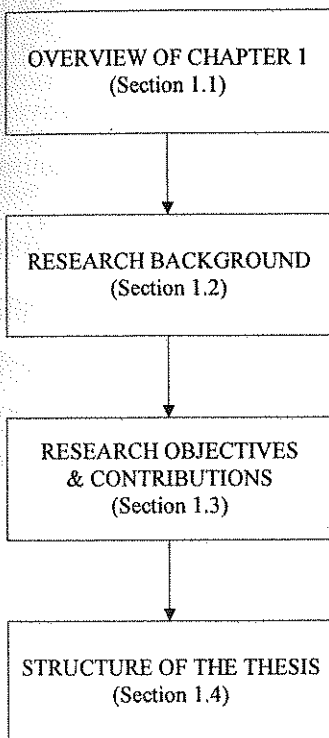


1 INTRODUCTION

1.1 Overview of Chapter 1

The aim of this thesis is to investigate the relationship between organisational culture and the outcomes of Customer Relationship Management (CRM) system implementations. The first part of this chapter introduces the background to the research and briefly discusses major obstacles in CRM implementation, specifically in relation to the importance of human factors. The discussion moves to the purpose and the significance of the study. The last part of this chapter presents the structure of the thesis. In order to guide the following discussion, a figure outlining each section included in the chapter is provided in figure 1.1.

Figure 1.1 Outline of chapter 1



1.2 Research Background

In recent years, Customer Relationship Management (CRM) has become more widely accepted as an important management discipline. CRM has been defined as *“the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on*

high-quality customer data and enabled by IT" (Buttle, 2004, p. 34). In the early 1990's many academics, commentators and consultants introduced CRM theory and vision with the aim of helping organisations achieve better customer relationships, increased sales and loyalty, and enhanced competitive advantage by providing higher quality customer service (Roberts, Liu, & Hazard, 2005; Smith, 2006). In the mid-late 1990's many companies adopted the CRM concept and technology (LaValle & Scheld, 2004). Cap Gemini Ernst and Young's global survey results showed that 69 percent of European organisations and 74 percent in North America have undertaken a CRM initiative (CGEY, 2003). In Europe, the financial service industry led with 82 percent deploying a CRM initiative, whereas in North America, the hospitality and entertainment industries led with 83 percent completing a CRM initiative. Despite the fact that organisations in Asia Pacific and Japan delayed implementing CRM compared to Europe and North America, they adopted newer CRM technologies. In Australia, according to a Gartner Inc. survey (as cited in Peterson, 2003), CRM usage was about 35 percent in organisations with more than 500 employees. The Economist Intelligence Unit conducted a survey among executives in Australia on CRM initiatives and information technology in 2004. The results highlighted that 41 percent of organisations planned to substantially increase their CRM investments (CRM-Magazine, 2004).

The CRM initiatives of the 1990s were focused on CRM as a technology implementation rather than as a solution for marketing problems (McKinsey&Co, 2001). In 1999, survey findings from a Business Intelligence/Renaissance Worldwide research of UK-based organisations highlighted the importance of process reengineering over technology in implementing CRM. Processes and practices for managing customer relationships emerged as the main problems in implementing CRM (as cited in Reed, 2002). Cap Gemini and IDC's survey of large organisations in Europe and United States in 1999 found that business process improvement significantly influenced the success of CRM system implementation (Staffware-eCRM, 2000). The survey results also revealed that two-thirds of the cost of a CRM investment is allocated to consulting, training and implementing CRM, compared to one-third of the cost allocated for technology. In a recent Forrester report, CRM investments, CRM process management and CRM outsourcing to consultant and system integrator are identified as key trends in 2006 (as cited in Sims, 2006).

Bain and Company's global survey ranked CRM as one of the top ten tools used by managers (Rigby, 2003; Rigby & Bilodeau, 2005). In 2000, only 35 percent of organisations were using CRM but this increased to 75 percent in 2004. In fact, CRM ranks second just behind strategic planning (Rigby & Bilodeau, 2005). However, estimates of CRM projects failing to achieve success were reportedly between 35 to 71 percent (CGEY, 2002a; LaValle & Scheld, 2004; D. Lee, 2000; Sims, 2006). Many organisations have not yet seen the increased business performance from CRM investments (Roberts, Liu, & Hazard, 2005; Smith, 2006).

From a review of the extant literature, it is clear that CRM performance is greatly influenced by the interplay between people, process and technology (Bull, 2003; Chan, 2005; Zablah, Bellenger, & Johnston, 2004a). A CRM implementation requires a CRM strategy to integrate these three important factors (Harding, DeAngelo, & Ziegler, 2004; Kristoffersen & Singh, 2004; Roberts, Liu, & Hazard, 2005). People are involved in every stage of a CRM initiative. Operational CRM systems are often designed to help front-line people provide better and more profitable service to customers. These people may have not used any automated tools previously. Their resistance to accept and make use of CRM tools is an issue that needs to be addressed. In addition, front-office processes are hugely varied across companies and less standardised than back-end processes. Automating these processes may require major organisational and technological changes. Organisational readiness to deal with these changes may be questionable, and an effective CRM implementation plan may benefit the organisation by shaping its resources to achieve CRM objectives successfully (Kavanagh, 2003). A number of people issues are identified as being important to CRM implementation such as senior management's leadership, people's willingness to support the initiative, and a more customer-focused organisational culture. Although this study focuses on people issues as a critical contributor to CRM success, it does not claim to imply that technology and process variables are unimportant.

Organisational culture influences people's behaviour in the workplace and affects an organisation in determining its organisational objectives, structure, system, rewards and recruitment policy (Petrock, 1996). Several survey findings support the importance of organisational culture in CRM implementation. The results from a study of several life-science companies world wide that implemented CRM revealed that organisational

culture is one of the reasons of poor CRM acceptance (CGEY, 2002a) . Sales people's resistance to making customer knowledge available to others has become part of the culture in some organisations. Another survey of 219 IT professionals by DMR Consulting in 2002 revealed that customer-centric organisations met a higher percentage of their implementation goals than non customer-centric organisations, which is 71 percent compared with 53 percent of implementation goals (as cited in Kale, 2004). The results from McKinsey & Company's survey of 60 major insurance companies in North America showed that 59 percent of those companies who reported a successful CRM implementation had addressed the cultural change required by CRM systems whereas 33 percent of those reporting a failed CRM implementation had addressed the cultural change (Agarwal, Harding, & Schumacher, 2004). From these surveys, it is recognised that organisational culture plays an important role in CRM implementation.

Academics have studied empirically the importance of adopting some organisational culture characteristics for a CRM initiative to be successful. Starkey and Woodcock (2002) have measured customer management performance in hundreds of companies. They concluded that organisations that fail to perform customer-focused behaviours are more likely to have poor customer management performance. Wilson, Daniel and McDonald (2002), who investigated CRM success factors from the IT point of view, identify the need for cross functional teams focusing on the customer. A study by Campbell (2003) in five organisations confirms that cross-functional teamwork is required to develop the deeper customer-related knowledge on which CRM is based. From the above previous studies, it seems that an organisational culture that puts more importance on customer-focused behaviours and cross-functional teams is associated with successful CRM system implementations.

1.3 Research Objectives and Contributions

Few empirical studies of CRM are primarily concerned with the extent to which the relationship between each CRM key success factor contributes to CRM performance. Only recently, interest has been growing in identifying and testing the relationships between key success factors of CRM and performance, especially on the relationship between CRM processes and performance. The importance of organisational culture to CRM strategy has been recognised, but until now, there is no empirical study that

relates organisational culture and CRM system implementation. This study addresses that gap in the literature by specifically considering the relationship between organisational culture and CRM system implementation outcomes. Thus, the aims of this study are:

1. To identify if organisational culture is significantly associated with CRM system implementation outcomes
2. To identify if the innovative characteristics of the CRM system and the environmental/market situations in which organisations operate moderate the strength of the relationship between organisational culture and CRM system implementation outcomes
3. To explore the associations between organisational culture and different outcomes of CRM system implementations
4. To explore the associations between the type of CRM initiative being pursued and CRM system implementation outcomes

This study adopts positivist assumptions about ontology and epistemology and quantitative methodology is identified as an appropriate method. Thus, the general research aims mentioned above are transformed into research questions and hypotheses later in the thesis.

The results of this study should provide a greater understanding of the role of organisational culture in CRM system implementation. Despite the fact that the issue of organisational culture has been examined extensively in organisational studies, the role of organisational culture in CRM system implementation has received little attention. Identifying the association between organisational culture and CRM system implementation outcomes is important, particularly in the development of theory related to the role of organisational culture in CRM system implementation. It will also provide a framework for an organisation in its cultural change process to increase the likelihood of CRM system implementation success.

1.4 Structure of the Thesis

This thesis has seven chapters. Chapter 1 (introduction) provides an introduction to the research such as research background, research objectives and research contributions.

Chapter 2 (literature review) reviews the parent theory of CRM and organisational culture. Previous studies on CRM definitions, perspectives and key success factors are included. Definitions, elements, key features and the management of organisational culture are presented. The last part of this chapter summarises the role of organisational culture in CRM system implementation.

Chapter 3 (research model) presents the research paradigm adopted in this study and a theoretical framework from which research issues are identified and the hypotheses are proposed. Justifications for all variables and constructs included in this study are discussed. This chapter also reports the results from CRM types construct development using Exploratory Factor Analysis.

Chapter 4 (research methodology and data collection) covers the methodologies of this research that outline the development of the questionnaire and data collection process. Statistical methods used in this study are also discussed.

Chapter 5 (data preparation and measurement model) analyses the reliability and the validity of data collected from the survey research. Data preparation and measurement model evaluation are discussed and the reliability and validity testing results are reported.

Chapter 6 (data analysis and results) examines the data and responds to the hypotheses and research questions. This chapter provides answers to research issues raised in chapter 3.

The final chapter, chapter 7 (conclusions and implications) provides conclusions about the research issues and discusses contributions towards theory and practice. The limitations of the research and implications for further research are also discussed.

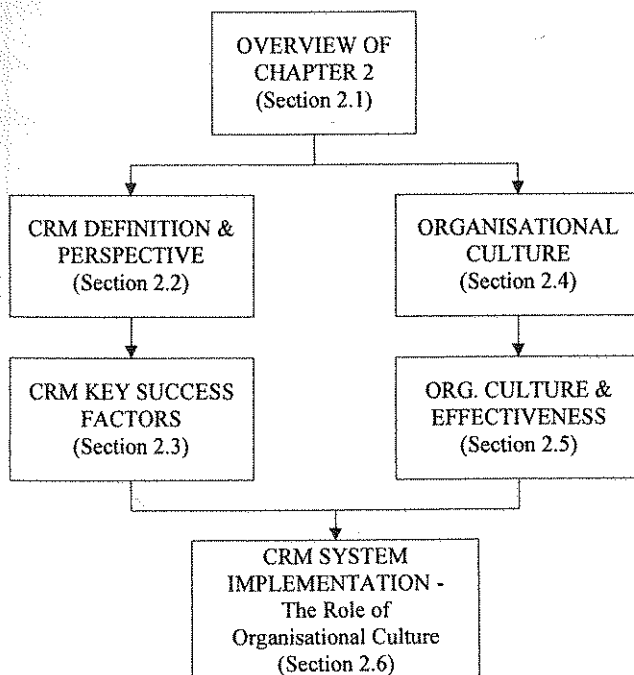
2 LITERATURE REVIEW

Chapter one briefly introduced the importance of organisational culture in CRM implementation. The aim of this chapter is to review the literature on organisational culture and its possible role in CRM implementation, to lay the foundation for the research model developed in chapter three.

2.1 Overview of Chapter 2

The literature review consists of five sections, as illustrated in Figure 2.1. The first section discusses the concept of CRM by reviewing the different definitions and perspectives of CRM. The second section describes important success factors for CRM implementation identified in the literature and reviews previous empirical studies on CRM success or failure. The third section discusses the theoretical and the research framework of organisational culture, and previous empirical studies on organisational culture, specifically on culture instruments used in previous studies. The fourth section describes the relationships between organisational culture and organisational effectiveness. The last section will link the two themes by examining the possible role of organisational culture in CRM implementation found in the literature.

Figure 2.1 Outline of chapter 2



2.2 CRM Definition and Perspective

The term CRM was first introduced by Tom Siebel, the founder of Siebel Systems Inc. to describe the software for marketing, selling and service automation (Buttle, 2004). Since then, many definitions and descriptions of CRM have been developed and published. Academics and practitioners see CRM as touching on issues of customer life-cycle management processes (Galbreath & Rogers, 1999; Nancarrow, Rees, & Stone, 2003; Parvatiyar & Sheth, 2001), information technology (Gefen & Ridings, 2002; Shoemaker, 2001), communications strategy (Kay Mandati, quoted in McKim, 2002; Swift, 2001) and business strategy (Gummesson, 2002; CRMguru.com, quoted in Tan, Yen, & Fang, 2002). CRM is also seen as a multi-dimensional construct, a combination between process and IT (Plakoyiannaki & Tzokas, 2002), between strategy, process and IT (Buttle, 2004; Rigby, Reichheld, & Schefter, 2002), between process, strategy, philosophy, capability and IT (Zablah, Bellenger, & Johnston, 2004b) and between strategy and IT (Payne & Frow, 2005).

Selected definitions of CRM are provided in table 2.1. Table 2.1 shows the emergent and varied nature of CRM. It can be concluded that an agreement on CRM definition is needed to make CRM a distinct management discipline (Paas & Kuijlen, 2001; Parvatiyar & Sheth, 2001; Plouffe, Williams, & Leigh, 2004). In this study, we adopt the following definition of CRM: *"CRM is the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on high-quality customer data and enabled by IT"* (Buttle, 2004, p. 34).

Table 2.1 Selected CRM definitions in the literature

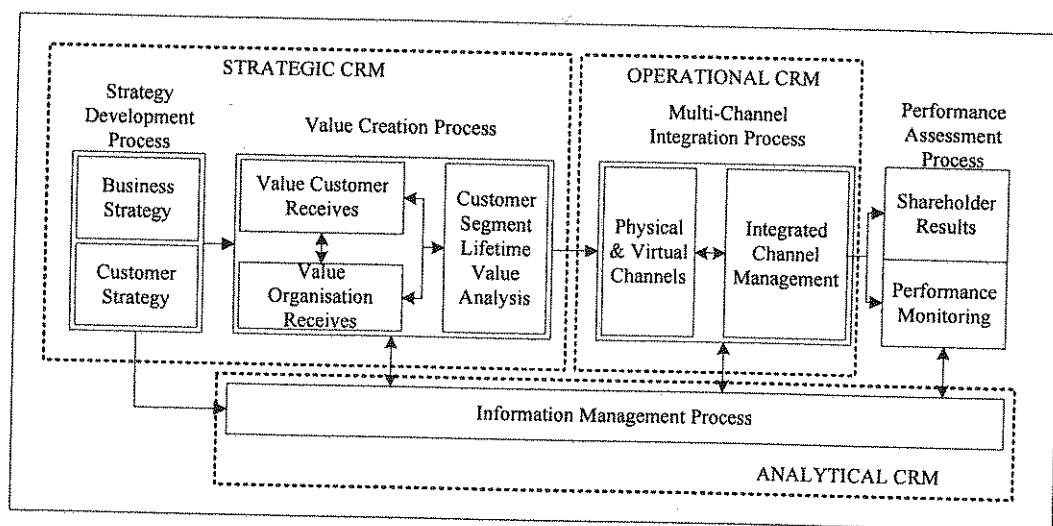
Definitions
"CRM is activities a business performs to identify, qualify, acquire, develop and retain increasingly loyal and profitable customers by delivering the right product or service, to the right customer, through the right channel, at the right time and the right cost. CRM integrates sales, marketing, service, enterprise resource planning and supply-chain management functions through business process automation, technology solutions, and information resources to maximize each customer contact. CRM facilitates relationships among enterprises, their customers, business partners, suppliers, and employees" (Galbreath & Rogers, 1999, p. 162)
"CRM is a comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service, and the supply-chain functions of the organisation to achieve greater efficiencies and effectiveness in delivering customer value" (Parvatiyar & Sheth, 2001, p. 5)
"CRM is the technology used to blend sales, marketing, and service information systems to build partnerships with customers" (Shoemaker, 2001, p. 178)
"CRM is an enterprise approach to understanding and influencing customer behaviour through meaningful communication in order to improve customer acquisition, customer retention, customer loyalty, and customer profitability" (Swift, 2001, p. 12)
"CRM is the values and strategies of relationship marketing, with particular emphasis on customer relationships – turned into practical application" (Gunnesson, 2002, p. 3)
"CRM is a business strategy to select and manage customers to optimise long term value. CRM requires a customer-centric business philosophy and culture to support effective marketing, sales and service processes. CRM applications can enable effective CRM, provided that an enterprise has the right leadership strategy and culture" (CRM Guru quoted in Tan et al., 2002, p. 78)
"CRMs are ERP modules that specialise in capturing, integrating, managing and analysing customer data, such as who, what, when and how a customer did what with the organisation" (Gefen & Ridings, 2002, p. 49)
"CRM is systematic, automatic, customised, targeted and relevant communications, initiated directly from data points, product relationships and other valuable consumer information, for the purpose of not only increasing loyalty and acquisition rates, but also ultimately to improve and manage consumer relationships in a more efficient and mutually beneficial manner" (Kay Mandati, quoted in McKim, 2002, p. 373)
"CRM is an IT enhanced value process, which identifies, develops, integrates and focuses the various competencies of the firm to the 'voice' of the customers in order to deliver long-term superior customer value, at a profit, to well identified existing and potential customer segments" (Plakoyiannaki & Tzokas, 2002, p. 229)
"CRM is the bundling of customer strategy and processes, supported by the relevant software, for the purpose of improving customer loyalty and eventually, corporate profitability" (Rigby et al., 2002, p. 102)
"CRM should be the application of a genuinely customer oriented model of marketing by an organisation, focusing on understanding and relating to the customers as a means to improve customer satisfaction, loyalty and profit" (Nancarrow et al., 2003, p. 26)
"CRM is the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on high-quality customer data and enabled by IT" (Buttle, 2004, p. 34)
"CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of relationship marketing strategies and IT to create profitable, long term relationships with customers and other key stakeholders" (Payne & Frow, 2005, p. 168)
"CRM is an ongoing process that involves the development and leveraging of market intelligence for the purpose of building and maintaining a profit-maximizing portfolio of customer relationships" (Zablah et al., 2004b, p. 460)

Source: developed for this study

Academics and practitioners have made an attempt to categorise different perspectives on CRM. As an early effort to cluster these perspectives into meaningful subsets, three different forms of CRM are identified: Operational, Collaborative, and Analytical CRM (METAGroup, 2001). Operational CRM is “the business processes and technologies that can help improve the efficiency and accuracy of day-to-day customer-facing operations” and includes sales, marketing, and service automation. Collaborative CRM is “the components and processes that allow an enterprise to interact and collaborate with their customers” and includes voice technologies, web store-fronts, e-mail, conferencing and face-to-face interactions. Analytical CRM is the portion of the CRM ecosystem that “provides analysis of customer data and behavioral patterns to improve business decisions” and includes the underlying data warehouse architecture, customer profiling/segmentation systems, reporting and analysis.

Building on the META Group’s representation of a CRM ecosystem, Payne and Frow (2005) proposed a strategic framework for CRM, consisting of five interrelated cross-functional processes: the Strategy Development Process, Value Creation Process, Multi Channel Integration Process, Information Management Process and Performance Assessment Process. Four of these five processes are subsumed within three forms of CRM – Strategic, Operational and Analytical – as shown in figure 2.2 below.

Figure 2.2 Strategic, Operational and Analytical CRM



Source: adapted from Payne and Frow (Payne, 2006; Payne & Frow, 2005)

Strategic CRM encompasses the strategy development process and the value creation process. An important goal in Strategic CRM is to align the broader business strategy with customer strategy. Therefore, Strategic CRM answers questions, such as '*what business are we in?*', '*which customers do we serve?*', and '*how do we create and deliver value to these customers?*'. In the value creation process, business and customer strategy decisions are translated into implementation programs that generate value for customers and organization alike. Operational CRM is focused on the management of the virtual and physical channels through which customers and organisation communicate and transact. Channel integration is an important driver of many Operational CRM system implementations. Analytical CRM is focused on the development and exploitation of customer data. Figure 2.2 also illustrates how these three forms of CRM are interrelated. Analytical CRM, for example, supports Operational CRM by feeding the right information at the right time to agents and channels interacting with customers (Payne, 2006; Payne & Frow, 2005). Strategic, Operational and Analytical CRM will be discussed further in the next section.

Payne and Frow (2004) proposed three levels of CRM project. At the first level, some CRM projects involve the implementation of single technologies, such as computer-telephony integration, e-commerce applications or data analytics. Second, some CRM projects involve an integrated series of customer-related technology solutions. Third, it is concluded that some CRM projects are committed to the development of "*a holistic strategy approach to managing customer relationships to create shareholder value*" (Payne & Frow, 2004, p. 268)

CRM can be classified according to implementation objectives. Organisations have some objectives to meet when a decision to implement CRM is made, which correspond to their expectations of CRM. CRM may be implemented to transform the organisation into a customer-centric organisation to increase customer profitability (Chye & Gerry, 2002; Hughes, 2002). Organisations strive to have better marketing and sales programs by collecting customer data and analysing relevant data into information with this information, they can offer customers the right product, through the right channels at the right time. Xu and Walton (2005) provided examples of CRM objectives, such as to improve customer satisfaction levels, to retain customers, to improve customer lifetime value, to have better strategic information to relevant departments, to attract new

customers and to cut cost. Table 2.2 shows selected CRM benefits from sharing customer data and using CRM innovative technology throughout an organisation.

Table 2.2 Selected CRM benefits

Benefits from customer data sharing	Benefits from CRM innovative technology
Superior levels of customer service and efficient call centres or service centres	Extends capability to the customer for self service and internet applications
Improved targeting to segments and individual customers	Attracts existing and new customers through personalised communications and improved targeting
Vast information about customers' habits and preferences	Attracts existing and new customers through personalised communications and improved targeting
Integrated and complete view of the customer	Integrates customer and supplier relationships
Opportunities for cross-selling and up-selling	Construct metrics to analyse common and unique customer patterns

Sources: Chen and Popovich (2003)

2.2.1 Strategic, Operational and Analytical CRM

The next section provides more detailed explanations of SOA (Strategic, Operational and Analytical) CRM.

Strategic CRM. Buttle (2004) defined Strategic CRM as *"a top down perspective on CRM, which views CRM as a core customer centric business strategy that aims at winning and keeping profitable customers"* (p. 3). Payne and Frow (2004) identified two processes – the Strategy Development and Value Creation processes – that form Strategic CRM. Plakoyiannaki and Tzokas (2002) explained that when CRM serves as a basic business strategy, it reflects the organisation's long-term vision as it strives to create and deliver value to customers. Lin and Su (2003) added that Strategic CRM gives opportunity to leverage customer knowledge and create value for customers and, in the end, helps organisations to understand and fulfil current and potential customer's needs.

Payne and Frow (2005) noted that an important goal in Strategic CRM is to align the broader business strategy with customer strategy. They suggest that an understanding of

business strategy issues, such as corporate vision and industry and competitor profiles, can help an organisation develop Strategic CRM that is consistent with its own context. Customer strategy selects which customers to be served. Due to limited resources, organisations select customers that can be served well and profitably. This proactive selection of customers is an important process, because no organisation is likely to be able to serve all customers effectively.

Payne and Frow (2005) explained that in the value creation process, business and customer strategy decisions are translated into implementation programs that generate value for customers and organisation alike. The main considerations of the value creation process are the value the customer receives and the value the organisation receives. The value the customer receives is delivered by the value proposition of the organisation. Organisations strive to develop offers that they believe will meet the needs and expectations of customers more effectively or efficiently than competing offers. The value the organisation receives is the return on investments in the value creation process. The Customer Lifetime Value (CLV) is a metric that can be used to measure the customer's potential profit over a defined lifetime of transactions. Customer lifetime value (CLV) is "*The estimated profitability of a customer over the course of his or her relationship with an organisation*" (Kale, 2004, p. 45) and can be calculated from the present value of all net margins during the relationship with a customer (Buttle, 2004).

Operational CRM. Buttle (2004) defined Operational CRM as "*a perspective on CRM which focuses on major automation projects within the front-office functions of selling, marketing and service*" (p. 3). From this definition, Operational CRM is focused on the automation of business processes in selling, marketing and service functions needed to implement the day-to-day business operations across customer contact points and enabled by technologies.

Sales force automation applies technology to the management of selling activities to optimise sales productivity by improving the speed and quality of information flow to improve internal communications between the sales force and management (Speier & Venkatesh, 2002; Tan, Yen, & Fang, 2002). Tan et al. (2002) added that marketing automation applies technology to marketing processes to help organisations manage their marketing programs. Similarly, service automation allows organisations to automate their customer service operations, with the objective of increased customer

satisfaction by accelerating the inquiry and feedback processes from communications channels. The objective of Operational CRM systems is to improve the efficiency and effectiveness of customer management business processes, by personalising the relationship with customers, by improving organisational response to customers' needs (Xu & Walton, 2005) and by increasing the speed and quality of information flows in organisation (Speier & Venkatesh, 2002).

Payne and Frow (2005) point out that channel integration is an important driver of many Operational CRM system implementations. This Multi-Channel Integration Process attempts to ensure consistency and high quality in the customer's experience across the different channels. Ang and Buttle (2003) provided examples of channels, such as distributors, catalogues, on-line shops, electronic exchanges or auctions and direct selling. They suggest evaluating channel options from the ability to create customer value that meets customers' needs and expectations at low cost.

Xu and Walton (2005) suggested obtaining Operational CRM data from contact centre and contact management activities. Chan (2005) explained that Operational CRM data consist of transactional data from front-line customer touch points, such as sales, surveys, customer inquiries and other customer interactions. Fayerman (2002) argued that data from back office functions, such as from human resources and finance, may be needed for Operational CRM system to work effectively.

Analytical CRM. Buttle (2004) defined Analytical CRM as "*A bottom up perspective, which focuses on the intelligent mining of customer data for strategic or tactical purposes*" (p. 3). Payne and Frow (2005) added that Analytical CRM refers to information management processes that involve the collection and accumulation of customer information from customer interfaces. Knox, Maklan, Payne, Peppard and Ryals (2003) explained that this information management process supports the strategy development process by providing the information about market characteristics to develop customer strategy, to assist in the value creation process, such as in determining customer lifetime value and in the development of new products and services.

Analytical CRM uses technology to accumulate and analyse customer data. Customer information is analysed to develop customer profiles and opportunities that will be delivered to the touch points and channels for better Operational CRM applications

(Payne, 2006). Customer information helps the organisation to understand better customer behaviour, to conduct the right transaction at the right time and to be able to segment its market effectively (Plakoyiannaki & Tzokas, 2002; Xu & Walton, 2005).

Herschel (2002) identified several tools of Analytical CRM, such as customer segmentation analysis, customer profitability analysis, '*what if*' analysis, real-time event monitoring and triggering, campaign management and personalisation. Doyle (2002) also suggested other analytical tools, such as analysis of the characteristics and behaviour of customers, modelling to predict customer behaviour, communications management with customers, personalised communications with customers, interaction management and optimisation to determine the best combination of customers, products and communications channels. Gebert, Geib, Kolbe and Brenner (2003) noted that data warehousing and data mining solutions are standard technology applications in Analytical CRM.

Analytical CRM systems can increase revenue in many ways, such as through cross-sell (selling additional products and services) and up-sell (selling higher value products and services) (Buttle, 2004), a prediction of which customers are most likely to buy, an identification of high value customers, an increase in brand awareness and an increase in customer satisfaction, loyalty and referrals (SAS, 2002). Key success factors for Analytical CRM system implementation are the empowerment of management through the sharing of customer information (Xu & Walton, 2005) and strong teamwork between marketing and customer service (Herschel, 2002). The lack of an integrated view of customers, insufficient customer intelligence, inability to act on customer intelligence quickly (SAS, 2002) and the lack of the awareness of the potential benefit of Analytical CRM (Xu & Walton, 2005) were identified as reasons for failures in implementing Analytical CRM systems.

Operational vs. Analytical CRM. From an evaluation of 20 leading CRM software functions, Xu and Walton (2005) point out that Operational CRM is a common feature in CRM software. The results of their study show that all CRM systems evaluated have Operational CRM functions, such as contact management, call centre, field sales and service support and 360-degree customer view. However, only 40 percent have analytical functions such as real-time information about customers. Xu and Walton

(2005) concluded that the main objective of CRM system implementation in the past was to improve operational efficiency rather than obtain customer information.

Gartner Inc. compared the benefit of Operational CRM with Analytical CRM (as cited in Herschel, 2002) and concluded that Operational CRM has a faster Return On Investment (ROI) than Analytical CRM because of improved efficiency. However, Analytical CRM offers a continuing potential ROI from the improvement in the knowledge and understanding of customers. Collaborating Operational and Analytical CRM is recommended (PRG, 2004). This collaboration may achieve a customer-based business strategy and a better ROI, because Analytical CRM creates intelligence by processing internal and external data, while Operational CRM turns this intelligence from Analytical CRM into customer value.

2.3 CRM Key Success Factors

In recent years, CRM has become more widely accepted as an important management discipline. Bain and Company's global survey ranked CRM as one of the top ten tools used by managers (Rigby, 2003; Rigby & Bilodeau, 2005). However, the satisfaction or success rate for CRM implementation reportedly remains low, as presented in table 2.3.

Table 2.3 CRM implementation satisfaction/success rates

Satisfactory/ Success Rate	Comments	Source
65 percent	35 percent of CRM implementations were clearly failing and many never provided a ROI	CRMGuru and Caribou Lake Customer (as cited in D. Lee, 2000)
29 percent	A global survey of senior executive worldwide in April 2003 revealed that only 29 percent of respondents are satisfied with the quality of their CRM	Economist Intelligence Unit (AT&T, 2003)
15 percent	A global survey released in April 2004 revealed that only 15 percent of global companies believe they were fully succeeding with their CRM initiatives and another 20 percent to 30 percent were having only some success	IBM Business Consulting (LaValle & Scheld, 2004)
50 percent	CRM trends report published in February 2006 reported that less than 50 percent of 94 executives surveyed felt that the business benefits achieved from CRM application met their expectations	Forrester Research (as cited in Sims, 2006)

Source: developed for this study

A global survey of senior executives worldwide in 2004, conducted by IBM Business Consulting Service, highlighted three important activities in CRM: Integral, Contributing and Foundation activities, and their impacts in achieving CRM success. Table 2.4 shows the results from this survey for the Asia Pacific region. From this table, Integral activities such as stakeholder assessment, CRM strategy and value proposition development, and process change, represent the biggest challenges in achieving CRM success. If these activities were implemented successfully, CRM success may be achieved. Contributing activities, such as change management, business case and ROI, metric development, governance, customer data integration and ownership, have a lesser impact on overall CRM success, while foundation activities such as organisational alignment, senior executive and leader buy-in, budget process management, capabilities and risk management, technology, company initiatives, implementation roadmap and customer needs analysis, have the least impact on overall CRM success.

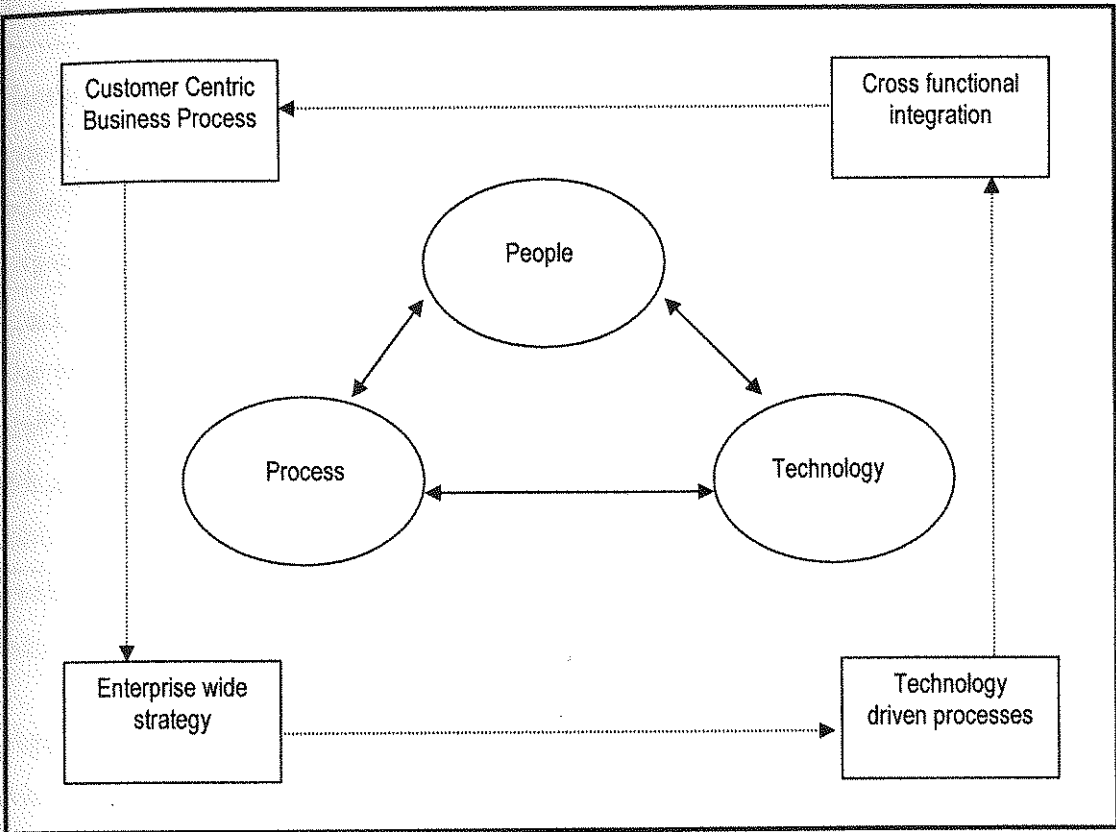
Table 2.4 Impact of key activities for CRM success in Asia Pacific

Type of activities	Activities	Percentage of success explained
Integral Activities	<ul style="list-style-type: none"> - Stakeholder assessment - CRM strategy and value proposition development - Process change 	Differentiates 70-74 percent of success
Contributing Activities	<ul style="list-style-type: none"> - Change management - Business case and ROI - Metric development - Governance - Customer data integration and data ownership 	Differentiates 23-27 percent of success
Foundation Activities	<ul style="list-style-type: none"> - Organisational alignment - Senior executive and leader buy-in - Budget process management - Capabilities and risk management - Technology implementation - Prioritisation of company initiatives - Implementation roadmap - Customer needs analysis 	Differentiates 3-4 percent of success

Source: adapted from IBM Business Consulting Service (LaValle & Scheld, 2004)

CRM performance is greatly influenced by the interplay between people, process and technology (Bull, 2003; Chan, 2005; I. J. Chen & Popovich, 2003; Zablah, Bellenger, & Johnston, 2004b). A CRM implementation needs a CRM strategy to integrate these three factors (Harding, DeAngelo, & Ziegler, 2004; Kim, Suh, & Hwang, 2003; Kristoffersen & Singh, 2004; Roberts, Liu, & Hazard, 2005). Figure 2.3 proposes a CRM implementation model that includes these three factors of CRM success. Chen and Popovich (2003) concluded that these three factors are integrated within customer centric business, enterprise wide strategy, technology driven processes and cross functional integration.

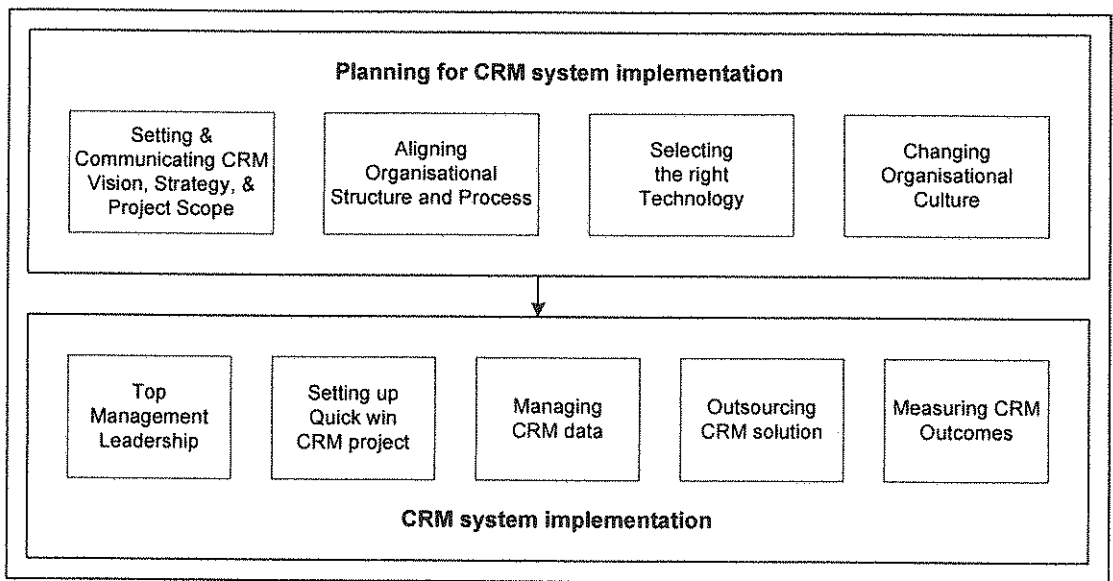
Figure 2.3 CRM implementation framework



Source: Chen and Popovich (2003)

The next section discusses important elements within people, process and technology contributing to the success or failure of CRM system implementation, and describes previous theoretical and empirical studies on leading factors for CRM success and failure. The discussion follows the CRM success framework developed for this study (see Figure 2.4), synthesising steps needed for a successful CRM system implementation that have been discussed in the literature. This version focuses on the requirements for planning and implementing CRM successfully. It should be noted that this model is not designed to be empirically tested, but simply serves to organise information collected during the literature review.

Figure 2.4 CRM success framework developed for this study



Source: developed for this study

2.3.1 Planning for CRM System Implementation

In any management initiative, planning plays an important part in determining the implementation outcome. The success or failure of implementation depends on how successful an implementing organisation's management is at defining and executing necessary actions before implementation. In the context of CRM, planning is needed for many reasons. Kavanagh (2003) argued that an Operational CRM system is designed to help front-line people offer more profitable and better service to customers. Front-line people may have not used any automated tools before. Their resistance to accept and use the CRM system is an issue that may need to be addressed. Kavanagh (2003) suggested that automating front-line processes requires major organisational and technological changes, because these processes are extremely varied across organisations and less standardised than back-end processes. Organisational readiness to deal with these changes is questionable, and a CRM system implementation plan benefits the organisation by shaping its resources to achieve CRM objectives.

CRM planning can include the following activities:

- Setting and communicating CRM vision, strategy and project scope
- Aligning organisational structure and process

- Selecting the right technology
- Changing organisational culture

Setting and communicating CRM vision, strategy and project scope. A CRM plan generally involves setting and communicating the CRM vision, strategy and project scope. Galbreath and Rogers (1999) noted that a vision sets out the expectation an organisation has of its CRM initiative. This serves to maintain the project on the right track. Aligning the CRM vision with the entire vision adopted by the organisation from the beginning is a helpful discipline. Hansotia (2002) added that a shared CRM vision that comes from employees keeps them motivated. If this vision does not incorporate, for example, a customer focus philosophy, the top management may need to revisit the philosophy statement and revise it accordingly. The organisation needs to set clear and realistic CRM implementation goals to achieve its vision (Ebner, Hu, Levitt, & McCrory, 2002).

Agrawal (2003) suggested that defining customer strategy is vital to realising the CRM vision. Considering CRM as a technology tool rather than a business strategy is a mistake made by some top management (Kale, 2004; Rigby, Reichheld, & Schefter, 2002). When CRM as a technology solution drives organisational processes, customer strategy is dictated by the functionality in the CRM software to support this strategy. To avoid this mistake, it is important to define customer strategy before implementation or even before considering the implementation of a CRM system (Davids, 1999; Rigby, Reichheld, & Schefter, 2002). Mack, Mayo and Khare (2005) noted that organisations want to have better relationships with profitable customers, therefore CRM customer strategy is focused on higher customer loyalty, more targeted customer control and better customer information. Rigby, Reichheld and Dawson (2003) suggested that identifying profitable customers is important in planning a CRM implementation. The organisation identifies potential profitable customers to make them more profitable and to ensure long-term profit (Roberts, Liu, & Hazard, 2005; Verhoef & Langerak, 2002).

Gillies, Rigby and Reichheld (2002) identified customer segmentation as the most important customer strategy in creating and managing customer relationships, because it identifies and targets profitable and unprofitable customers. Segmentation analysis is designed to achieve marketing goals by making profitable customers more profitable and unprofitable customers profitable (Rigby, Reichheld, & Schefter, 2002; Roberts,

Liu, & Hazard, 2005). A customer's life time value is a recommended metric to identify best customers (Davids, 1999; Mack, Mayo, & Khare, 2005; Roberts, Liu, & Hazard, 2005; Ryals & Payne, 2001; Verhoef & Langerak, 2002). Long-term relationships with customers increase profits, with the assumptions that serving loyal customers is less costly than acquiring new ones and long-term relationships are more profitable than short term (Crosby, 2002; Kale, 2004). However, there is not enough evidence to support this assumption. Long-term customers are less inclined to switch product or service (Verhoef & Langerak, 2002) and not all customers are equally profitable and desirable (Kale, 2004). Kale (2004) concluded that accurate data on revenue and customer service costs help an organisation to apply customer lifetime value as part of its CRM strategies.

Davids (1999) noted that developing a detailed customer strategy, such as customer acquisition, retention and development targets, involves understanding from the customer and the organisation. He points out that customers have different needs and not all want to have a relationship with suppliers, therefore customers need to understand what benefit they will gain from CRM system implementation. On the other hand, the organisation needs to understand how customer experience is going to be affected by CRM implementation (Rigby, Reichheld, & Schefter, 2002; Verhoef & Langerak, 2002).

Kotorov (2003) noted that CRM vision and customer strategy help to set a well-defined project scope that highlights the potential benefit of adopting CRM at every stage of implementation. Agrawal (2003) advised that involving employees affected by the CRM project in defining the vision, strategy and project scope is important in ensuring their support. The vision, strategy and project scope need to be communicated regularly to employees to create a sense of ownership and commitment. A CRM steering committee team that consists of important department representatives who will be affected by CRM implementation needs to be established. A project leader should be appointed to ensure that the reasons for CRM implementation are communicated to all employees (Rigby, Reichheld, & Schefter, 2002). Smith (2006) suggested communicating benefits from CRM implementation to employees. Convincing employees that a CRM system will not cost their jobs but help to solve their day-to-day problems or achieve their goals may ensure staff buy-in (Bull, 2003; Kavanagh, 2003).

Empirical studies show that understanding customer needs and customer value plays a major role in CRM implementation. Kristoffersen and Singh (2004) studied a CRM implementation in a Norwegian non-profit organisation and concluded that understanding customers' needs is critical for CRM success. A study by Deloitte Consulting shows that organisations with better understandings of customer value are 60 percent more profitable (as cited in Kale, 2004). From in-depth case studies at five organisations in the US, Wilson, Daniel and McDonald (2002) examined the success factors of CRM system implementation from the IT point of view. They reveal that adopting a single view of the customer leads to an understanding of customer value. Starkey and Woodcock (2002) have measured customer management performance using CMAT (Customer Management Assessment Tools) in hundreds of organisations. CMAT consists of 260 best practice questions covering eight parts of a strategic CRM implementation such as analysis and planning, proposition, information and technology, people and organisation, process management, customer management activity, measuring the effect and customer experience. CMAT scores can be correlated with business performance and compared with a relevant set of other organisations. Starkey and Woodcock (2002) point out that implementing customer management without the development of customer value leads to poor performance in customer management.

Aligning organisational structure and process. Designing or re-engineering important business processes helps the organisation in executing its CRM strategy and fulfilling customers' needs (Kale, 2004; Kavanagh, 2003; Rigby, Reichheld, & Scheffer, 2002). Process re-design initiatives generally aim at having more efficient processes. Some organisations believe that CRM is only associated with customer-facing processes and ignore the importance of re-designing the internal structures to facilitate customer orientation, such as job descriptions, performance measures, rewards and training programs (Rigby, Reichheld, & Scheffer, 2002). Bolton (2004) points out that customer facing processes are generally re-designed to offer customers some solutions to meet their needs. The aims of process re-design are to increase customer loyalty, customer lifetime value and revenue (I. J. Chen & Popovich, 2003; Hansotia, 2002).

The re-engineering of processes that cross departmental boundaries requires involvement from affected employees from the early development stage of process redesign to ensure the ownership and the implementation of the new processes

(Agrawal, 2003; Kotorov, 2003; Mack, Mayo, & Khare, 2005). Agrawal (2003) argued that employees who are comfortable with the current processes may resist change to their routine activities. Mack et al. (2005) suggested including a CRM department in organisational structure. Ryals and Knox (2001) recommended changing the traditional organisational structure into cross-functional teams.

Kale (2004) emphasised the importance of re-designing back office and customer-facing processes. Eichorn (2004) identified several processes which need to be redesigned, such as internal processes to satisfy customers, service innovation or continuous process improvement, frontline problem solving, decision-making processes for data mining and campaign management and performance metrics linked to customer satisfaction. He adds that organisational processes integrate customer information throughout the organisation and the customer information processes consist of data acquisition and data interpretation.

Several empirical studies support the claim that designing or re-engineering important business processes helps the organisation in executing its CRM strategy. From a case study of a Scandinavian organisation, Lindgreen (2004) concluded that business processes that drive loyalty are essential. In re-designing processes, voice-of-the-customer, whether internal or external, needs to be heard, because customers dislike complicated processes. Starkey and Woodcock (2002) have measured customer management performance using the CMAT toolkit and conclude that organisations with complicated processes face difficulties in implementing CRM and are more likely to have poor CMAT scores. Campbell (2003) studied five Canadian financial services organisations that have implemented CRM. The results show a tendency among these organisations to over-emphasise data acquisition procedures to the detriment of improving skill and understanding among departments in interpreting, sharing and integrating customer information.

Selecting the right technology. As implied in the CRM definition, information technology, both hardware and software, are important inputs to CRM implementation. Many literatures suggest that CRM is more than just a technology implementation. CRM technology is just an enabler to execute CRM strategy and only implemented after developing strategy and addressing organisational issues, such as people, culture and

process (A. J. Campbell, 2003; Hansotia, 2002; Mack, Mayo, & Khare, 2005; Roberts, Liu, & Hazard, 2005).

Roberts et al. (2005) noted that CRM technology is often regarded as a tool that maximises customer retention through efficiency and effectiveness in marketing activities. However, he argues that CRM technology without excellent employees does not improve customer retention. This CRM technology may neither solve customer relationship problems nor uniquely determine the CRM system implementation success. Software alone may not compensate for the inability to fulfil customer expectation (Verhoef & Langerak, 2002).

Xu and Walton (2005) evaluated 20 CRM applications and concluded that Operational CRM functionality is a common feature in CRM software. Speier and Venkatesh (2002) point out that Sales Force Automation (SFA) tools represent an important component of Operational CRM system and are increasingly used to facilitate CRM strategy. Eichorn (2004) identified technology features needed for CRM system implementation, such as reliable communications technology, customer data management capability, information delivery channels, customer data availability to front line staff and scalable and interoperable hardware and software platforms.

Rigby et al. (2003) noted that CRM software is hugely varied in its functionality and relevance to different industrial and commercial contexts. Therefore, software selection is generally based on its fit with objectives of a program, customer-facing processes, and organisational culture. They suggested that a shared understanding of CRM perspectives (Strategic, Operational or Analytical) and goals is needed to evaluate software options from the business point of view rather than simply from the technological point of view.

CRM software needs to be integrated with back-end applications (Bull, 2003; Kale, 2004). If an organisation implements several projects at the same time without an integrated implementation plan, the risk of CRM failure may be higher (Accenture, 2003). The IT people might not cope with the implementation requirements of too many projects. Software user-friendliness is another important attribute in selecting CRM software (Ebner, Hu, Levitt, & McCrory, 2002).

Empirical studies show that CRM is more than just a technology implementation. Starkey and Woodcock (2002) have measured customer management performance using the CMAT toolkit and reveal that a wrong belief that IT is the main solution to create customer value has caused organisations to perform poorly in customer management. They suggest that implementing a CRM system that considers organisational issues may lead to lower operating cost and marketing efficiency. From in-depth case studies at five organisations in the US, Wilson et al. (2002) examined the success factors of CRM system implementation from the IT point of view. They reveal that business process alignment, supported by IT infrastructure, is important in ensuring CRM system implementation success. Croteau and Li (2003) studied CRM technological initiatives in 57 large Canadian organisations. They concluded that knowledge management capability supported by IT is also an important factor in ensuring CRM success. Reinartz and Chugh (2003) have interviewed senior managers involved in Strategic CRM projects. The results of their study demonstrate that the user friendliness and flexibility of the CRM system are important factors for CRM implementation.

Changing organisational culture. Successful CRM performance has been linked to an organisation's ability to identify and respond to potential barriers in organisational culture. People's resistance to working with newly created processes and to use CRM software may lead to implementation failure (Crosby, 2002; Kavanagh, 2003). Thus, many researchers suggest reviewing and changing employee behaviour and attitude, to create an organisational culture conducive to the implementation of CRM system and strategy (Hansotia, 2002; Mack, Mayo, & Khare, 2005; O'Malley & Mitussis, 2002; Smith, 2006).

It is widely accepted that adopting a customer centric culture is an important requirement for CRM initiatives (Kale, 2004; Karakostas, Kardaras, & Papathanassiou, 2005; Rigby, Reichheld, & Schefter, 2002; Verhoef & Langerak, 2002). Starkey and Woodcock (2002) have measured customer management performance using the CMAT toolkit and point out that organisations that fail to perform customer-focused behaviours are more likely to have poor CMAT scores.

Changes in organisational culture can be communicated through rewards, thereby ensuring that all employees understand the importance of adopting customer centric

behaviours as they strive to develop stronger customer relationships (Mack, Mayo, & Khare, 2005; Smith, 2006). Campbell (2003) studied CRM implementations at five Canadian financial service firms. The results indicate that the reward structure is a key success factor in the development of deeper customer knowledge. Companies may need to restructure performance-based rewards to motivate customer-focused behaviours, such as one point-of-contact resolution of customer complaints.

Ryals and Knox (2001) argued that a customer-centric organisational culture is characteristically adaptive and responsive to change. They note that many organisations assume that by implementing a CRM program and system, they will automatically become customer centric. This is unlikely to occur without a planned effort to alter the existing organisational culture to be more customer focused (Kale, 2004).

Verhoef and Langerak (2002) suggested having cross-functional teams to assist the development of customer-centricity. Front line people may need assistance from other departments to solve customer problems and for that reason, teamwork and shared customer data are important (Eichorn, 2004; Ryals & Knox, 2001). Curry and Kkolou (2004) have applied a self-assessment tool to evaluate CRM performance in three UK organisations. They point out that customer focus, participation, and teamwork are important cultural aspects for CRM. From in-depth case studies at five organisations in the US, Wilson et al. (2002) examined the success factors of CRM system implementation from the IT point of view. They also identified the need for a cross-functional team focusing on the customer.

A study by Campbell (2003) in five Canadian organisations implementing CRM confirms that cross-functional teamwork is required to develop deeper customer-related knowledge. Chen and Popovich (2003) also suggested the sharing of information and knowledge across departments. O'Malley and Mitussis (2002) argued that sharing customer data, accounts data, marketing data and inventory data in an organisation enables the relevant departments to market, sell and service customers more effectively. Without this, heads of departments may conflict over the issue of data or system ownership and reject the idea of collaboration, therefore putting at risk the drive to become more customer focused (Eichorn, 2004).

Galbreath and Rogers (1999) noted that decentralised decision making, whereby front-line people are empowered to solve customer problems using their own initiative, is another critical organisational culture issue. However, survey data from a sample of sales people in the pharmaceutical industry, Ahearne, Mathieu and Rapp (2005) suggested that empowerment may only benefit sales people with low level of knowledge and experience.

An organisational environment that promotes an atmosphere of risk can create confidence in which employees feel able to act in the best interests of customers. This environment encourages employees to be more innovative in trying to overcome problems in CRM implementation (Galbreath & Rogers, 1999). Reinartz and Chugh (2003) have interviewed senior managers involved in Strategic CRM projects. The results of their study demonstrate that giving employees the control over customer service and ensuring job security for employees contribute to CRM success.

Starkey and Woodcock (2002) have measured customer management performance using the CMAT toolkit and conclude that the lack of support from short-term focused managers, who are rewarded for achieving quarterly sales targets, may undermine the longer-term benefit of a CRM system implementation. From in-depth case studies at five organisations in the US, Wilson et al (2002) examined the success factors of CRM system implementation from the IT point of view. They reveal that employee commitment across many customer-facing departments leads to success in implementing a CRM system. In support, Kristoffersen and Singh (2004) studied a CRM implementation in a Norwegian non-profit organisation. They argued that employee support and commitment leads to CRM success.

2.3.2 CRM System Implementation Issues

A CRM system implementation may involve the following important factors:

- Top management leadership
- Setting up several '*quick wins*' CRM projects
- Managing CRM data
- Outsourcing CRM solutions
- Measuring CRM outcomes

Top management leadership. It is widely claim that a CRM initiative demands top management's involvement and commitment throughout the project to ensure employees acceptance and support (I. J. Chen & Popovich, 2003; Croteau & Li, 2003; Kale, 2004; Kotorov, 2003). Accenture's survey in 2000 revealed that 55 percent of CRM failures were linked to lack of top management support (as cited in Kale, 2004). Crosby (2002) explained that top management shows long-term commitment to CRM implementation by interacting with customers and gaining an understanding of customers' needs. Top management interactions with customers help to ensure that the positives and negatives of customer experience are understood at the highest levels. This understanding helps top management to identify and solve competency problems to support customer relationship strategy.

Galbreath and Rogers (1999) point out the importance of having a customer relationship leader. According to them, a CRM leader must be the champion of technology, must ensure that this technology is adopted by people in the organisation, and must be aware that technology is equally important to customers and employees. The CRM leader must facilitate a shared vision that comes from within the organisation and must review and reinforce this vision regularly. The CRM leader must be innovative to fulfil customers' needs, and must incorporate this atmosphere of innovation into the culture of the organisation to encourage employees to solve problems during CRM implementation.

Some top management may not realise that CRM is more than just a technology project. The appointment of a technology manager to champion and manage a CRM system implementation can signal a lack of ownership and support from the top management in implementing customer strategy and this may cause employees' resistance to the initiative (Kale, 2004; Rigby, Reichheld, & Schefter, 2002).

Empirical studies support the view that top management's involvement and commitment are important for CRM success. From in-depth case studies at five organisations in the US, Wilson et al. (2002) examined the success factors of CRM system implementation from the IT point of view. They point out that the Board of Directors needs to be directly involved in managing a CRM project. Starkey and Woodcock (2002) have measured customer management performance using the CMAT toolkit and argued that the lack of senior executive ownership and leadership explains why organisations are performing poorly in customer management. Bull (2003)

analysed a CRM system implementation at a UK-based manufacturing company. He suggested having effective leadership may help an organisation to implement project management effectively, to address several project ownership issues and to address organisational communication problems. From a study of CRM implementation in five Canadian financial service organisations, Campbell (2003) concluded that senior management involvement is required to develop competency in customer knowledge and achieve the CRM vision.

Setting up several ‘quick wins’ CRM projects. Inadequate funding faced by an organisation implementing CRM contributes to CRM failure. Many CRM project scopes are expanded from the first plan, but with no corresponding expansion in investment. Ryals and Payne (2001) studied the implementation of CRM in 16 financial services organisations in the UK. They point out that for some organisations, the ‘quick wins’ method has solved funding problems and resulted in better internal buy-in to CRM investments.

A long-term CRM project can be divided into several small projects where the benefit of implementing CRM is highlighted in every stage. From in-depth case studies at five organisations in the US, Wilson et al. (2002) examined the success factors of CRM system implementation from the IT point of view. They point out that a ‘quick win’ in each project contributes to the achievement of the long-term objective of implementing a CRM system. Mack et al. (2005) explained that the ‘quick win’ method helps the organisation to achieve success early in the project, to gain executive buy-in, and to motivate the project team and the organisation.

Managing CRM data. A CRM initiative requires organisational capability to build Operational, Analytical and Collaborative customer knowledge. Smith (2006) identified elements of customer knowledge, such as patterns and trends in consumer behaviour, customer preferences, migratory tendencies, life style and personal habits. The information intelligence about customers help the organisation to create propositions that deliver value to customers (Verhoef & Langerak, 2002).

A CRM system needs high quality data (Reid & Catterall, 2005; Verhoef & Langerak, 2002). Ebner et al. (2002) argued that data unavailability contributes to CRM system implementation failures and point out that customer data may be inaccurate, incomplete,

invalid or inconsistent. Combining customer data from different incompatible sources is often the cause of data unreliability. Fletcher (2003) suggested that data unavailability can be a result of customers' hesitation to give personal information. This may be because of their concern over the improper use of their data, for example, selling their personal information to other organisations for mass marketing. Data collection may be easier when customers trust the organisation. To build trust, customers must understand why the organisation needs their personal data and how customers may benefit from this information exchange. Providing this information is one of several principles developed by the Organisation for Economic Cooperation and Development (OECD) to protect customer privacy (as cited in Buttle, 2004). An organisation must not collect customers' data without their permission. Verhoef and Langerak (2002) explained that, in permission-based marketing, customers select the kind of offers they wish to take part in, their communication method, and the timeframe in which they receive marketing information. This method may improve data quality, because it signals a concern for customers' privacy.

A massive database of customers may cause an organisation to lose focus in executing its customer strategy (Crosby, 2002; Davids, 1999). Rigby and Ledingham (2004) noted that perfect data comes at a high cost and to minimise cost, organisations need to set priorities for operational activities within their customer relationship cycles (customer targeting, product development, sales, service and retention) that need perfect information. Smith (2006) suggests using online data storage to reduce the cost of maintaining customer information.

Supporting the above statements, from interviews with senior managers involved in Strategic CRM projects, Reinartz and Chugh (2003) highlighted the importance of wide data access and availability to identify and to service profitable customers. Payton and Zahay (2005) have investigated why a Corporate Data Warehouse (CDW) was not used for CRM implementation in a large regional US health care company. They reveal that the lack of trust in the data and perception of low data quality are the reasons behind the lack of CDW usage. Payton and Zahay (2003) also point out problems with data availability in the data warehouse and add that even if the data are available, they are difficult to analyse. Ryals and Payne (2001) studied the implementation of CRM systems in 16 financial services organisations in the UK. They identified the following

as barriers to CRM system implementation: lack of analytical skill in using the data collected from the CRM system; failure to understand the benefit of a marketing database; and poor data quality and quantity. A data quantity problem (for example, not enough detailed information about customers) is seen as a major problem compared to data quality. The implementation of data warehouse is perceived as expensive. The lack of awareness of the benefit to be gained from a data warehouse can result in unwillingness to co-operate from business unit managers. Lindgreen and Antiocho (2005) examined CRM implementation in a European bank and concluded that data integration and customers' privacy are important issues for CRM. Karakostas et al. (2005) evaluated 21 CRM system implementations at financial service organisations in the UK and concluded that CRM data integration and applications are requisite in CRM systems. High quality data are not sufficient. Data distributions and applications issues are also important. How the organisation shares and uses customer data to execute customer strategy may contribute significantly to the success of CRM system implementation.

Outsourcing CRM solution. A subset of the people involved in CRM system implementation is software and hardware consultants. Many organisations implementing CRM outsource a significant share of their CRM solutions to consultant or technology partners, because of their poor understanding of how to implement a CRM system (Bull, 2003). If the organisation does not have a specialised expertise in tracking and using customer information, Davids (1999) suggested outsourcing these activities to a trustworthy vendor to get the most from customer data. Eichorn (2004) suggested creating a successful relationship with an outsourcing partner by ensuring that a supportive organisational culture and leadership are in place and processes are aligned, to facilitate easy access and the use of customer data. Four types of CRM vendors are identified by Pricewaterhouse Coopers (as cited in MacSweeney, 2000): full service CRM product vendors, vendors that offer some but not all CRM applications, Enterprise Resource Planning (ERP) vendors and e-CRM vendors. Siebel Systems, now part of Oracle, is the largest vendor for full service CRM application (Smith, 2006).

Starkey and Woodcock (2002) have measured customer management performance using the CMAT toolkit and point out that the lack of knowledge in good customer

management techniques and practices result in organisations performing poorly in customer management. Ryals and Payne (2001) studied the implementation of CRM systems in 16 financial services organisations in the UK. They argued that the lack of skill in developing and using the CRM system contributed to CRM failures. Bull (2003) analysed a CRM system implementation at a UK-based manufacturing company. The results of his study showed that sourcing for external expertise, training and consultancy may improve CRM knowledge, capability and competency. Kristoffersen and Singh (2004) studied a CRM implementation in a Norwegian non-profit organisation. They point out that outsourcing CRM activities enhances competitive advantage. From interviews with CRM consultants in the UK, Germany and France, Pries and Stone (2004) concluded that organisations would get more benefit from CRM consultants if consultants have change management knowledge and implement it during CRM implementation.

Measuring CRM outcomes. It is widely suggested that CRM implementation must be evaluated regularly (Mack, Mayo, & Khare, 2005; Ryals & Payne, 2001; Smith, 2006). Defining metrics that contribute to the organisation's financial performance helps the organisation to lessen the risk of implementation failure. These metrics give an early warning that the objectives of implementing customer strategy supported by a CRM system may be difficult to achieve. Consequently, reviewing and changing CRM strategy and resources may be necessary (Agrawal, 2003; Crosby, 2002; Smith, 2006). Ryals and Payne (2001) identified inadequate measurement and reward systems as problems associated with CRM. These problems arise because organisations do not understand their CRM goals or do not communicate these goals to their employees. Kim et al. (2003) explained that CRM measurement is an instrument that helps to resolve the uncertainty about CRM goals. These goals and how the organisation intends to achieve them need to be communicated to employees.

Karakostas et al. (2005) have evaluated CRM system implementations at 32 financial service organisations in the UK and conclude that identifying the measurable goals for each implementation step is important to evaluating the success of CRM system implementation. In support, Reinartz and Chugh (2003) have interviewed senior managers involved in Strategic CRM projects and identified that a system for evaluating CRM objectives is required.

The measurement of CRM performance has taken two forms. First, CRM metrics can be used to measure the effectiveness of CRM projects by comparing the before and after implementation. The second form of CRM evaluation compares the performance of CRM implementation with a set of defined metrics. QCi, a management consultancy specialising in assessing and improving customer management, developed the Customer Management Assessment Tool (CMAT) (Starkey, Woodcock, & Stone, 2002a) to help organisations understand how well they manage their customers. CMAT consists of 260 best practice questions covering eight parts of a Strategic CRM implementation, such as analysis and planning, proposition, information and technology, people and organisation, process management, customer management activity, measuring the effect and customer experience. CMAT scores can be correlated with business performance and compared with a relevant set of other organisations. CMAT offers benefits for CRM implementation, such as aligning the senior management team for a common understanding on CRM performance, setting a clear baseline on how to measure improvement in CRM, checking necessary CRM requirements before investing in a technology or program, providing value input to business cases, IT development, organisational change and business planning for CRM investment. Starkey et al. (2002b) have applied CMAT-R, a simple version of CMAT, to examine the state of customer management performance in financial, oil and automotive industries. The results of their study show that the customer management performance is especially poor in insurance and consumer banking and is the best in the credit card industry.

Plouffe et al. (2004) identified speed to market, market intelligence and barriers to entry as intangible metrics for Strategic CRM that are important for the long-term competitive position of the organisation. Yim, Anderson and Swaminathan (2004) noted that customer satisfaction, customer retention and sales growth are examples of CRM metrics from the customer perspective. Customer satisfaction is indicative of a successful application of a marketing initiative. An increase in customer satisfaction may lead to higher customer retention. Similarly, an increase in customer retention may lead to higher sales growth. Kellen (2002) also suggested several metrics for marketing automation, sales force automation, service centre, field service, supply chain and logistics and website.

Kim et al. (2003) assessed CRM effectiveness using the balanced scorecard method (Kaplan & Norton, 1992) that views CRM performance from the perspective of several financial and non-financial measures. A customer-centric Balanced CRM Scorecard consists of four customer-centric outcomes, such as Customer Value, Customer Satisfaction, Customer Interaction and Customer Knowledge. These metrics are adapted from the four perspectives of the more conventional company-centric Balanced Scorecard: Financial, Customer, Business Process, and Innovation and Learning perspectives.

ROI is a popular measure for CRM but CRM metrics do not just measure cost, revenue and profit, but can include softer customer-centric metrics. Many academic researchers or practitioners recommend measuring ROI from CRM investments. However, the ROI of a CRM system implementation is difficult to calculate for several reasons (CGEY, 2002b). First, it is often not possible to identify what elements are responsible for changes in cost, revenue or profit. Second, it may be difficult to predict or trace the causes for changes in customer behaviour. Third, it can be difficult to have collaboration between IT and commercial departments, such as sales and marketing. Calculating CRM ROI by aligning metrics to CRM objectives, such as customer acquisition, growth, retention and marketing efficiencies is suggested. Bayer (2002) identified two methods for measuring CRM ROI: from the Strategic, Operational or Analytical point of view, and from hard and soft customers measures. Measuring CRM return at the strategic level and quantifying the soft customer measures are difficult. Ang and Buttle (2003) proposed a customer journey approach that traces customer value from customer acquisition to customer retention. This method uses activity based costing to compute ROI on CRM. Plouffe et al. (2004) suggested including CRM investments in CRM ROI calculation, such as software cost, hardware cost, consultant cost and internal resource cost or the opportunity cost associated with forgone initiatives.

2.3.3 CRM Key Success Factors from Previous Empirical Studies

In the previous section, the CRM key success factors that have been studied conceptually and empirically in the literature were discussed. In an attempt to organise the empirical findings about each CRM key success factor proposed in the CRM Success Framework (see figure 2.4), table 2.5 summarises findings from 14 published

empirical studies. Most of the surveyed published empirical studies employed case studies and more than half were done in the UK and Europe.

Table 2.5 Summary of CRM key success factors from previous empirical studies

Method	CASE STUDY													SURVEY	
	Countries	US/Canada			UK/Europe							Other		US/Canada	UK/Europe
Authors		Payton & Zahay (2005)	Campbell (2003)	Ryals & Payne (2001)	Wilson et al. (2002)	Bull (2003)	Kristoffersen & Singh (2004)	Lindgreen (2004)	Curry & Kkolou (2004)	Lindgreen & Antiocho (2005)	Pries & Stone (2004)	Reinartz & Chugh (2003)	Starkey & Woodcock (2002)	Croteau & Li (2003)	Karakostas et al. (2005)
Drivers															
Vision/ Strategy															
A single view of customers					x										
Setting CRM objectives						x									
Understand customers' needs							x								
Create strategy before implementation												x			
Sourcing, targeting & evaluating strategies					x										
Process															
Process alignment with IT as an enabler					x										
Reward systems & structure			x	x											
Business process that drives loyalty								x							
Customer information processes													x		

Method		CASE STUDY											SURVEY		
Countries		US/Canada			UK/Europe						Other		US/ Canada	UK/ Europe	
Authors		Payton & Zahay (2005)	Campbell (2003)	Ryals & Payne (2001)	Wilson et al. (2002)	Bull (2003)	Kristoffersen & Singh (2004)	Lindgreen (2004)	Curry & Kkolou (2004)	Lindgreen & Antioch (2005)	Pries & Stone (2004)	Reinartz & Chugh (2003)	Starkey & Woodcock (2002)	Croteau & Li (2003)	Karakostas et al. (2005)
Drivers															
Easy to use processes					x										
Approval procedures for capital expenditure					x										
IT															
IT flexibility & infrastructure					x										
User friendly & flexibility												x			
Knowledge management capabilities supported by IT														x	
Best practice embedded in a CRM package					x										
People/Culture															
Employee empowerment												x			
Cross functional teams			x		x								x		
Employee supports & commitment							x	x							
Participation & teamwork									x						

Method	CASE STUDY												SURVEY	
Countries	US/Canada				UK/Europe						Other		US/Canada	UK/Europe
Authors	Payton & Zahay (2005)	Campbell (2003)	Ryals & Payne (2001)	Wilson et al. (2002)	Bull (2003)	Kristoffersen & Singh (2004)	Lindgreen (2004)	Curry & Kkolou (2004)	Lindgreen & Antiooco (2005)	Pries & Stone (2004)	Reinartz & Chugh (2003)	Starkey & Woodcock (2002)	Croteau & Li (2003)	Karakostas et al. (2005)
Drivers														
CRM skills		X		X										
Job security											X			
Customer centric culture												X		X
Leadership														
Boards of Directors & Top Management's involvement & support		X		X									X	
Effective leadership					X									
Manager			X											
Co-operations														
Ownership												X		
Quick win project														
A quick win in several small project				X										
Adequate funding			X											
Project with major impact											X			
Data														
Quality	X		X											
Quantity			X											
Integration &									X					X

Method Countries	CASE STUDY										SURVEY			
	US/Canada		UK/Europe							Other		US/ Canada	UK/ Europe	
Authors	Payton & Zahay (2005)	Campbell (2003)	Ryals & Payne (2001)	Wilson et al. (2002)	Bull (2003)	Kristoffersen & Singh (2004)	Lindgreen (2004)	Curry & Kkolou (2004)	Lindgreen & Antiocho (2005)	Pries & Stone (2004)	Reinartz & Chugh (2003)	Starkey & Woodcock (2002)	Croteau & Li (2003)	Karakostas et al. (2005)
Drivers														
application														
Availability or access	x													
Trust in data														x
Outsource														
Provide competitive advantage						x								
Consultant advice									x					
Change management consultant										x				
Metrics														
Employee evaluation		x												
Adequate metrics			x											
CRM objectives											x			x
evaluation system														

Source: developed for this study