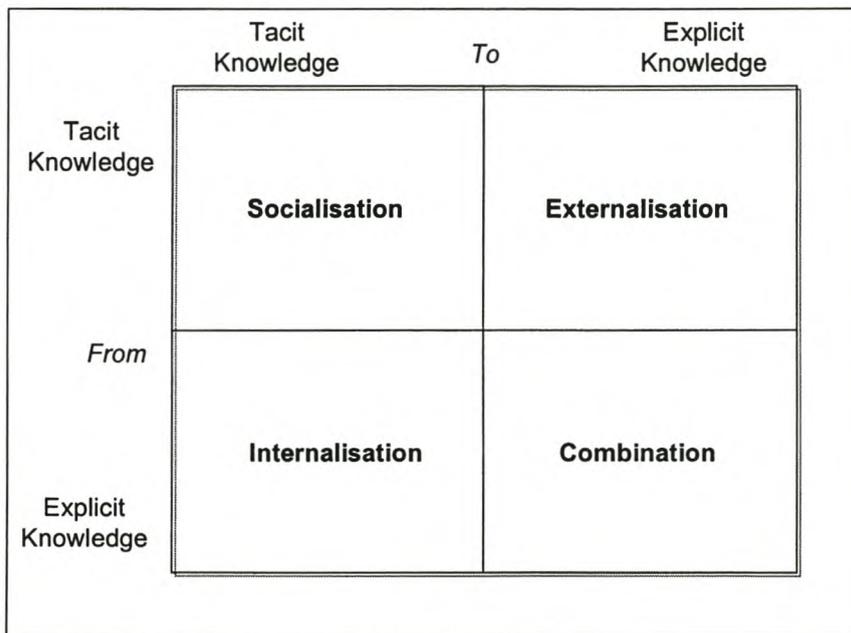


Source: Grant, 1998

4.3.2 Methodology of Knowledge Creation

The SECI (socialisation, externalisation, combination and internalisation) model represented in figure 4.2, describes the four conversion modes of knowledge. Each of the four modes is a process of transcendence as it involves the change in individuals and communities alike (Nonaka, Reinmoeller & Senoo, 1998).

Figure 4. 2 : Modes of Knowledge Conversion



Source: Grant, 1998

Socialisation is the process of sharing of experiences in order to exchange tacit knowledge between individuals and the enterprise and – through the development of culture and shared beliefs – between the enterprise and the individual. The socialisation process is facilitated by the concept of redundancy as this encourages dialogue and communication. The common cognitive ground established through this dialogue and interaction, facilitates the transfer of tacit knowledge

Externalisation is the articulation and translation of tacit knowledge into forms that others may understand. Dialogue, listening and contribution by participants for the collective benefit, form the core of the externalisation process. According to Nonaka et al (1998) the externalisation process is supported by metaphors and analogies.

A metaphor is defined in the context of knowledge creation as the figurative language through which individuals with different experiences and contexts are enabled to intuitively understand something. A metaphor creates a paradox by combining more than one concept in one expression. This paradox in turn gives rise to the creative process as the search for meaning will reconcile conflicting issues. This is viewed as the first step of making the tacit explicit (Nonaka, 1991).

Analogy is viewed as a structured method of reconciling contradictions and making distinctions. In practise analogy is a useful mechanism through which the contradictions created in metaphor could be harmonised. In this regard analogy could be viewed as the link between imagination and logical thinking (Nonaka, 1991).

The combination process is the conversion of explicit knowledge held by individuals to explicit knowledge at the organisational level. Fragmented knowledge is diffused at the organisational level and is systemised into possibly more complex sets of knowledge. This knowledge is then transferred back to the individual for use. Grant (1998) suggests that enterprise information systems play a key role at this level.

Internalisation is the conversion of explicit knowledge, whether at individual or organisational level, to individual tacit knowledge. Learning by doing and training is seen as methods of embedding tacit knowledge, while simulations and experiments are seen as appropriate ways to facilitate internalisation.

4.4 Barriers to Knowledge Creation

It is noted by Nonaka (1991) that the articulation of tacit knowledge requires the knowledge worker to commit and show his personal identity. The reason may be found in the cognitive model of knowledge and the suggestion that tacit knowledge embodies personal beliefs and mental models of the individual. Therefore, it is concluded that when tacit knowledge is articulated it may represent a translation of the individual's vision of the world.

This notion is supported by Von Krogh (1998) and is expanded by the suggestion that knowledge creation puts particular demands on the relationships between individuals in the enterprise. Untrustworthy behaviour, excessive competitiveness and unequal sharing of knowledge are cited as imbalances that may endanger the knowledge creation process. Good relationships are required to purge the enterprise of factors such as distrust, fear and dissatisfaction, which in turn create an environment conducive to knowledge creation.

In sharing tacit knowledge, the individual is exposed to a justification process in which personal true beliefs have to be defended and justified. It is suggested that this justification process is a prerequisite for the initiation of the knowledge creation process and four barriers to public justification are noted (Von Krogh, 1998).

- *Need for legitimate language* : In order to make knowledge explicit, a legitimate language that is understood by all is required. This language needs to be acceptable to all team members in the enterprise. In a highly innovative environment a new vocabulary needs to be created to assist in the articulation of complex concepts.
- *Stories and habits* : Stories are described as the legends of product launches, new service offerings or the implementation of a new technology that failed, all of which may circulate within the enterprise. These stories contain a powerful deterrent for innovative thought and the articulation of such thought. Habits refer to the common occurrence of: “this is the way we do things around here”. Habits present a barrier to new ways of doing business and prohibits the implementation of new concepts.
- *Formal procedures* : Formal procedures may be viewed as the embodiment of experiences and successful solutions to complex challenges. Formal procedures could, however, also be viewed as directing communication, defining planning steps and setting the criteria for performance measurement and control and may thus militate against public justification.
- *Enterprise paradigms* : A fundamental barrier to public justification are the paradigms of strategic intent, mission and vision that may exist in the enterprise. It would be a challenge for individuals to justify beliefs which run contrary to the ruling paradigms.

Overcoming the four barriers to public justification presents a managerial challenge. The barriers may mean that great ideas and innovations are never implemented or converted to products or services. The enterprise culture that may evolve from the strong presence of the barriers, may cause knowledge workers to become passive participants who would rather not contribute to any innovation. Enabling conditions that may facilitate knowledge creation are described as new systems, new structures or care in organisational relationships (Von Krogh, 1998).

4.5 Leveraging Knowledge

Knowledge has been identified as a source of competitive advantage and yet it is suggested that there is a variance between what organisations do and what they know (Pfeffer & Sutton, 1999). It is suggested that successful organisations should be able to create and gather knowledge and then have the ability to distribute and cross-fertilise knowledge across individuals and working groups (Inkpen, 1996). The following section will firstly analyse the principles of taking action in closing the knowing-doing gap (Pfeffer & Sutton, 1999). Thereafter the guidelines for the implementation of the principles of knowledge leverage is presented.

4.5.1 Principles for Knowledge Leverage

Pfeffer and Sutton (1999) suggest that there is a gap between what organisations know and what they do. This knowing-doing gap is illustrated by the existence of a large number of business strategies and management methodologies on the one hand and the relatively low level of implementation of these strategies and methodologies by modern business on the other hand. It follows that the enterprise should consider some

principles that may facilitate the leverage of knowledge by taking action. The following principles for taking action are proposed by Pfeffer and Sutton (1999):

The first principle is that philosophy is paramount as organisational learning normally focuses normally be on *how* to do things and not *why* things are done. In understanding the philosophy of the business the context is provided for operating according to certain core values thereby permitting the organisation to adopt effective ways of conducting business.

A next principle is that knowledge is created by action and teaching: The concept of apprenticeship and transfer of tacit knowledge by observation is not new and has proved to be effective. Knowledge acquisition and transfer is facilitated by learning by doing and learning by teaching.

The next principle is that action is more important than plans and concepts. Peters and Waterman (1982) referred to the “ready, fire, aim” approach to managing organisations. This concept of first “firing,” and then “aiming,” helps to establish a culture which is action orientated. This builds on the concept of learning by doing and is supported by the prominence of reflection in the knowledge creation process (Nonaka, 1991).

Another principle is that there is no doing without mistakes The issue of the cost of failure is raised and the enterprise's response to failure is paramount. It is suggested that all learning involves some failure and that the enterprise should be tolerant to “reasonable” failure.

Combined with the attitude and approach to failure is the culture of fear or rather the absence of fear. The issue is that fear inhibits risk taking and that no individual would take any risks if the perceived negative potential outweighs the perceived benefits.

It is suggested that it is more likely to turn knowledge into action in those organisations where fear and internal competition does not exist. The concepts of motivation and competition should not be confused. Winning internal “contests” is seen as counter productive and prevents individuals from concentrating on the real contest where the enterprise competes in the marketplace. This describes the principle of fighting the competition and not fighting internally.

Another important issue is to measure what matters. The paradigm exists that the more things are measured the more things will get done. This is challenged by the notion that only value drivers should be measured. Measurement should also focus on the reasons of performance variance as this would be diagnostic by nature and could indicate areas of potential performance enhancement.

The last principle is that management needs to create an environment which is conducive to the transformation of knowledge into action. It is suggested that management should reinforce a value of action orientation and learning by engaging in new activities.

4.5.2 Guidelines for Leveraging Knowledge

The knowledge leverage process could essentially be described as the process of utilising the knowledge that the enterprise possesses. McDermott (1999) suggests that

in order to leverage knowledge the enterprise should be reminded to focus on the people who own the knowledge and not on the knowledge itself. The following guidelines for the leverage of knowledge were formulated by McDermott (1999) and will be discussed briefly:

- *Develop existing communities:* Most organisations have informal groups of people who share knowledge about key topics. The key should be to find these informal groups, to be careful not to over-formalise the structures of the groups and to utilise the natural energy in the group to share knowledge.
- *Focus on knowledge that is important to both the enterprise and individuals:* Generally people will seek and share knowledge on topics they care about. This implies that the leverage activities should be focussed on knowledge that is meaningful to the individual and has value to the enterprise.
- *Create forums for sharing information:* The sharing of knowledge is greatly enhanced by electronic tools but it is not sufficient only to share knowledge. A process of reflection is required to enhance understanding and, therefore, discussion forums could be important tools in this process.
- *Let the community decide what to share and how to share it:* Knowledge is only useful if and when it contributes to an individual or group's problem resolution. This implies that knowledge needs to be shared where it is needed most. The work group or community is the natural user of knowledge and should be allowed to decide how much knowledge to share, with whom and in what manner to share it.
- *Create a community support structure:* Communities are knit together by people who care about that community. In turn knowledge communities are no different. The enterprise should enable communities to control the quality of knowledge they

are sharing. The use of information technology to support individuals and communities should be combined with a quality control process.

- *Utilise community terminology:* Different communities in the enterprise will have different taxonomies, each with a particular relevance to the primary user group. It would be important to use a terminology that is intuitively understood not only by members of a specific group but also by members of other groups that may use the same knowledge.
- *Integrate learning communities:* The transfer of tacit knowledge between individuals is a determinant of the need for members of a community to interact. The enterprise should facilitate a complex network of connecting individuals and groups in order to facilitate knowledge transfer, use and leverage.
- *Culture change is a community issue:* It is difficult to change an organisation's culture through the manipulation of rewards, policies or structure. The manner in which peers and group members influence behaviour is a powerful tool that could be utilised in changing the culture within a community.

McDermott's guidelines present a strong case for the importance of facilitating human behaviour that is conducive to the sharing and transfer of knowledge. This is supported by Von Krogh (1998) who posits that high levels of innovation and tacit as well as explicit knowledge creation are facilitated by care in relationships. The methods of creating care in the enterprise are listed as follows (Von Krogh, 1998):

- An incentive system that encourages care and rewards contributions to knowledge creation.

- Mentoring programmes by means of which senior members of the team facilitate access to expertise for the junior members of the team.
- Trust, openness and courage should be stated as explicit values by senior management.
- Training programmes in care-based behaviour to encourage care in organisational relationships.
- Project debriefings and other forms of learning-oriented conversations that facilitate knowledge sharing.
- Social events that facilitate and stimulate sound interpersonal relationships.

When considering the guidelines to leveraging knowledge, it is apparent that the successful leverage of knowledge in the enterprise is not only dependent on the structural and technological approaches, but also the sensitivity on the manner in which people interact.

4.6 Summary

In the present chapter an analysis of knowledge creation and knowledge leverage processes was conducted. Knowledge was identified as a key competitive advantage in an information intensive economy. The valuation of customer knowledge was subsequently discussed as a component of the total knowledge base of the information intensive enterprise.

The knowledge creation process, as primarily defined by Nonaka and enhanced by others, was discussed. It was indicated that the concept of knowledge conversion

between tacit and explicit knowledge forms the key to the knowledge creation process. The processes of socialisation, externalisation, combination and internalisation were shown as key organisational processes in the facilitation of knowledge creation.

The barriers to knowledge creation were identified as the absence of legitimate language, stories and habits, formal procedures and restrictive enterprise paradigms. Potential solutions to overcome each of these barriers were presented.

Finally it was contended that knowledge leverage is a primarily human action and a practical approach was followed in presenting the guidelines and principles for knowledge leverage in the enterprise.

CHAPTER 5 : THE RELATIONSHIP BETWEEN CUSTOMER RELATIONSHIP MANAGEMENT, KNOWLEDGE CREATION AND KNOWLEDGE LEVERAGE

5.1 Introduction

It is submitted that the knowledge base of the enterprise exists on two levels, namely the resource level and the managerial level (Sivula, Van Den Bosch & Elfring, 1997). Customer knowledge as a resource has been indicated as a potential source of competitive advantage and the methodologies for the development of such a customer knowledge base was analysed.

Managerial knowledge – as the ability of the enterprise to manage knowledge effectively and to create and leverage knowledge – should be viewed as a competence building capacity (Sivula et al, 1997). It is suggested that the internal development of knowledge and the use of external knowledge are of specific interest in building a customer knowledge base that will form the basis of the CRM strategy in the enterprise.

Specific research has been done on the processes of learning in alliances with different firms, but the ability to learn from the interaction with customers has, however, received little attention. Sharma (1992) suggests that durable relationships between the enterprise and its customers present the opportunity for the enterprise to absorb and utilise knowledge from customers. This notion is supported by Prahalad & Ramaswamy (2000) and it is further suggested that the traditional roles of business and customers are rapidly changing through the evolution and transformation of customers.

This chapter analysed customer knowledge as a form of resource based knowledge and also as a constituent part of the CRM strategy. Managerial knowledge as a key enabler to creating and leveraging the customer knowledge base is analysed and finally the importance of customer contact and interaction is highlighted and the creation of a customer contact zone is discussed.

5.2 Resource Based Knowledge

Prahalad and Ramaswamy (2000) suggest that the notion of competence as a source of competitive advantage originated in previous studies on the diversified firm. Customers are fundamentally changing the way in which business is conducted and are playing an active role in the creating of value. Customers are consequently becoming a source of competence to the enterprise as they contribute their knowledge and skills, their willingness to learn and experiment, and their ability and willingness to engage in active dialogue (Prahalad & Ramaswamy, 2000). This evolution of the customer is summarised in Table 5. 1. It becomes apparent that building customer relationships goes beyond the definition of customer focus, which is described as the "... objective of the firm to identify and serve the needs of the customer profitably, by placing them as the primary interest over and above all other claims on the firm's resources." (Fitchett et al, 1999).

Table 5. 1: The Evolution and Transformation of Customers

Customers as a Passive Audience				Customers as Active Players
	Persuading predetermined groups of buyers	Transacting with individual buyers	Lifetime bonds with individual customers	Customers as co-creators of value
Time Frame	1970s, early 1980s	Late 1980s and early 1990s	1990s	Beyond 2000
Nature of business exchange and role of customer	Customers are seen as passive buyers with predetermined role of consumption			Customers are part of the enhanced network, they co-create and extract business value. They are collaborators, co-developers and competitors.
Managerial mind-set	The customer is an average statistic, groups of buyers are predetermined by the company	The customer is an individual statistic in a transaction	The customer is a person, cultivate trust and relationships.	The customer is not only an individual, but also part of an emergent social and cultural fabric.
Company's interaction with customers, and development of products and services	Traditional market research and inquiries, products and services are created without much feedback	Shift from selling to helping customers via help desks, call centres and customer service programmes, identify problems from customers, then redesign products and services based on that feedback.	Providing for customers through observation of users, identify solutions from lead users, and reconfigure products and services based on deep understanding of customers.	Customers are co-developers of personalised experiences. Companies and lead customers have joint roles in education, shaping expectations,, and co-creating market acceptance for products and services.
Purpose and flow of communication	Gain access to and target predetermined groups of buyers. One-way communication.	Database marketing, two-way communication.	Relationship marketing, two-way communication and access.	Active dialogue with customers to shape expectations and create buzz. Multilevel access and communication.

Source: Prahalad & Ramaswamy, 2000

It is suggested that by means of the active dialogue between customers and the enterprise, the enterprise is enabled to build a customer knowledge base which, it is proposed, forms the core of its customer relationships. It would appear that the dialogue between the enterprise and customers would be a dialogue of equals extending beyond the paradigm of being customer focused. The relationship between enterprise

and customer is not parochial by nature and it engenders the flow of information between the parties.

It is contended by Sivula et al (1997) that close interaction and dialogue with customers provide opportunities for the utilisation of customer knowledge in service delivery, the absorption of the customer's knowledge, the co-operative development of knowledge and "learning by doing". The latter concept of "learning by doing" provides a dynamic method of knowledge creation by focusing on the delivery of customer solutions.

5.2.1 Valuation of Customer Knowledge Bases

With the advent of information-intensive strategies the emergence of the so-called customer information file (CIF) has become evident. The most common information intensive strategies that have been identified are mass customisation, yield management and customer intimacy. In turn the CIF has emerged as a pivot around which such strategies could be organised (Glazer, 1998).

The CIF could be described as a virtual knowledge base supported by data and information that may be stored in separate isolated databases. The CIF contains customer information that may be organised along the following parameters:

- *Customer Characteristics*: These would typically include demographic information which would normally define customers as to who they are, independent of their relationship with the enterprise.

- *Response to Firm Decisions*: This could include marketing-mix response data, such as price sensitivity, sources of information and channel shopping behaviour. This level of information depends on the interaction between the customer and the enterprise.
- *Purchase History*: This could generally include transaction based information, such as the products purchased by a customer and the revenues and costs associated with the customer.

(Glazer, 1998) suggests that by capturing information along the above mentioned parameters, the enterprise is enabled to use the information in order to increase its future revenues. Examples of these revenue enhancing activities could include the ability to better identify customer needs and offering customised solutions. It may also be possible to identify opportunities of selling more products or more of the same product to any customer. The cost of future transactions could also decrease by understanding customers' channel preferences and organising distribution to match customer preference.

By stratifying information and combining information for various customers the enterprise should be able to segment its market more accurately, target its marketing efforts and to customise new product development. A key assumption underlying this statement is that information assets are used by knowledgeable workers (Glazer, 1998). The opportunity for learning is created in the interpretation of this information on the part of knowledge workers. It is, therefore, proposed that the valuation of a customer

database should include the measuring and valuation of the tacit knowledge contained therein.

5.2.2 Capabilities in Building Customer Competence

In the development of competence based competition it would be imperative to understand how particular learning capabilities create value in a specific context (Klavans & Deeds, 1997). In this regard Klavans and Deeds (1997) identified three activities contributing to value creation in a knowledge-intensive environment: Scientific discovery, technical development and absorptive capacity. For the purpose of analysing customer competence building, the discussion will be limited to technical capability and absorptive capacity.

5.2.2.1 *Technical Capability*

Technical development is defined as knowledge that is generated within the enterprise and is captured through the implementation of policies and procedures. As the origin of knowledge creation is internal to the enterprise, the ability to generate technical solutions is specific to the enterprise. The determinants of this ability are proposed to be behavioural procedures and technological expertise (Klavans & Deeds, 1997).

It is implicitly suggested in the knowledge spiral model presented in figure 4.1 that a certain level of knowledge is build on a pre-existing, lower level of knowledge. The sharing of ideas in a forum leads to the formulation of new ideas, some of which represent valuable insights and, therefore, expand the enterprise's knowledge base.

Similarly problem resolution leads to new insights and – if properly documented and saved – contribute to the knowledge base (Radding, 1998).

The implication for the implementation of CRM and developing customer knowledge is that technology and business architecture which support these implementations are equally reliant upon human behaviour and technical expertise.

5.2.2.2 Absorptive Capacity

The notion of absorptive capacity evolved from prior research on organisational learning and can be described as the ability to gain insight into the resolution of organisational problems, improving actions through better understanding and the ability to act on external stimuli in an interactive and purposeful manner (Klavans & Deeds, 1997).

A distinguishing feature of absorptive capacity is its dependence on the enterprise's prior level of knowledge. This dependence is not different to the reliance on technical ability mentioned in the previous section. The impact of this dependence is that the enterprise would only be able to act and react on new information and changes in the market should it have a sound knowledge base of that particular field (Klavans & Deeds, 1997).

It is suggested that the enterprise that disposes of absorptive capacity will have an advantage in competence based competition. This confirms the notion that the building of customer competence is paramount to the success of the modern enterprise.

5.2.3 Implications for CRM

The potential contribution of customer collaboration in the co-creation of value for both the customer and the enterprise increases the importance of the ability of the enterprise to build customer competence. The concept of customer competence transcends the traditional view of customer focus. The enterprise can no longer merely act as a depository of customer information in order to project sales trends and volumes.

5.2.3.1 Combination and Integration of Customer Information

The notion that knowledge begets knowledge implies that the enterprise should start accumulating customer knowledge in order to enhance its ability to develop true customer competence. It is suggested by Radding (1998) that organisations generally possess more customer knowledge than they realise and that it is often scattered throughout the organisation and that it may also reside in production systems and databases.

The combination of various enterprise information systems will add to the transparency of customer information represented in the CRM system (Goldstein, 1999). The information systems which could be integrated and networked to create the required information transparency, are listed as follows:

- Customer database and direct marketing applications
- Customer support and helpdesk
- Data warehousing
- Distributions and logistics systems

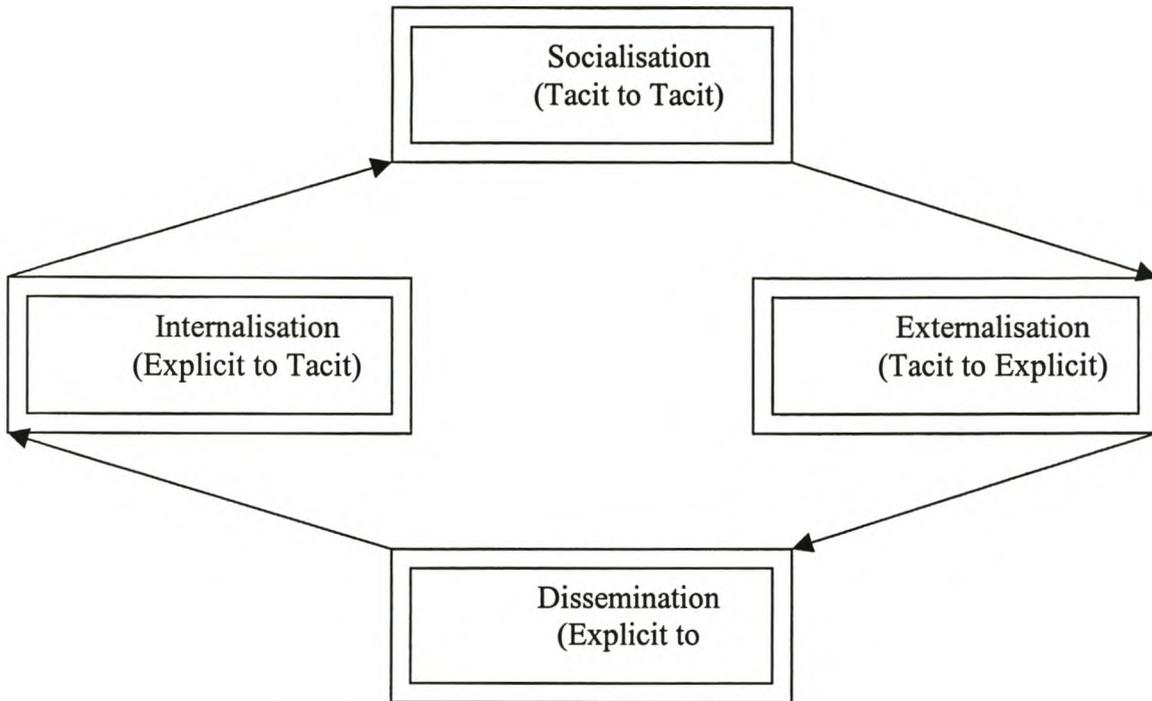
- Electronic funds transfer systems (EFT)
- Executive information systems
- Financial and accounting systems
- Internet
- Inventory control
- Supply chain forecasting systems
- Manufacturing planning systems
- Sales force automation
- Telemarketing applications
- The relational database

It is further suggested that the manner in which these systems are integrated and information extracted from the various systems, be determined by the CRM strategy and systems. This would facilitate a customer centric approach to information management and knowledge leverage (Goldstein, 1999). Finally, the ability to combine and integrate various systems in order to collate customer centric information in the CRM system, could be viewed as a technical capability as defined.

5.2.3.2 Customer Knowledge and the Conversion Cycle

Radding (1998) builds on the knowledge conversion model proposed by Nonaka and suggests that knowledge conversion is cyclical by nature. Figure 5. 2 depicts this model.

Figure 5. 2: Knowledge Conversion Cycle



Source : Radding, 1998

This cyclical model is further supported by the spiral of knowledge creation as presented by Nonaka (1991). In the creation of customer knowledge, it is the level at which knowledge creation is initiated that is of importance. If it is accepted that knowledge begets knowledge then it may be safe to assume that the starting point of customer knowledge may rest on the collation of the knowledge which is already present within the enterprise.

A CRM strategy could thus be developed from the dissemination (Explicit to Explicit) of current explicit knowledge within the enterprise. The formulation of a CRM strategy could, therefore, be assisted by posing the following questions:

- What does the enterprise already know about its customers?

- What does the enterprise need to know about its customers?
- How could the enterprise learn from its customers?
- How could the enterprise collaborate with its customers?

It may be argued that the implementation of CRM would present the enterprise with a dichotomy: does it start with the knowledge already in existence in the enterprise or does it start by absorbing knowledge from customers through a socialisation process? From the argument presented above, it would appear to be appropriate to start by understanding the knowledge already present in the enterprise.

5.3 Managerial Knowledge

Allee suggests that knowledge *per se* is not a particularly exciting and inspiring topic for managers. Knowledge could be viewed as a “soft” issue which is abstract and academic by nature. He presents a strong case for making it the business of managers to understand the “soft” issues that determine human and organisational behaviour (Allee, 1997).

Managerial knowledge is described as the co-ordination of the various knowledge processes such as knowledge creation, development, maintenance and distribution (Sivula et al, 1997). Managerial knowledge could, according to Allee (1997), be viewed as the operational implementation of knowledge strategies and as such could include the following activities:

- Mapping knowledge and information resources.

- Establishing knowledge champions and obtaining funding.
- Training and guiding people in techniques, tools and technology.
- Building knowledge networks or knowledge infrastructures.
- Monitoring external information.

It is contended that managerial knowledge should not be viewed as management in the traditional sense. The rationale for this is that knowledge and knowledge networks are by their nature not truly manageable. It is suggested by Allee (1997) that knowledge could be attended to and cultivated, and that the managerial role is an enabling activity that includes the implementation of supporting technologies and infrastructure. Managerial knowledge could furthermore be described as the enabling knowledge which assists in the development of guidance programmes that enable people to access knowledge resources and other members of the knowledge network.

5.3.1 Implications for CRM

Nonaka (1991) suggests that managerial knowledge represents the “how” of knowledge management and that it defines managerial roles, responsibilities and activities. It is suggested that the application of managerial knowledge would create a work environment conducive to the creation of customer knowledge that which may be leveraged throughout the enterprise.

To illustrate the interaction and combination of managerial knowledge and CRM, the constituent parts of a CRM strategy are described as follows:

- business processes and enabled employees who are customer focused,
- are implemented across various traditional functional areas of the business,
- are key drivers of profitability,
- are focused on selected profitable customers and
- are supported by appropriate technology.

The following principles are deemed to be underlying the knowledge conversion and creation process and will be shown to affect each of the components of the CRM strategy.

5.3.1.1 Redundancy

Nonaka (1991) suggests the concept of redundancy as a key principle of organisational design. Redundancy is described as: *“the conscious overlapping of company information, business activities and managerial responsibilities. To Western managers, the term redundancy, with its connotations of unnecessary duplication and waste, may sound unappealing. And yet, building a redundant organisation is the first step in managing the knowledge creating company.”* (Nonaka, 1991).

Redundancy is presented as a pre-requisite for the distribution of explicit knowledge in the enterprise. Without redundancy employees would not be able to reflect on experiences and to internalise explicit knowledge.

Micklethwait and Wooldridge (1997) criticise the notion of redundancy as being a direct consequence of the Japanese tradition of lifetime employment. It is contended

that redundancy creates unnecessary cost structures which influence the profitability of the enterprise.

Understanding the enabling factors and the cost implications of redundancy could be deemed as key managerial knowledge, as the balance between cost and benefit would determine the success of the CRM strategy.

5.3.1.2 Strategic Rotation

The rotation of employees between various positions in different departments – but in the same enterprise – is described as an extension of the principle of redundancy (Nonaka, 1991) but also as an accepted technique for the leveraging of knowledge (Thurbin, 1995).

The rotation of employees is proposed to facilitate the flow of information in the enterprise. It could also contribute to the demolishing of barriers between traditional departments and in the process help to establish a customer focused culture which transcends functional departments such as marketing, sales and service.

It is clear that strategic rotation, as part of managerial knowledge could thus contribute significantly to the implementation of a CRM strategy. It is also true that strategic rotation may contain an element of redundancy and thereby contribute to the cost structure of the CRM implementation.

5.3.1.3 Access to Information

It is suggested that all employees should have access to the same information in the enterprise. This access ensures that information differentials are extinguished and that individuals could communicate as equals (Nonaka, 1991). It is also suggested by Radding (1998) that the information architecture should support the business architecture.

The implementation of CRM implies that customer information be made available to all people or channels that interact with the customer. This position is consistent with the managerial knowledge principle of information sharing. Access to information could facilitate cross departmental integration and enable employees to add value in their interaction with customers.

5.3.1.4 Changes in Reward Systems

The implementation of CRM implies a strong focus on creating a workforce who is enabled to deliver superior customer value. Thurbin (1995) suggests that employees be rewarded for sharing knowledge. This means that the criteria for managing the outputs of employees should change to reflect the new focus on customer-knowledge creation and sharing.

5.3.1.5 New Management Styles

Thurbin (1995) suggests that the knowledge leverage process will put new emphasis on the roles of management. This changing focus may necessitate the adoption of new management techniques and styles.

It should be quite apparent that, if individuals are the repository of tacit knowledge, then management activity should be focussed on creating the environment where this tacit knowledge may be shared through the socialisation process.

The contention is that for the CRM strategy to leverage the tacit knowledge of employees, it would be necessary to implement management styles and techniques which recognise the importance of individuals, whilst simultaneously creating the networks to facilitate knowledge conversion.

5.3.1.6 Implementation of Technology

It has been suggested that enterprise CRM should be supported by the appropriate technology. Thurbin (1995) submits that a managerial activity in the leverage of knowledge is the introduction of new technology. Managerial knowledge would therefore include the appropriate technical knowledge to facilitate the implementation of new technology with an appropriate focus on the change management that may be required to encourage employees to use and leverage the new technology.

Radding (1998) lists the following technology components of knowledge management : Network communications; document management; search and retrieval; data management; electronic publishing; groupware; workflow; help desk and data processing and reporting.

These components should include the most important CRM technologies, such as the CIF and relational databases (which could be viewed as part of Data Management). Workflow and customer contact databases could also be seen as key CRM technologies.

The large overlap between what are regarded as knowledge management technologies and CRM technologies suggests that the managerial knowledge required to implement new knowledge technologies, would be equally applicable to the implementation of CRM technologies.

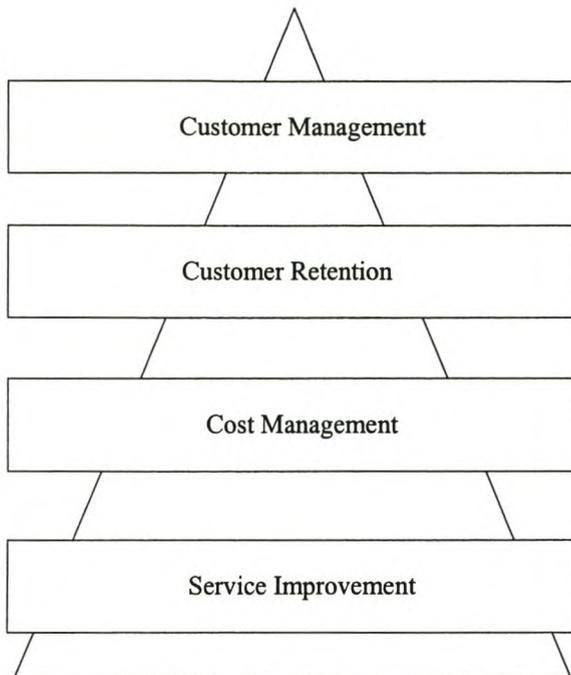
5.4 The Customer Contact Zone

The customer contact zone is proposed as the market space in which the enterprise engages with its customers and through this interaction is enabled to deliver value to those customers. The customer contact zone is the interface of the enterprise with its customers and encompasses all communication and delivery channels.

The proposed customer contact zone is a combination of traditional call centre structures and field sales and service structures. The notion of a customer contact zone evolved from call centre structures and the advent of electronic communication media enabled this zone to integrate customer interaction across various communication channels.

The evolution and changing role of the call centre is presented in figure 5. 3. Allemann (2000) contends that the role of the traditional call centre is fast changing to incorporate new electronic media, such as the internet.

Figure 5.3 : Call Centre Evolution



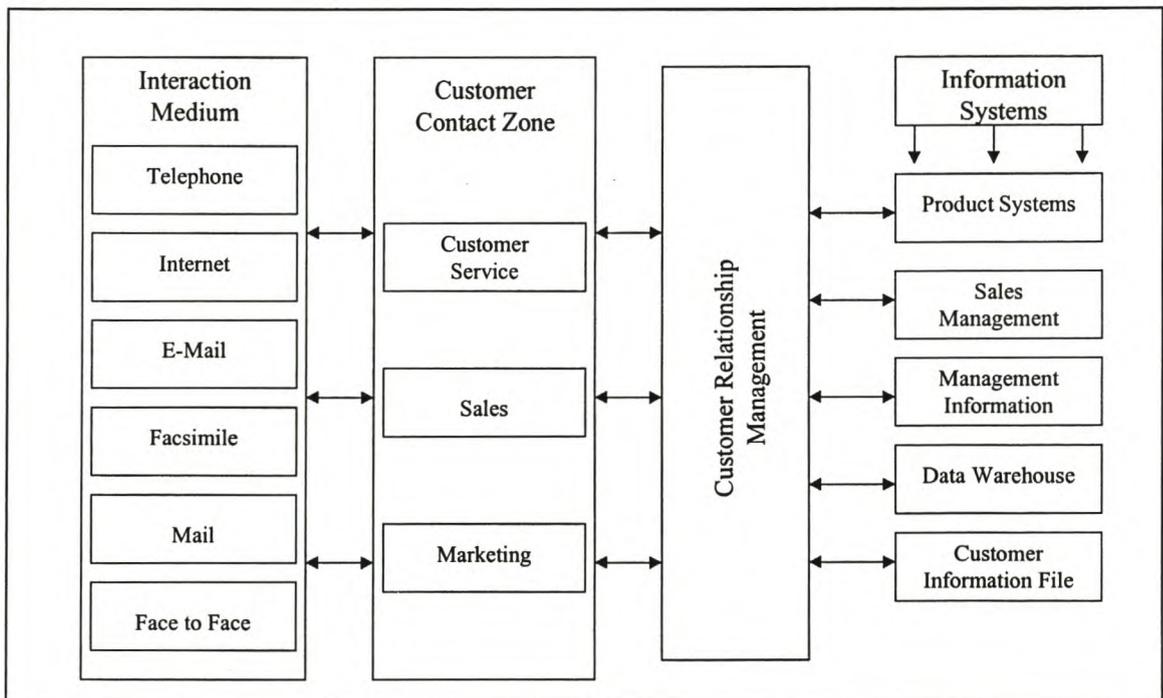
Source : Allemann, 2000

It is contended that the customer contact zone transcends the traditional call centre to include all interaction media and not only telephony. The customer contact zone is suggested as the primary area for the implementation of CRM strategies and technology.

Building on call centre management practice it would be possible to implement and manage a customer knowledge creation and leverage process integrated in the CRM strategy. Cleveland and Mayben (1997) suggest that the application of the Erlang C formula for scheduling and staffing of call centres inadvertently creates a level of redundancy in the centre. This redundancy and the close proximity of the people in the centre in turn facilitate the implementation of knowledge creating processes.

Figure 5. 4 proposes a tool to determine the strategic fit of the customer contact zone and CRM technology. The diagram suggests a framework for the integration of traditional information systems with a CRM system to provide a primary technology platform for customer interaction. The customer contact zone is depicted as transcending the barriers of functional departments to include all types of customer interaction, utilising all available interaction media.

Figure 5. 4 : Strategic Fit of the Customer Contact Zone and CRM



5.5 Summary

This chapter illustrated and critically discussed the relationship between CRM and knowledge creation and knowledge leverage. The relationship was shown to exist on two levels, namely resource and managerial level.

Knowledge as a resource was proposed as a dynamic knowledge that could be developed with the active participation of customers. The development of customers from passive consumers of products to active partners in the delivery of solutions was illustrated. The Customer Information File was shown as a key element of knowledge resource. The CIF is also an integral part of the CRM strategy and as such contributes value to the enterprise.

Building a customer knowledge base in the enterprise was indicated to require technical and absorptive capacities. These capacities are key determinants of the ability of the enterprise to develop customer knowledge. The customer knowledge base was indicated to underpin the CRM strategy and as such the integration and combination of information in this knowledge base were discussed. The knowledge conversion process was also illustrated as a key process in the development of a customer database.

Knowledge on the managerial level was shown as encompassing activities such as knowledge creation, knowledge leverage and knowledge distribution. The principles of redundancy, strategic rotation, access to information, changing of managerial styles and changing reward systems to incentivise desired behaviour were shown as knowledge management principles that contribute to the attainment of CRM goals.

Finally, the customer contact zone was presented as the probable point for initiating a CRM strategy in the enterprise. The continuing evolution of the call centre was presented as providing a logical platform on which to base the customer contact zone. A graphic model of the proposed strategic fit of the customer contact zone and CRM

was presented and it was suggested that the close proximity of employees and the natural redundancy that exists in call centres are enabling conditions for the implementation of knowledge creating processes.

CHAPTER 6 : SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The objective of the study was to provide a critical analysis of customer relationship management and of the knowledge creation and knowledge leverage processes in order to determine the relationship between these different concepts. The concepts of CRM, knowledge creation and knowledge leverage were clarified first, and subsequently the potential convergence and relationships of these practises were demonstrated.

This final chapter consists of three parts which have, in the first instance, provided a summary of the analysis which was undertaken. Secondly the conclusions based on the conceptual analysis were provided, and finally recommendations of the present research were presented. Areas of insufficient knowledge in the theoretical base were also indicated to provide possible areas of further research.

6.2 Summary

The summary of the conceptual analysis was provided and the convergence of the concepts of CRM, knowledge creation and knowledge leverage was demonstrated.

6.2.1 Background

The introductory chapter provided a brief overview of the discontinuities that are increasingly changing the enterprise's competitive environment. The concept of customer relationship management was described and proposed as a methodology of achieving competitive advantage. The parallel and possible overlap between KM and CRM were analysed, leading to the application of knowledge creation methodologies to CRM.

The emerging focus on customer relationships as a source of competitive advantage was highlighted and the notion of customer capital was introduced. Customer relationships and customer capital were shown to transcend the traditional transactional view of interaction with customers. As an alternative to the transactional view of the customer interaction, the life time value of customers was proposed as a dimension of customer capital. It was shown that the value of customer relationships should not be restricted to the economic value of current and future transactions with those customers.

It was demonstrated from the Seven Eleven in Japan case, how a traditional retailing business transcended the normal barriers of the retail industry by implementing a policy of customer intimacy.

6.2.2 Problem statement and Objective of the study

The problem statement of the thesis was based on the limited study undertaken on the topic of customer capital and the role of CRM in enhancing that customer capital. It was stated that knowledge management has traditionally been studied in the context of

intellectual capital and that little has been done to indicate that the same principles applied to the creation of customer knowledge and customer capital.

The objective of the study was to provide a critical analysis of customer relationship management and the knowledge creation process and to indicate how a knowledge creation process could leverage CRM initiatives in the enterprise.

6.2.3 Overview of the Concept of Customer Relationship Management

CRM was defined as the strategy guiding all customer focused business processes across functional areas in the business, in order to manage the relationship with the most profitable customers to increase the profitability of the enterprise. It is accepted that CRM needs to be supported by an appropriate technology platform.

Although CRM is enabled by the advances in the field of information technology, this rapid technological development obscures a clear and concise definition of CRM. It appeared that, whilst information technology plays an important role in the implementation of CRM, there was consensus in the literature that CRM revolved fundamentally around a strategy that involves more than customer focus.

A theoretical analysis of extant models of CRM was provided.. The models discussed included the customer value funnel, the SCOPE model of CRM, the Anderson Consulting model and the IBM model. The models were all found to focus individually on specific aspects of the management of customer relationships and each was described in terms of its emphasis and focus

The analysis of CRM showed that CRM was dependant on the interaction with the macro and micro environment of the enterprise. The various stakeholders in CRM were identified as the suppliers, partners, employees, owners and customers of the enterprise and it was demonstrated how the dynamic interaction of these stakeholders contributed to the implementation of CRM. It was indicated that customer insight, customer interaction, a high performing organisation and organizational integration were key components of a CRM strategy.

Finally it was contended that the implementation of CRM and the advent of the life time value of customers implied that not all customers were equal. This phenomenon has the effect that the implementation of a CRM strategy should ideally be initiated by the identification of the desired customer profile of the enterprise. It was suggested that the fundamental platform for CRM be established by following a customer portfolio approach.

6.2.4 The Rationale for Customer Relationship Management

The major discontinuities contributing to the prominence of customer capital as a strategic differentiator were highlighted in chapter 1. It was considered useful to demonstrate the need for CRM and, therefore, chapter 3 shed further light on this discussion and contributed to the understanding of the rationale for the investment in a CRM strategy.

It was proposed that customer value creation and customer intimacy was an imperative for competitive advantage of the organization and that the CRM strategy should consequently form an integral part of the total corporate strategy.

It was demonstrated that the Porterian view of the enterprise value chain could be expanded upon to create a customer value chain and ultimately a CRM value chain. To illustrate the contribution of customer value creation, a case study of IKEA, the home appliance provider, was presented. The case demonstrated the new role of the enterprise in value creation which involves much more than just the value that went into the product. It confirmed the need for more complex relationships with customers and also the need to manage these relationships as it is a source of value that needs to be managed. The IKEA case indicated that the enterprise would act as a conduit for information flow between the customer and the internal organisation. The IKEA case underlined the relevance of CRM in value creation.

Customer competence and collaboration are key sources of competitive advantage. Furthermore the capturing, extraction, and presentation of customer information underpins the ability of the enterprise to utilise customer competence and to enter into customer collaboration arrangements. It was shown that CRM performs an important role in enabling customer collaboration and mobilising customer competence.

Finally, a key determinant of the lifetime value of customers was indicated to be customer intimacy. The contribution of CRM to customer intimacy and thus the lifetime value of customers, is significant and provides a strong rationale for the implementation of CRM.

6.2.5 The Knowledge Creation and Leverage Process

In the fourth chapter the knowledge creation process was analysed in order to determine the similarities, the relationship between, and the overlapping aspects of knowledge creation and CRM. This chapter focused on the analysis of extant knowledge creation and the processes of leveraging knowledge. Customer knowledge was identified as a key component of the total knowledge base of the information intensive enterprise.

From the analysis of the literature on the knowledge creation process it was found that the conversion between tacit knowledge and explicit knowledge formed the essence to the knowledge creation process. The processes of socialisation, externalisation, combination and internalisation are key organizational processes that enables knowledge conversion and thus knowledge creation.

It was found that knowledge creation depends on certain enabling conditions in the enterprise. These conditions relate largely to the manner in which people interact in both a formal and informal fashion. Suggestions were made on possible solutions in overcoming barriers to the knowledge creation process. Finally it was demonstrated that knowledge leverage was primarily a human action and some the principles for knowledge leverage were offered.

6.2.6 The Relationship Between Customer Relationship Management, Knowledge Creation and Knowledge Leverage

Utilising the definition and description of CRM provided in chapter 2, and the characteristics of the knowledge creation and knowledge leverage processes discussed

in chapter 4, the fifth chapter illustrated and critically discussed the relationship between CRM and knowledge creation and knowledge leverage.

It was stated that knowledge exist on two levels, namely the resource level and the managerial level. The relationship of knowledge with CRM was indicated on both levels. Knowledge is a dynamic resource that could be developed with the active participation of customers. The main repository for customer information was found to be the customer information file. The CIF forms an integral part of the CRM strategy and the relationship between knowledge creation and CRM, became clear.

It was established that the customer knowledge base was a core element of the CRM strategy and the integration and combination processes of information in this knowledge base were discussed. Building a customer knowledge base in the enterprise requires certain technical and absorptive capacities. The knowledge conversion process is a key process in the development of a customer database.

Activities such as knowledge creation, knowledge leverage and knowledge distribution requires managerial knowledge. Managerial knowledge is required for the implementation of redundancy, strategic rotation, access to information, change of managerial styles and changing reward systems in the enterprise. These principles underlies the knowledge creation and knowledge conversion processes and affects the CRM strategy. Managerial knowledge is therefore not only a key to the creation of knowledge, but was also proposed to contribute to the attainment of CRM goals.

Finally, the customer contact zone was proposed as a possible method for the launching of a CRM strategy in the enterprise. A graphic model was developed as a tool to represent the strategic fit of the customer contact zone and CRM. It was also suggested that the close proximity of employees and the natural redundancy in a contact centre were enabling conditions for integrating the knowledge creation and customer relationship management processes.

6.3 Conclusions

The conclusions of this study are the following:

- (a) From the analysis of CRM the following definition of CRM is proposed:

Customer relationship management:

- includes business processes that are customer focused;
- is implemented across various traditional functional areas of the business;
- is a key driver of profitability;
- is focused on selected profitable customers and
- is supported by appropriate technology.

- (b) The analysis of extant CRM models revealed that CRM is a strategic process that integrates traditional, functional business areas in order to enable seamless and focused interaction with selected customers. It follows that technology that supports CRM should integrate various existing back-end information systems to facilitate seamless customer interaction.

(c) It is concluded that although existing CRM models proposes the integration of marketing, sales and customer service, there is no apparent manner in which these activities should be combined. In addition it is concluded that the manner in which knowledge should be shared between these functional areas is not clear. Attention was given to the sharing of explicit knowledge available in various enterprise databases, but it appears that there is no existing model for the strategic integration of various knowledge areas in the enterprise.

(d) Analysis of the customer value triad and the value chain of the enterprise revealed that the constituent parts of customer value delivery could no longer be deemed to include only product quality, service quality and value based pricing. It is concluded that customers require more dynamic value determinants which are based on their interaction with the enterprise.

(e) An important conclusion of this study is that the role of the enterprise in value creation is rapidly changing. The enterprise is increasingly being required to act as an equal partner in facilitating the flow of knowledge between various parties in order to deliver value to the customer. This new gateway role requires the enterprise to be adept at gathering and dispersing information and knowledge. It is also concluded that CRM could enable the enterprise to fulfil this new role as gateway.

(f) From the analysis of the knowledge conversion process, it is concluded that the knowledge conversion process, the methodology of knowledge creation and the modes of knowledge creation could be applied to the creation of knowledge about customers,

thus enhancing the knowledge base regarding customers of the enterprise. It is concurrently concluded that the principles that are applicable to the leverage of knowledge in general, can also be applied to specifically leverage customer knowledge across functional areas of the organization.

(g) Although there are common ground between CRM and knowledge creation, there are no models that clearly illustrates how CRM can be leveraged through the implementation of knowledge management methodologies. The suggestion that a customer contact zone needs to be established as a logical point for this integration, has thus far received scant attention in the field of CRM and the academic literature has not covered it to the extent that it deserves.

6.4 Recommendations

6.4.1 Recommendations for the Improved Integration of CRM and Knowledge Management

Recommendations for the improved integration of CRM and knowledge management, based on the analysis conducted in this study could include, but are not restricted to the following:

(a) In order to extend the benefit of a CRM initiative in the enterprise, certain knowledge creation principles could be applied to the existing customer knowledge base. The modes of knowledge creation that were presented in figure 4.2 provide a useful framework for utilising existing explicit knowledge, that may be contained in

databases like the CIF, as well as guidelines for absorbing tacit knowledge from customer interactions.

(b) Enhancing the technical and absorptive capabilities of the enterprise should enable the enterprise to gain maximum benefit from customer interaction and collaboration. Utilising technical and absorptive capabilities to enhance customer knowledge in order to provide customised solutions, is an iterative process that could accelerate rapidly. The context of understanding these capabilities should not be restricted to the creation of knowledge only, but could be integrated with the theory of the learning organisation.

(c) Knowledge, including customer knowledge, is used and leveraged by individuals or groups of individuals. The process of managing this knowledge, therefore, requires skills in managing humans and groups of humans. It should be clear that integrating individuals and groups from functional areas – such as marketing, sales and customer service – presents a particular challenge to the enterprise which is implementing CRM.

(d) When referring to CRM, it should be borne in mind that relationships consist of a minimum of two consenting parties and that both the enterprise and the customer are required to be active participants in the relationship. The implication for CRM is that the customer should understand the benefit (added customer value) to be derived from participating in the relationship. This implies the need for effective communication and interaction between the parties, failing which the best conceived CRM strategy and customer knowledge creation process will come to nought.

6.4.2 Recommendations for Further Research

This thesis concludes with some recommendations for further research on the integration of CRM and knowledge creation.

(a) In the present study CRM was shown as a key determinant of customer capital. The definition and constituent parts of customer capital have unfortunately not received much academic attention hitherto and are, therefore, inadequately described. An improved understanding of the anatomy of customer capital should enhance the present view on the contribution of CRM.

(b) The relevance of CRM to particular industries should be examined. Current literature only refers vaguely to the benefit of CRM as the lower cost of retaining customers as opposed to acquiring them. The determinants of value for a CRM strategy need to be established and then tested across industries to determine the relevance for each industry.

(c) The current preoccupation of research into CRM, with the integration of functional business areas to provide a seamless customer interface, would suggest that the measurement of the value of customer relationships need further academic attention. It has been suggested that the value of the customer relationship transcend the lifetime value of the customer. This notion could be elaborated on and a methodology for valuing customer relationships could be developed.

(d) Whilst the methodology of knowledge conversion (socialisation, externalisation, combination and internalisation) has been presented, it could be useful to consider the

building blocks of these processes. A theoretical and practical model for the implementation of these processes in the enterprise could be developed and should contribute to knowledge creation in the enterprise.

(e) Finally, it is recommended that – whilst the implementation of CRM and knowledge creation processes may require significant cultural change in the enterprise – it may be useful to determine the appropriate manner in which these strategies could be implemented. The proposed customer contact zone as a separate entity could be further studied, whilst other enterprise-wide implementation models may also be developed.

BIBLIOGRAPHY

Allee, V. (1997). **The Knowledge Evolution: Expanding Organisational Intelligence**, Butterworth-Heinemann, Newton, Massachusetts.

Allemann, G. (2000). The Four Stages of Call Centre Evolution, **Call Centre Contact**, August – September 2000, 8-9.

Anderson Consulting (2000). Focussing on Customer Equity – The Unrealised Asset. **Customer Relationship Management**, May 2000, 10-11.

Band, W.A. (1995). Customer Accelerated Change, **Marketing Management**, Winter 1995.

Barney, J.B. (1996). The Resource-Based Theory of the Firm, **Organization Science**, September-October 1996.

Bell, C.R. (1994). **Customers as Partners**. Berrett-Koehler Publishers, San Francisco.

Bhote, K.R. (1996). **Beyond Customer Satisfaction to Customer Loyalty**. American Management Association, New York.

Brown, J.S. and Duguid, P. (1998). Organising Knowledge. **California Management Review**, 40 (3), 90-108.

Buhrman, A. (2000). Is CRM promising the moon? **Call Centre SA**, August – September 2000, 38-40.

Buttle, F. (1996). **Relationship Marketing: Theory and Practice**. Paul Chapman Publishing Ltd. London.

Campbell, K. (2000). First: View CRM through a business lens. **Call Centre Contact**, February - March 2000, 12-13.

Cannie, J.K.& Caplin, D. (1991). **Keeping Customers for Life**, American Management Association, New York.

Chaston, I. (1993). **Customer-focussed Marketing**. McGraw-Hill, London.

Christopher, M., Payne, A.and Ballantyne, D. (1991). **Relationship Marketing**. Butterworth-Heinemann, Oxford.

Cleveland, B & Mayben, J. (1997). **Call Centre Management on Fast Forward**. Call Centre Press, Annapolis, Maryland.

Cohen, D. (1998). Toward a Knowledge Context: Report on the first annual U.C. Berkeley Forum on Knowledge and the Firm, **California Management Review**, 40 (3), 22-39.

Collis, D.J.& Montgomery, C.A. (1995). Competing on Resources: Strategy in the 1990's, **Harvard Business Review**, July-August 1995, 118-128.

Davenport, T.H.and Klahr, P. (1998). Managing Customer Support Knowledge, **California Management Review**, 40 (3) 195-208.

Davenport, T.H.& Prusak, L. (1998). **Working Knowledge**. Harvard Business School Press, Boston, Massachusetts.

Fickenscher, L. (1999). Marketers see Customer Data as Business Capital, **American Banker**, September 1999.

Fitchett, J.A., Saren, M.and Tzokas, N. (1999). **Daz Kapital: Consumer competition and collaboration in value creation**. Paper presented at the 28'th EXNAC Conference, Hamboldt University, Berlin, Germany, 11 to 14 May 1999.

Glazer, R. (1998). **Managing The Knower: Towards a Theory of Knowledge Equity**, **California Management Review**, 40 (3), 175-194.

Goldstein, E. (1999). **Concentrating the Enterprise's Focus on the Customer**. **Call Centre SA**, June – July 1999, 37-38.

Grant, R.M. (1991). **The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation**. **California Management Review**, Spring 1991, 114-135.

Gummesson, E. (1994). **Making Relationship Marketing Operational**. **Service Industry Management**, 5 (5), 5-20.

Higgo, M. (1999). **It's all about strategy**. **Call Centre IQ**, Vol 2 (4) 82-83.

Inkpen, A.C. (1996). **Creating Knowledge through Collaboration**, **California Management Review**, 39 (1), 123-139.

Kim, W.C. and Mauborgne, R. (1999). **Creating New Market Space**. **Harvard Business Review**, January – February 1999, 83-93.

Klavans, R.& Deeds, D.L. (1997). **Competence Building in Biotechnology Start-ups: The Role of Scientific Discovery, Technical Development and Absorptive Capacity**, in: Sanchez, R.& Heene, A. (eds.). (1997). **Strategic Learning and Knowledge Management**, John Wiley & Sons Ltd. New York.

Lang, J.W. (1997). **Leveraging Knowledge Across Firm Boundaries: Achieving Strategic Flexibility Through Modularization and Alliances**, in: Sanchez, R.& Heene, A. (eds.). (1997). **Strategic Learning and Knowledge Management**, John Wiley & Sons Ltd. New York.

Linton, I. (1994). **Creating a Customer Focussed Company**. Pitman Publishing, London.

Manning, A.D. (1989). **World Class! Strategies for winning with your customer**, Juta & Co, Johannesburg.

McDermott, R. (1999). Why Information Technology Inspired But Cannot Deliver Knowledge Management. **California Management Review**, 41 (4), 103-116.

Nagle, T.T.& Holden, R.K. (1995). **The strategy and tactics of pricing**. Prentice Hall, Englewood Cliffs, New Jersey.

Naumann, E. (1995). **Creating customer value: The path to sustainable competitive advantage**, Thomson Executive Press, Cincinnati, Ohio.

Nonaka, I. (1991). The Knowledge-Creating Company. **Harvard Business Review**, (November - December), 96-104.

Nonaka, I. (1993). **On a Knowledge Creating Organisation**, Paper presented at Alf National Congress, Posma, October.

Nonaka, I., Reinmoeller, P.& Senoo, D. (1998). The “ART” of Knowledge: Systems to Capitalize on Market Knowledge, **European Management Journal**, December 1998, 673-684.

Normann, R.and Ramirez, R. (1993). From value chain to value constellation: Designing interactive strategy, **Harvard Business Review**, (July-Aug), 65-77.

Payne, R. (1999). The future of Call Centres. **Call Centre SA**, August – September, 12-13.

Payne, A., Christopher, M., Clark, M.& Peck, H. (1998). **Relationship Marketing for Competitive Advantage**. Butterworth – Heinemann, Oxford.

Peppers, D.& Rogers, M. (1997). **Enterprise One-to-One**, Doubleday, New York.

- Peters, T. and Waterman, R.H. (1982). **In Search of Excellence: Lessons from America's Best-Run Companies**. Harper and Row, New York.
- Pfeffer, J. and Sutton, R.I. (1999). Knowing "What" to Do Is Not Enough: Turning Knowledge Into Action, **California Management Review**, 42 (1) 83-105.
- Pfeffer, J. & Sutton, R.I. (2000). **The Knowing-Doing Gap**. Harvard Business School Press, Boston, Massachusetts.
- Porter, M. (1985). **Competitive Advantage**. The Free Press, New York.
- Prahalad, C.K. & Hamel, G. (1990). The Core Competence of the Corporation, **Harvard Business Review**, May-June 1990, 79-94.
- Prahalad, C.K. & Ramaswamy, V. (2000). Co-opting Customer Competence, **Harvard Business Review**, January – February 2000, 79-87.
- Probst, G.J.B. (1998). Practical Knowledge Management : A Model That Works, **Prism**, second quarter, 17-29.
- Quin, J.B. (1992). **Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry**, Maxwell Macmillan, New York.
- Seybold, P.B. (1998). **Customers.Com – How to Create a Profitable Business Strategy for the Internet and Beyond**, Redwood Books, Wiltshire, United Kingdom.
- Sharma, D.D. (1992). **Experiential network knowledge in international consultancy**, in: Forsgren, M. & Johanson, J., (eds.). (1992). **Managing Networks in International Business**, Gordon & Breach. Philadelphia
- Sivula, P., Van Den Bosch, F.A.J. & Elfring, T. (1997). **Competence Building by Incorporating Clients into the Development of a Business Service Firm's Knowledge Base**, in Sanchez, R. & Heene, A. (eds.). (1997). **Strategic Learning and Knowledge Management**, John Wiley & Sons Ltd. New York.

Stone, M.& Woodcock, N. (1995). **Relationship Marketing**. Biddles Ltd. London.

Treacy, M.and Wiersema, F. (1993).Customer Intimacy and Other Value Disciplines, **Harvard Business Review**, (January-February), 84-93.

Tsokaz, N.and Saren, M (1997), Building Relationship Platforms in Consumer Markets: a Value Chain Approach, **Journal of Strategic Marketing**, 5 (2): 105-120.

Thurbin, P. (1995).**Leveraging Knowledge : The 17 day Programme for a Learning Organisation**. Pitman Publishing, London.

Vandermerwe, S. (1996).**The Eleventh Commandment : Transforming to “Own” Customers**. John Wiley & Sons, New York.

Vavra, T.G. (1992).Aftermarketing : **How to Keep Customers For Life Through Relationship Marketing**. Business One Irwin, Illinois.

Von Krogh, G. (1998). Care in Knowledge Creation. **California Management Review**, 40 (3), 133-148.

Von Ruben, R. (1999). Customer Relationship Management – the next generation ERP, **Call Centre IQ**, 2 (5), 36-37.

Weinstein, A.& Johnson, W.C. (1999). **Superior Customer Value**. St Lucie Press. New York.

Wellington, P. (1995). **Kaizen Strategies for Customer Care**. Pitman Publishing, London.

Wiersema, F. (1996). **Customer Intimacy**. Knowledge Exchange, Santa Monica, California.

Wilson, D.T.& Jantrania, S. (1994). Understanding the Value of a Relationship, **Asia-Australia Marketing Journal**, 2 (1), 1994.

Woodruff, R.B.(1997). Customer Value: The Next Source for Competitive Advantage. **Journal of the Academy of Marketing Science**, 25 (2), 139-153.

Zack, M.H. (1999). Developing a Knowledge Strategy, **California Management Review**, 41 (3) 1999, 125-142.

Internet Sources

Anderson Consulting. Available: <http://www.ac.com/services/crm/>

Buttle, F. (2000). **The CRM Value Chain**, Available: <http://www.crm-forum.com>
[2000, August 20]

Buttle, F. (2000). **The SCOPE.of Customer Relationship Management**, Available:
<http://www.crm-forum.com>

Coopers and Lybrand. (1998). **Efficient Customer Response Study Conclusions**.
Available: (<http://www.coopers.com/managementconsulting/ecr/conclusions.html>).

Gartner Group, (2000). **Call Centre Contact**, February March 2000.

Harris, K. (1999). **Enterprise IQ: The Knowledge Enabled Firm**. Available: <http://gartner3.gartnerweb.com/gg/purchase/html>.

Radding, A. (1998). **Knowledge Management: Succeeding in the Information-based Global Economy**. Computer Technology Research Corp.South Carolina
Available: <http://www.ctrcorp.com>

Roos, J. (1997). **The Poised Organisation : Navigating Effectively on Knowledge Landscapes**,. Available: http://www.imd.ch/fac/roos/paper_po.html

Simms, D. (2000). **Four Smart CRM Decisions**, . Available: <http://www.crmguru.com>

Simms, D. (2000). **What is CRM?** Available: <http://www.crmguru.com>

Simms, D. (2000). **The Future of CRM – Same, but Different**, Available: <http://www.crmguru.com>

Simms, D. (2000). **Principles Make the Best Practises**, Available: <http://www.crmguru.com>

Stone, M. (2000). **Paradigms in customer management**, Available: <http://www.crm-forum.com/academy/pcm/sld01.htm>

Stone, M. (2000). **How to Manage Bad Customers**, Available: <http://www.crm-forum.com/academy/badc/sld01.htm>

Xavier, M.J. (2000). **Marketing in the E-Commerce Era**, Available: <http://www.crm-forum.com>