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Organisational Adoption of CRM in Jordan

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I dedicate this thesis to my son, husband and parents.

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Abstract

The primary question addressed in this research is: what are the factors affecting organisations' adoption of CRM? The customer relationship management system (CRM) is an information technology system that effectively manages interaction and long-term relationship with customers. The number of organisations in the world adopting CRM has been rapidly increasing and the concept of CRM has resonated considerably in recent years with both academics and practitioners. While literature often cites CRM projects as failing to deliver promised improvement in business performance, our empirical knowledge about what constitutes a successful adoption of CRM remains inherently narrow. The potential for substantially improved customer relationships and the tremendous amount of confusion regarding what constitutes successful CRM adoption, calls for a critical investigation into the adoption process, and its key success factors. To do this, the research aims to develop effective guidelines to assist in the adoption of CRM in organisations, by showing that the concept of CRM is a joint development between marketing, management and IT disciplines.

The methodology in this study is based on mixed methods by combining qualitative and quantitative approaches. There were two phases of data collection for this research. The qualitative exploratory study with varied stakeholders dealing with CRM was conducted to assess and explore the relevance of factors identified from the literature, and to contextualise the research question in relation to organisations in Jordan. The question led to the design of a survey instrument completed by 321 practitioners from ten organisations across four sectors (banking and finance, telecommunication, hospitality, and automotive) in Jordan. The data was then analysed using a variety of appropriate statistical techniques such as Exploratory Factor Analysis (EFA). In the light of the EFA, the hypotheses of the study were modified to accommodate the underlying structure of identified factors. In order to test the conceptual model with relevant hypotheses, structured equation modelling (SEM) was performed.

This study provides insight into the complexity of CRM through a new multi-disciplinarily approach, which alters the view of CRM amongst academics and practitioners and brings about a new understanding of what constitutes CRM. This approach serves the study purpose of developing a holistic picture of the impetus of CRM adoption in organisations. Moreover, two different perspectives are investigated, at individual (employee) and at organisational level. By doing so, this study unravels the complexity of CRM adoption process.

Analysis results revealed that employees' perception of CRM benefits serves as reasonable proxy for actual organisational implementation. In this study, there were four factors found to influence and explain employee perception of CRM: i) having a clear objective of CRM influences, ii) strategically measuring CRM performance, iii)

traditional segmentation analysis, and iv) knowledge management. Moreover, there were three factors which were found to have direct impact on the implementation stage: i) clear direction of CRM, ii) rewarding usage, and iii) managing project changes.

Theoretical and practical implications based on the current study results and their meanings emerged to shed new light on the potential processes and practices which managers can use to address the complexity of CRM, enabling them to exploit the potential of CRM. Moreover, this study has considered a holistic approach to CRM and its adoption, and has highlighted key areas of poorly implemented practices. It represents one of the rare attempts to thoroughly incorporate different elements of CRM into the adoption process and illuminating reasons that explain the adoption process hierarchy.

Chapter 1: Introduction

1.1 Introduction

This chapter discusses the rationale and the purpose of the study. It begins first with a rationale for investigating CRM adoption within organisations. Second, it formulates the research question in tandem with the specific objectives of the study. Third, it specifies the scope of the study by identifying different perspectives of CRM. Fourth, it outlines the expected theoretical and practical contributions of the study. Fifth, information about the economy of Jordan and the compositions of Jordanian business is provided. Sixth, the methodology used to achieve the research aims is briefly discussed. Finally, the chapter ends with an outline of the study summarising its contents.

1.2 Background of the Study

In this decade, a shift from one marketing trend to another seems inevitable, given changes in emergent technology and how these impact upon marketing concepts. One of these concepts relates to how businesses should engage with, interact with and adapt to changes in customer needs. Consequently, most businesses are increasingly integrating technology into their overall marketing plans to obtain insights into customer behaviour, to engage with customer expectations, and to build long-term relationships (Gummesson and Grönroos, 2012). As competition increases, businesses are challenged to look for innovative approaches to enhance marketing effectiveness with the goal of creating mutual values (Sheth and Parvatiyar, 1995). In order for companies to survive in today's competitive environment, the traditional transactional approach to marketing has begun to shift towards relationship-based marketing strategies; building long-term relationships with customers is better than taking advantage of the customer in short-term exchanges. This requires a shift in perspective to emphasising involvement and engagement of customers in long-term relationships, so that more can be learned about individual customer needs.

Recent marketing research into changes in the business environment has highlighted a rising trend in the costs of acquiring customers, whilst the cost of retaining customers has proven considerably less costly and more profitable (Alshawi *et al.*, 2011). According to Payne (2006), marketers should be able to substantiate Pareto's 80/20 principle, whereby a relatively small number of customers account for the majority of the business profits. In the light of this perception, the most important task of marketing is to serve profitable customers in ways that develop and enrich their relationships with the firm (Zeithaml *et al.*, 2001; Persson, 2013). To create relationships with profitable customers means that the business provides them with continuous services, finds new ways to offer satisfaction and finds new sources of value.

According to marketing research leaders, relationship marketing is one of the emerging paradigms of modern marketing, delivering a new conceptual understanding

of how marketing functions in context (Morgan and Hunt, 1994; Chaffey, 2008). The emergence of relationship marketing signifies a paradigm shift from the traditional concept of transactional marketing (Grönroos, 1994; Hung *et al.*, 2010). This emerging concept focuses on long-term interactions leading to repeat purchases. Its objective is to establish, maintain and enhance customer relationships. The origin of relationship marketing stems from the disciplines of business-to-business and services marketing, which are more likely to benefit from adopting this relational approach (Harwood *et al.*, 2008).

For this emerging concept to be developed successfully, it is likely that relationship marketing would profit from advances in technology, as it provides enhanced opportunities for organisations to use information/data to build, manage, and sustain long term relationships with customers (Payne, 2006; Lin *et al.*, 2010). One important tool which has evolved for effectively managing interactions in long-term relationships is known as the customer relationship management system (CRM). As a result, the focus within marketing has gradually moved from relationship marketing to the Customer Relationship Management (CRM) which has been defined as the "a strategic approach concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments." (Payne, 2006:22).

A cynical view may consider CRM systems as old hat or already dealt with fully. Taking a more holistic view, however, it is more likely that, although CRM has become a well-used term attracting considerable criticism over time, it remains a prominent area of research integrating different research streams in the marketing literature. At the heart of this observation lies revived interest in organisational adoption of CRM (Alshawi *et al.*, 2011; Ling-yee, 2011), customer engagement (Verhoef *et al.*, 2010), social media (Harrigan *et al.*, 2011), trust and effective commitment (Aurier and Lanauze, 2012), dark sides (Frow *et al.*, 2011), unfairness (Nguyen and Mutum 2012), and profitability and segmentation (Ernst *et al.*, 2011; Meadows and Dibb 2012).

CRM is a result of advances in technology which have been targeted at effective management interaction and long-term relationships with customers. It helps organisations to adapt to changes in their customers' needs, which in turn will create competitive advantage. Therefore, the number of organisations adopting CRM is rapidly increasing and the concept of CRM increasingly resonates with businesses and researchers in today's competitive environment. However, critics point that some CRM projects have failed to deliver the promised improvement in business performance (Frow *et al.*, 2011). Such criticisms can be countered by arguing that to date, our empirical knowledge of what constitutes a successful adoption of CRM remains inherently narrow (Payne, 2006). The considerable confusion as to what constitutes successful CRM adoption, and its potential for substantially improved customer relationships, calls for a critical investigation into current adoption

processes, and an evaluation of which key success factors have helped other organisations to manage CRM adoption more effectively, leading to better financial performance. Responding to this, the research aims to develop guidelines which will effectively assist organisations in the adoption of CRM, by showing that the concept of CRM is a joint development between marketing, management and IT disciplines.

1.3 Research Problem

CRM plays a crucial role in modern marketing strategies (Gummesson, 2008). Over the last two decades there has been rapid growth in the number of organisations integrating CRM into their strategies and systems. However, given that CRM of necessity is integral to a business's system, the effective introduction of CRM poses a considerable challenge to businesses which are not yet ready to adapt their organisational behaviour to the system. Indeed it has been suggested by many practitioners and researchers of CRM that it is this inability to adapt their organisational behaviour which has led CRM to fail to fulfil many businesses' expectations, One explanation is that the complex nature of CRM creates differences in tactical emphasis and a lack of agreement as to the precise definition of CRM (Pedron and Caldeira, 2011). Nevertheless, CRM is viewed in this study as a strategic approach facilitated by technology, which aims to handle relationship marketing in practice. Hence it is a fundamental concept that links business and IT disciplines.

CRM issues have emerged in the literature within the business and IT disciplines, with considerable overlap between the two fields. However, there are distinct differences in the focus of CRM research between the two literature fields. From the business discipline, CRM is involved with marketing and management disciplines and reflects the development of marketing strategies that focus on customers. Researchers in the business literature have focused on business strategy (Buttle, 2008), relationship marketing (Gummesson, 2008), and customer-centric orientation (Baker and Hart, 2007). Business researchers also emphasise that CRM implementation needs the essential of relationship marketing to be accepted as a customer strategy across all levels of organisation (Goodhue *et al.*, 2002). On the other hand, the IT discipline has focused on software application use, design, implementation, and support. Researchers from this field have attempted to make efficient use of the technology to achieve value for businesses and are concerned with critical success factors involved in technology implementation and use (Romano and Fjermestad, 2003; Goldenberg, 2008). Although researchers from different disciplines have focused on different aspects of CRM, a fair overlap between these disciplines seems to exist. Especially with regards to CRM functions, it is worth mentioning that researchers from the IT discipline have discussed CRM characteristics and usefulness, which are noticeably linked to those elements of customer-centric orientation which have attracted the most attention from marketing researchers.

Developing a conceptual framework to guide organisations in CRM adoption is increasingly critical for researchers and managers, to help them cope with the multi-

disciplinary nature of CRM. While there is a substantial body of literature concerning CRM and its adoption, research on CRM adoption is widely scattered and fragmented across different disciplines and perspectives. As a result, the subject of CRM is notable for the lack of a holistic conceptualisation of the major factors affecting its adoption within organisations (Frow *et al.*, 2011). Research of what constitutes CRM adoption within organisations is needed. Therefore, this study comes with empirical investigation of a comprehensive conceptualisation of the major factors affecting organisational adoption of CRM.

CRM is perceived as an innovative and an emerging modern marketing strategy (Goldenberg, 2008). Prior research has either developed a broad interpretation of CRM adoption which encompasses a variety of factors affecting the adoption of CRM at an organisational level, or a narrow view of CRM focusing primarily on individual/staff level. While there is a need for a holistic understanding of the CRM adoption process at both levels, research integrating both levels of CRM adoption is scant. This study considers CRM adoption as a multi-stages process (individual and organisational) with differing influences at each stage. Although the terms adoption and implementation are similar and used interchangeably, the term 'implementation' in this study means a widespread usage of CRM within an organisation while 'adoption' refers to sequential phases of the innovation diffusion process which mainly includes employees' acceptance of CRM and the implementation of CRM within the organisation.

This study adopts the Innovation Diffusion Theory (IDT), in order to investigate the adoption process. Moreover, IDT aids the development of a holistic view of CRM as it considers the adoption process at both individual and organisational levels. The IDT model, comprehensively developed by Rogers (1962, 1983, and 1995), has been applied across various disciplines such as anthropology, sociology, education, communication, marketing, management and geography (Rogers, 1995). According to Chen *et al.* (2000), IDT is one of the primary theories applied in technology innovation. However, to date, it has received minimal coverage amongst CRM adoption studies. Therefore, this study attempts to bridge this gap in the literature.

1.4 Aims, Objectives and Research Question

The problem motivating this study is why organisations are challenged by CRM adoption, or have failed to adopt CRM successfully. The overall aim of this study is to develop a conceptualisation of the major factors affecting organisations' adoption of CRM. CRM adoption will be investigated from marketing, management and information technology perspectives, reflecting the idea that CRM is a combination of concepts from these perspectives/disciplines. Hence, more holistic conceptualisation of the major factors affecting organisations' adoption of CRM system is needed in order to better understand this phenomenon.

This study attempts to extend the body of knowledge in the area of CRM adoption and to develop insights from various perspectives. Moreover, the findings from this study

are intended to enable researchers to understand how the overlaps of these perspectives are relevant for extending each one of them. The main aim of this study is to develop a conceptualisation of the major factors affecting organisations' adoption of CRM. In order to achieve this, the study has evolved the following four objectives:

- To evaluate extant literature of CRM from the marketing, management and IT disciplines.
- To propose a conceptual research framework for understanding the factors influencing the adoption of CRM.
- To empirically identify factors affecting the organisations' adoption of CRM.
- To offer insights into CRM adoption and its paradoxes.

Existing CRM studies fail to offer organisations sufficient guidelines for effective adoption of CRM. Moreover they fail to offer clear conceptual links between marketing, management and IT disciplines to demonstrate CRM as a joint development process. This study aims to resolve this dilemma or research problem. In particular, this study strives to answer the following research question:

What are the factors affecting CRM adoption within organisations?

1.5 Scope of the Study

This study explores a relevant theoretical and managerial issue, that is, which factors most influence the adoption of CRM by organisations. It seeks to bridge gaps in CRM theory and practice by developing a holistic view of factors affecting its adoption. Because CRM is involved with marketing, management and technology disciplines, it is important that the holistic view in this study is based upon valid prior knowledge regarding adoption factors across these disciplines, as shown in Figure 1.1.

Figure 1.1: Three Perspectives on CRM

From a marketing perspective, CRM is viewed as a concept concerned with the essentials of relationship marketing as an effective business philosophy or strategy. Relationship marketing offers direction on the broad structures for developing an in-depth understanding of CRM (Mitussis *et al.*, 2006). In turn, CRM pursues the goal of establishing relationship marketing. The central difference between these two terms is

in the application of information technology facilitating effectiveness (Ryals and Payne, 2001). Accordingly, the relationship marketing field is engaged in this study as it aids in building a thoughtful understanding of the embedded philosophy of CRM.

According to Day (1999), the customer-centric approach lies in creating liability for managing customer relationships. Following on from this, Grönroos (2000) states that relationship marketing builds from a customer-centric approach to enhance customer loyalty and long-term relationship. The customer-centric orientation is the core of relationship marketing, as it relies on enhancing customer relationships and loyalty (Grönroos, 2000). Customer-centric orientation is a resourced and organised strategy which seeks to satisfy the profitable customer. This ostensibly involves many elements that are also characteristics of CRM adoption, including customer segmentation, acquisition, profitability analysis, satisfaction, and retention (Buttle, 2008). These characteristics will be discussed in more details in the second chapter of the study.

For the most part the CRM management literature, due to its inherent focus on the customer, views CRM as an essential business strategy and philosophy (Day, 2002). Therefore, scholars from this field focus on organisational and communication issues surrounding the development and implementation of business strategy, and the role of employees and organisations in managing the adoption of CRM. According to Ocker and Mudambi (2003), CRM adoption involves a substantial restructure of organisational elements and processes, which often includes a strategic plan for organisational change, the aim of which is to maximise the value of relationships with company customers. Overall, researchers from this area propose that the organisation's strategic plan, internal marketing, organisation culture and leadership, and project management have a strong influence on the successful organisation's adoption of CRM.

These two themes will be discussed later in Chapter two. Since technology can be seen as a key component of CRM, IT researchers focus accordingly on CRM as a marketing tool/technology rather than as a philosophy/strategy. Generally, there are two main themes rising from the IT discipline: CRM alignment with knowledge management capabilities, and CRM usage and implementation issues. Technology makes it possible for businesses to capture, manage, and share customer knowledge (Maklan *et al.*, 2005; Raman *et al.*, 2006). Since gaining customer knowledge is crucial to attain CRM objectives, it is suggested that CRM is strongly related to the knowledge management field (Massey *et al.*, 2001).

IT researchers are concerned with CRM usage and acceptance (Schillewaert *et al.*, 2005; Wu and Wu, 2005). They suggest that the quality of system use and acceptance has a strong effect on employees' adoption of CRM in organisations, referring to the idea that employees must first accept the CRM system in order to achieve the marketing goals of their organisations. Technology acceptance is often correlated with other constructs. Prior research suggests that a technology acceptance model would

help businesses and researchers to better understand why people adopt/resist using the CRM system, to predict how individual users will respond to the CRM, and to increase their acceptance by improving the CRM implementation process (Tung *et al.*, 2009). This study suggests using the technology acceptance model (TAM), developed by Davis (1989) to explain the behaviour of individuals, whereas other factors in the conceptual model elucidate CRM adoption by organisations. A number of studies have successfully applied and extended the TAM to examine the acceptance of new technologies in the CRM domain. The TAM explains IS usage-behaviour, and how subsequently usage-behaviour is influenced by behavioural intention, which in turn is influenced by attitude and perceived usefulness of the system. Additionally, attitude and perceived usefulness are influenced by the perceived ease of use.

1.6 Contribution of the Study

This study offers a number of theoretical and practical contributions. First and foremost, it offers insights into CRM adoption and its paradoxes for both academics and practitioners. By developing a holistic view of factors affecting CRM adoption, this study contributes to key debates surrounding the rationale and consequences of CRM adoption. It also highlights key areas of poorly implemented practices and some under-researched areas of CRM adoption.

The most important theoretical contribution of the study lies in developing a holistic conceptualisation of the major factors affecting CRM adoption by organisations. To date there has been a scarcity of such holistic views portraying how a wide variety of relevant areas/concepts integrate with the CRM adoption process. Thus, providing a big-picture conceptual framework stands to bridge gaps in understanding and to provide deeper insights into CRM as a modern marketing paradigm which can be translated into multidimensional concepts. The underlying principle of the multidimensional view, suggested in this study, is that CRM obliges organisations to keep abreast of technology, managerial concepts, and to adopt a way of thinking which focuses on the customer. Undertaking such a view requires incorporating the disciplines of marketing, management and information technology into the CRM concept. Accordingly, this study builds on research from these disciplines to develop a holistic perspective on CRM, making a number of contributions to these three disciplines. Such multi-disciplinary integration unravels the complexity of CRM and advances theoretical knowledge of its meaning.

Academic as well as practical contributions are expected as in today's competitive environment if businesses are to improve their performance. This conceptual framework is intended to shed new light on potential management processes and practices which managers may use to consider the complexity of CRM, providing them with a tool with which to exploit the potential of CRM. This is vital since businesses are challenged by the difficulty of adopting CRM in ways which help them yield its potential benefits. This study advances businesses understanding of the CRM adoption process by offering a comprehensive hierarchical approach: the adoption

process starts with the individual level of adoption of CRM strategies as something accepted and valued by employees, towards the organisational level of adoption, as a strategy implemented by an organisation. This approach pays attention to the important role of employees' perceptions as a critical mediator between organisational efforts to adopt CRM and the actual CRM implementation within an organisation. In conclusion, the conceptual framework in this study encourages businesses to consider and undertake a number of different initiatives which have emerged as relevant to CRM, if they wish to boost the adoption of CRM at both levels.

1.7 Jordan as a Research Context

The empirical investigation for this study is carried out with organisations situated in Jordan. Jordan has been selected as the locus for the sample of this study because: i) businesses in Jordan are known to adopt and implement highly sophisticated technologies and CRM applications, and ii) the author, being a Jordanian citizen, has ready access to data there.

Given that the study fieldwork is carried out in Jordan, some information about the economy of Jordan and compositions of its business networks is presented in this section. Jordan is located in the heart of the Middle East. It is considered one of the major countries contributing to the economic and political stability in the area. Geographically, it is within easy access of both of Europe and Africa continents. Because of its liberal economic policy, Jordan represents a model of developing countries, in that it is witnessing a rapid development in its economy (CBJ-Annual Report, 2003; Naser *et al.*, 1999). The GDP of Jordan was $37.37 billion in 2011 (annual growth is about 2.5%). Over the last decade, Jordan's economic growth has been driven by the performance of the services sector (64.7% of GDP). This may explain why it was chosen by the World Economic Forum (WEF) in 2003 as a pilot country to provide a convenient benchmark for development in the region (WEF, 2003).

Jordan joined the World Trade Organisation (WTO) in 2000; in this year it also signed an association agreement with the European Union, a trade agreement with the United States, and joined the Arab free trade Agreement. These trade relations have granted Jordan beneficial access to various international markets, and gradually are paving the way for liberalisation and enhancing private investments in the country. This has caused the international community to be very responsive, and thus enabled Jordan to derive many of the benefits of a globalising world (Al-Jaghoub and Westrup, 2003). Consequently, the local technological capacity there has improved with the aspiration of transforming Jordan into a leading country in the area of information and communications technologies (ICT) in the Middle East. The rapid growth of ICT usage and development has made Jordan a competitive state in the area. This has facilitated the penetration of information technology into different sectors in the country.

Compared to other Middle Eastern and African countries, Jordan is currently in a superior situation in regard to accessibility to internet services and information technology (Aladwani, 2003). The development in information technology has grown rapidly, with a total number of internet users increasing from 127,300 in 2000 to 1,980,400 in 2011. The penetration rate growth of 1450% (Internet World Stats, 2012) means that around one third of the population uses the internet. In light of the recent development of ICT in Jordan, CRM is becoming one of the strategies considered by businesses for enhancement of customer relationships. Hence, conducting this study in the Jordanian context is valuable, as organisations there have recognised the advantages of adopting CRM and utilising the information technology in conducting their business.

The economy of Jordan is dominated by the services sector (around two thirds of its GDP). The services sector there is well advanced and generally adheres to the highest standards by benchmarking international best practices (European Union, 2011). The ability to derive many of the benefits of the globalising world facilitates the penetration of information technology to the service sectors in the country (Al-Jaghoub and Westrup, 2003).

The banking sector is a major player in the services sector. The dynamic and liberal financial system in Jordan has resulted in this sector, being the fastest growing in Jordan; the number of private banks rose from 21 banks in 2000 to 25 banks by the end of 2010. Of the total, 16 are domestic, and nine are subsidiaries of foreign banks (six of them Arabic banks). The approximate number of bank branches is 619 branches (Association of Banks in Jordan, 2010). The telecommunication sector in Jordan has tremendously grown to become a very advanced and immensely competitive market; the mobile phone penetration rate is 120% of the population. This sector is dominated by four telecommunication firms: Zain, Orange, Umniah, and Express telecoms. These are private firms which are mainly owned by foreign corporations. The hospitality sector is rapidly developing with more than 470 hotels of which 21 are five-star hotels (Jordan Economic and Commerce Bureau, 2009).

In order to succeed or survive in this competitive environment, businesses from all sectors in Jordan realise the necessity of providing excellent service quality to customers. Consequently, several up-to-date technologies have been incorporated into the services they provide (Jordan Economic and Commerce Bureau, 2009; Association of Banks in Jordan, 2010). All of this has enhanced Jordan's experience with CRM adoption. In conclusion, CRM is one of the strategies used by Jordanian organisations to improve relationships with customers. Hence, the empirical investigation of this study will be carried out with firms in Jordan, especially since the author has access to data in that country.

1.8 Thesis Structure

After the introduction, this thesis starts with an extensive review of literature in order to develop a conceptual framework of the relevant factors affecting CRM adoption within organisations, and to inform the interview design. It proceeds with an exploratory study of data derived from nine individual interviews with varied stakeholders involved with CRM in their organisations. The exploratory study aims to investigate the subjective perceptions and experiences of a variety of marketing managers, CIOs, and employees working with CRM. This qualitative part of the thesis serves to ensure that the proposed conceptual framework is efficient in tackling significant aspects relevant of the study. The second study in this thesis is quantitative, and aims empirically to test the proposed conceptual framework across a wider sample of population. Hence, the quantitative study is designed to offer further breadth and generalisation to the results. Results of the quantitative study are found using two main statistical techniques: exploratory factor analysis, and structured equation modelling. Finally, the significant findings, implications and limitations for practitioners and academics seeking to extend their knowledge of ways to adopt CRM are presented.

This thesis is organised into eight main chapters, the contents of which are briefly described as follows:

Chapter 2: Literature Review on CRM and its Adoption

This chapter is composed of five sections. Firstly, it reviews the current literature of CRM and represents relationship marketing as the root of CRM. Following that, it elucidates a broader understanding about what constitutes CRM. The subsequent sections develop a conceptualisation of the major factors affecting organisations' adoption of CRM. Extant empirical research is examined from different perspectives related to marketing, management, and IT disciplines. A conceptual research framework is proposed in this chapter, based on incorporating key success factors that include the customer-centric orientation of organisations, use of strategic plan, internal marketing, organisation culture and leadership, project management, knowledge management, and innovation essentials.

Chapter 3: Research Methodology

This chapter describes the research design and methodology used in this study. Different research philosophies are discussed and the author's philosophical standpoint is acknowledged. Then, discussion is carried on and around the research strategy, research methods, sampling and recruitment, data analysis and ethical considerations. Moreover, this chapter elaborates the details of sampling procedures and developing research framework steps/stages.

Chapter 4: The Conceptual Framework

This chapter presents the results of in-depth interviews with individuals, as the first study in this research. Building on the results of the interviews in combination with

insights from the present literature, this chapter aims to present the conceptual framework of this study. It starts by explaining the purpose of employing exploratory individual interviews in the study. Furthermore, the sample selection process and respondent characteristics are described. Interviews results are based on a two-step data analysis: within-case analysis, and cross-case analysis. The combination of interview results and reviewed literature are used to develop research hypotheses. Based on the results of this exploratory study, the proposed conceptual framework of

Chapter 5: Research Model and Scale Development

This chapter summarises the stages used to develop the research model and scale items. First, the literature of CRM and CRM adoption is reviewed to explore and develop key themes. These themes are then discussed and confirmed in interviews with practitioners dealing with CRM in Jordan. Then, the results of the interviews, in combination with the reviewed literature, are used to design a survey instrument. Finally, the quantitative data are analysed using appropriate methods.

Chapter 6: Data Analysis and Findings

This chapter presents the results of the quantitative study and tests hypotheses developed in the prior qualitative findings chapter. It discusses the research framework development process alongside the statistical techniques used to analyse quantitative data. First, it starts by describing the characteristics of the sample. Then, it discusses the different statistical techniques which can be used to serve the research question in this study. This is followed by the analysis strategy used in this study. First, Exploratory Factor Analysis (EFA) is employed to summarise the scale items, then a two-stage structural model is used to evaluate the proposed conceptual model. The first stage involves using Confirmatory Factor Analysis (CFA) on measurement models to confirm or reject the proposed model. Reliability and validity tests of the measurement model are verified during this stage. The second stage involves using structured equation modelling (SEM) on structural models to evaluate the hypothesised relationships that predict CRM adoption. This chapter represents the findings of this thesis in a conceptual model of CRM adoption. Finally, Analysis of Variances (ANOVA) is utilised to determine which kinds of organisational characteristics might determine how CRM is adopted by the organisation.

Chapter 7: Discussion of Results

This chapter interprets the findings of this thesis, and offers insights into the nature of CRM and its adoption within organisations. It first discusses the conceptual model development process. Then, possible explanations and critical arguments in accordance with prior research are provided to respond to research findings. The findings are beneficial to both practice and theory as they identify gaps between what is known from prior research and knowledge synthesis, and actual organisational implementation of such knowledge.

Chapter 8: Conclusions, Implications and Further Research

This chapter summarises and links the findings of the study to the research objectives, and then goes on to represent the overall conclusions of the study. A number of theoretical and managerial contributions are drawn to illustrate the significance of the study. Besides this, some limitations and key areas for future research are acknowledged and discussed.

Chapter 2: Literature Review on CRM and its Adoption

2.1 Introduction

Following on from the research question investigation factors affecting organisational adoption of CRM, this chapter elucidates a theoretical foundation relating to CRM and its adoption by organisations. It is composed of six main sections. Firstly, the chapter represents relationship marketing, the root of CRM. Secondly, a review of what constitutes CRM, and its types, marketplace, and vendors is represented. By building on extant work in the field, the literature review of this study is an attempt to build on the cumulative studies from marketing, management and IT disciplines. Accordingly, an extensive review of the literature in each discipline is respectively conducted in sections four, five and six. Next, a summary of the main factors affecting CRM adoption is extracted from the literature of the three main disciplines
In this study, the literature review is used to meet the following objectives:

1. Gaining an understanding of the existing theories and models in the field of CRM and CRM adoption.
2. Seeking evidence that may lend support to the proposed conceptual model.
3. Developing a baseline conceptual model that is used to identify the key factors that may affect an organisation's adoption of CRM.
4. Establishing a conceptual framework for designing in-depth interviews appropriate to the research.
5. Analysing qualitative data, using within-case and cross-case analysis.
6. Identifying a preliminary set of observed variables for each of the unobserved variables in this study.

2.2 Relationship Marketing (RM) and Customer Relationship Management (CRM)

2.2.1 What is Relationship Marketing?

Changes in the concept and practice of marketing over the last decade have fundamentally reshaped the field. Although the concept of marketing mix has retained its place as a dominant marketing paradigm, modern research has demonstrated that on its own it is inadequate as a theoretical model for many industries, and this has necessitated the emergence of another marketing paradigm (Grönroos, 1994).

The concept of relationship marketing has been suggested as one of the most useful emergent paradigms for the future of marketing (Berry *et al.*, 1983; Grönroos, 1989; Peppers and Roger, 1995). According to Kotler (1999:450), "marketing is moving away from a focus on individual transactions and towards a focus on building value-laden relationships and marketing networks". This argument is apparent in today's business environment, since changing pressures on industries, from market, technology and society, have altered how businesses compete in today's new economy. Hence businesses, in essence, must move from a product-oriented and

transaction-oriented approach towards a longer-term relationship-oriented approach, and accordingly must adapt their marketing strategies in order to sustain competitive advantage, and maintain a place in target markets (Baker, 2003).

Relationship marketing is not a recent concept; marketers have consistently promoted a close relationship to customers. This is reflected in marketing literature, where understanding customers' values and delivering their needs has been demonstrated as significant for successful businesses. Sheth and Parvatiyar (2002) suggest that relationship marketing had a place even at developmental stages of marketing theories in regard to consumer behaviour. Additionally, Jacoby and Kyner (1973:2 as cited in Parvatiyar and Sheth, 2001) argue that 'Brand loyalty is essentially a relational phenomenon', that is, that some relationship marketing fundamentals have been facilitated by brand loyalty. Thus relationship marketing has strong antecedents in marketing literature and theory; what is new now is that the advance of technology has altered the forms and practices of relationship marketing.

The origins of relationship marketing were born out of ancient trading practice. But in the modern world, it has re-emerged as one of the dominant paradigm of marketing. In the literature, it is generally agreed that the term "relationship marketing" was first used by Berry (1983), to describe a longer term approach to marketing in a service context. According to Berry (1983:66), relationship marketing is useful in "attracting, maintaining and -in multi-service organisations- enhancing customer relationships". Since its early evolution, several other terms, mainly derived from service and industrial fields, have been used to refine the concept of relationship marketing, such as relationship management, database marketing, interactive marketing and one-to-one marketing.

Relationship marketing (RM) and CRM are often used interchangeably, which sometimes can cause confusion about their meanings. Although, both concepts are closely related in the sense that they are based on the idea of building relationships with customers, there are some important differences between the RM and CRM. Sin *et al.* (2005) delineate three key differences between the RM and CRM. First, they explain that RM offers a strategic approach whilst CRM is often related to a more tactical approach. Moreover, they suggest that RM should focus on emotional and behavioural elements such as attachment and empathy, and CRM should focus on managerial elements related to building and maintaining relationships with customers. Finally, they argue that RM is broader in its capacity to embrace relationship building with all stakeholders including suppliers and employees, and CRM is more exclusive in building relationships with profitable customers.

Following the extensive review of the development of the RM and CRM literature, it is suggested that RM provides guidance on the broad structures for developing an in-depth understanding of CRM (Mitussis *et al.*, 2006). CRM in turn aims to achieve the objective of establishing RM. Ryals and Pyane (2001) indicate that the main differentiation between RM and CRM is that CRM is often concerned with using

information technology in implementing relationship marketing strategies. To understand issues underpinned by diverse interpretations of CRM and provide a holistic view of CRM meanings, it is essential to focus on relationship marketing literature as the root discipline to CRM. Accordingly, the relationship marketing concept is engaged in this study in order to elucidate the embedded philosophy of CRM.

2.2.2 Relationship Marketing Schools

In order to identify the key elements of relationship marketing (RM), the extant studies of leading schools of RM will now be reviewed. Several studies have deepened and broadened the understanding of RM from within a variety of geographical regions, disciplines, and contexts (see Figure 2.1). Studies have developed independently and simultaneously within Scandinavian countries, the USA, Australia and the UK. Such studies have drawn on theories from a wide variety of disciplines including marketing, management, sociology and psychology. Furthermore, RM has been applied within a diverse range of contexts including services marketing, business-to-business manufacturing, and Fast Moving Consumer packaged Goods FMCG (Harwood *et al.*, 2008). The relationship marketing concepts derived from such studies have developed to reflect different perspectives, incorporating differing areas of precise focus. One approach to relationship marketing integrating quality, customer services, marketing, and logistics can be observed in the works of Christopher *et al.* (1991) and Crosby *et al.* (1987). Another approach, to be found in the works of Vardarajan and Cunningham (1995), Heide (1994), and Morgan and Hunt (1994), focuses on partnering relationships and alliances as a type of relationship marketing. Yet again, other studies of relationship marketing have focused on relationship-oriented strategies (Schultz *et al.*, 1992), and on customer motivations for engaging in relationship marketing (Sheth and Parvatiyar, 1995).

Figure 2.1: Perspectives of Relationship Marketing

Source: Harwood *et al.* (2008:15)

It has been generally accepted that there are three distinct schools or approaches of thought on relationship marketing: the Anglo-Australian school (also known as the Cranfield School), the North American school, and the Nordic and industrial or international marketing and purchasing group (IMP) school. These three schools have evolved separately and simultaneously with their distinctive concepts and empirical findings. Although they share several perspectives, they have differed somewhat in focus. The Anglo-Australian school, influentially represented by leading researchers such as Christopher *et al.* (1991), has typically integrated quality, customer service and marketing, and customer relationship economics. Although this cluster of researchers is dispersed throughout the UK and Australia, their common background is the Cranfield School of Management. The North American school on the other hand, representing the work of Berry (1983), Levitt (1983), Jackson (1985), and Kotler and Armstrong (2008), has laid emphasis on the dyadic relationship between the buyer and the seller. Most American school researchers have suggested that the marketing mix concept has not been replaced by, but repositioned within relationship marketing, which enables organisations to understand and respond to customer needs. Finally, the Nordic school, developed in Northern Europe over the last three decades, is based on the interactive network theory of industrial marketing and services marketing concepts. Grönroos (1989) and Gummesson (1987) are vigorous and influential researchers from this school, particularly from the services marketing perspective. IMP, co-founded by Håkansson (1982) and Ford (1990), is a research group from Scandinavian countries that has focused on understanding organisational relationships in business-to-business (B2B) markets.

The Nordic School

Grönroos and Gummesson in representing the Nordic school, are influential in their critical assessment of marketing paradigms. Grönroos (1995) criticises the transactional nature of the marketing mix derived from microeconomic theories, and claims that the marketing paradigm has shifted from the marketing mix to relationship marketing. He states (1996:11) that "Relationship marketing is to identify and establish, maintain, and enhance relationships with customers and other stakeholders, at a profit, so that the objectives of all parties involved are met"; and "that this is done by a mutual exchange and fulfilment of promises". According to Grönroos (1981), effective marketing and delivery of services prompt organisations to practice 'internal marketing' and engage them into developing relationships with customers across all departments. On the other hand, Gummesson (2008:5) discusses marketing as a cross functional process no longer merely confined to organisational function, and defines relationship marketing as "interaction in networks of relationships". Additionally, he argues that relationship marketing core concepts include relationships, networks and interactions. Such relationships require at least two parties who contact each other, such as the dyadic relationship between a supplier and a customer. He describes the network as a set of relationships which can be developed into tremendously complex patterns, operating within the interaction that is established when parties have active contact with each other. Gummesson (2008) suggests that relationship marketing is a

new emerging marketing concept and CRM is a technique that handles relationship marketing in practice.

The Nordic school is mainly characterised by its structured approach towards relationship marketing, and its shift in focus from traditional marketing concepts (Ganguli *et al.*, 2008). It has emphasised that services management is the core of relationship marketing, which should be approached from a managerial perspective highlighting the necessity to practice internal marketing and involve the whole organisation in developing a relationship-orientation strategy (Palmer *et al.*, 2005; Peck, 1995). According to this school, there is a strategic need to look internally at employees as well as externally at customers, and to prioritise internal marketing as a reflection of organisational structure, processes, and culture (Grönroos, 1981). Further explicating the underlying premise of the Nordic school, scholars from this school have focused on long-term relational exchange aspects in industrial and services marketing, including concepts such as quality, customer commitment, and customer retention (Rao, 2002; Shammout, 2007). According to Grönroos (1981), relationship marketing is also supported by building networks, strategic alliances, and relationship-oriented marketing communications. Gummesson (2008) identified 30 varied types of relationships in a given market, counting relationships with customers, competitors, employees, supply chain, etc. These relationships are seen to derive from three central processes: the interaction, the dialogue, and value process (Bush *et al.*, 2007). While such ideas offered by the Nordic school have been influential, it could also be argued that these ideas are limited in that the school revolves its approach around service, as the exclusive factor in building relationships (Ganguli *et al.*, 2008). This approach has its limitation in that it does not explain the linkages between relationship marketing and other sectors where consumers may value relationships.

The Anglo-Australian School

An integrative approach, undertaken by Australian and British scholars working together in a research group based at Cranfield University, has become widely known as the Anglo-Australian school (Egan, 2008). This school is based on the work of Christopher, Payne and Ballantyne, who consider traditional marketing as being built on quality and service, which together increase the value offered to customers of enduring relationships with the organisation (Palmer *et al.*, 2005; Ivanković, 2008). This school considers marketing as a cross-functional process (Lindgreen *et al.*, 2006). It takes a holistic approach to relationship marketing which embodies the integration of quality management, services marketing concepts and customer relationships economics (Christopher *et al.*, 2002). The Anglo-Australian school is characterised by what is known as the six markets model (Christopher *et al.*, 2001; Payne, 2006). This model seeks to accommodate the growing complexity of industrial markets, and addresses relationship marketing at the organisational level in order to build and sustain real customers' value. In this model the principles of relationship marketing are extended to a range of diverse markets surrounding the customer markets. These are internal, supplier/alliance, recruitment, influence, and referral

markets. This model shows that delivering superior value to customers is based on building and nurturing relationships among these six markets. Payne (2006) emphasises the critical role of information technology in implementing relationship marketing within organisations.

The North American School

In addition to the ideas promoted by the two schools mentioned above, the North American school (Berry, 1983; Perrien *et al.*, 1993) has focused on consumer transactions. It identified transactions as a central unit used in assessing marketing activity up until the early 1980s (Webster, 1992; Palmer *et al.*, 2005). This school considers relationship marketing as a generally under-developed concept or phenomenon (Egan, 2008). Accordingly, it highlights the importance of organisations handling and integrating a portfolio of transactional and relational strategies within one hybrid model. In the view of this school, organisations are expected to understand that different customers have different profitability levels; related to this is an understanding that there should be available a variety of alternative marketing styles in order to ensure the appropriate amount of money and other resources that should be allotted between the priorities of retaining and attracting of customers. In this respect, they see relationship marketing as a strategy especially tailored for the best customers, that is, who are profitable, committed and loyal to the organisation. This viewpoint, in arguing that relationship marketing should be part of marketing's modern dominant logic (Egan, 2004), has been generally accepted as the latest approach to relationship marketing, not the least of which is that it emphasises the critical role of information technology in the maintenance of relationships (Rao, 2002).

Similarities and Differences between Schools

As can be seen from the above discussion, RM is a diverse field with no single best definition. The Nordic school has made a significant contribution to relationship marketing literature in the field of services marketing and interactive network theory. Widely cited in relationship marketing literature, it is generally held that Nordic school contributions are unique.

Overall, in the literature there is a high level of agreement that a changing perspective on relationship marketing has played a significant role in ongoing dramatic changes in marketing. Furthermore, researchers from different schools agree that customer retention is the basis of relationship marketing in all schools (Rosenberg and Czepiel, 1984 as cited in Choudhary, 2010). However, there exists still some debate as to whether the marketing mix should be modified to inform relationships in certain industries such as the service industry, or whether the marketing mix is no longer practical for businesses which should now focus more exclusively on relationships. A review of the literature shows that there are several perspectives on relationship marketing from different schools. As the debate as to what constitutes RM continues to resonate among academics, some attempts have been made to integrate existing bodies of work in order to provide something more comprehensive. Palmer *et al.*

(2006) have tabulated the key traits of each School to highlight their differences, as shown in Table 2.1.

Table 2.1 Comparison of Main Components of Major Schools of Relationship Marketing

Key component	Transaction Marketing	Anglo-Australian school	Nordic School	IMP Group
Basis	Exchange and the 4Ps	Service/ quality /marketing	Service	Relationship between firms
Time frame	Short-term	Long-term	Long-term	Short and long term
Market	Single customer	Six markets	30 markets with four categories	Multiple, network
Organisation	Hierarchical and functional	Cross functional process based	Functional and cross functional	N/A
Basis of exchange	Price	Perceived value	Less sensitive to price	Product/service, information, financial, and social
Product/quality dimension	Product/technical /output quality	Function of value and cost of ownership	Interaction quality	Technological
Measurement	Revenue and market share	Customer satisfaction	Quality, value, customer satisfaction	Customer profitability
Customer information	Ad hoc	Customer value and retention	Individual	Varies by relationship stage
Internal marketing	NA	Integral to the concept	Substantial strategic importance	N/A
Service	Augmentation to core product	Basis for differentiation	Integral to product	Close seller-buyer relations

Source: Palmer *et al.* (2005:322)

As can be seen in this table, the Nordic school highlights the long-term relational aspect of service marketing. To emphasise the relational nature of this form of marketing, they use relative terms such as interactive marketing, quality and relationships, overall representing a network approach to relationship issues within the service industry. This approach prompts organisations to look strategically at 'internal marketing' with a view to promoting more effective service to customers and eventually to building relationships. A similar perspective is emphasised by the IMP, with the difference that IMP stems from work conducted in business-to-business contexts where there is a small number of buyers and sellers but where transaction values are great and, therefore, significant. The IMP school emphasises that a buyer-seller relationship develops from a series of interactions in which adoption is closely linked to the process of building relationships. Thus, relationships are viewed as an outcome of a series of interactions, with emphasis placed on the role played by the

buyer. Because of the importance of the process as well as the outcome in this series of interactions, IMP scholars highlight the potential value of developing relationships between suppliers and buyers. In contrast to this, the Anglo-Australian school focuses on delivering superior value both to customers and to shareholders. Hence, their position is that relationship marketing should be handled from a strategic approach in order holistically to integrate aspects of service marketing, customer relationship economics and quality management. On the other hand, the North American school adopts a different perspective by emphasising the dyadic nature of transactions between buyers and sellers. A review of the literature demonstrates that the North American school positions relationship marketing as a general philosophy and a phenomenon rather than a unified developed concept (Egan, 2008). In contrast, the Nordic and IMP schools view relationship marketing, networks, and service as representing a new foundation for marketing (Gummesson, 2008). Apart from aligning itself with the IMP's view that greater emphasis should be placed on achieving marketing paradigm shift, the Nordic school takes an approach to relationship marketing which brings it closer to the American and Anglo-Australian school position (Parvatiyar and Sheth, 1999), which is that customer relationship management should incorporate quality management tools such as CRM (Shammout, 2007).

In sum, although there is some overlap of views, there is no consensus among scholars as to what constitutes the most important elements of relationship marketing. Different backgrounds reflect different views which have developed around relationship marketing as a concept. This study aims to develop a holistic view of CRM, and in doing so attempts to consider the full spectrum of thought emerging from different RM theorists, such as those related to internal marketing (Nordic school), increasing value delivered to customers (Australian school), and use of transactional and relational strategies for serving best customers (American school).

2.2.3 The Role of IT in Relationship Marketing

Information technology affects marketing concepts in many ways, as it changes the marketing landscape and challenges marketing strategies. Specifically, the revolution of the internet and other technologies has had a dramatic impact on the marketing paradigm and on consumer behaviours (Kotler and Armstrong, 2008). The technology revolution, from its beginnings in 1970, has provided marketers with many benefits, including access to and use of customer information, call centres, automated sales forces, enhanced analytical capabilities, and sophisticated decision support systems.

IT offers several distinct benefits to both customers and the businesses that serve them (Kotler, 1992). On one hand, it provides customers with flexibility, a wider selection of products, and comparative information about companies, products and competitors' prices (Doyle and Stern, 2006; Baker and Hart, 2007). On the other hand, IT helps businesses to build customer relationships, to communicate with customers, to reduce costs and increase efficiency; it also gives marketing and management function access

to new markets and customers, and helps them to maintain flexibility (Baker and Hart, 2007; Kotler and Armstrong, 2008; Chaffey, 2009). It is clear that technology drastically changes how businesses may deliver value for the customer and build customer relationships. It not only creates new and more efficient global distribution and media channelling for businesses, but also changes customer or consumer behaviour; customers have become more sophisticated with the wide selection of choices and thus less responsive to mass-customised advertising media. Overall, IT is shifting the balance of power to the customer, so that businesses now need to think fast and to adapt to dynamic changes in customer needs, in order to create competitive advantage (Payne, 2006).

The recent explosion of information technology facilitates or at least supports relationship marketing (Lin *et al.*, 2010). The significant value of relationship marketing, which provides organisations with competitive advantage, drives attempts to implement relationship marketing in mass consumer markets. Small organisations with few customers have always to some extent found it easy to collect information and build relationships. For large organisations with mass consumer markets however, mapping customer relationships without the support of information technology has been virtually impossible. For these organisations information technology enhances opportunities for using information or data to build, manage, and sustain long term relationship with customers (Payne *et al.*, 2006). As a result, the focus within marketing evolves from relationship marketing to the customer relationship management.

2.3 Customer Relationship Management (CRM)

2.3.1 What is CRM?

According to marketing research leaders, customer relationship is one of the emerging paradigms of modern marketing, as it delivers the essence of marketing concept (Berry *et al.*, 1983; Webster, 2002; Gummesson, 2008). As a paradigm of relationship marketing, CRM is "an overall process of building and maintaining profitable customer relationships by delivering superior customer value and satisfaction" (Kotler and Armstrong, 2008:16). Alternatively, information technology plays a significant role in the CRM function of building customer relationships; because of its one-to-one and interactive marketing nature, IT is particularly useful for enabling businesses to collect information about customers and increase their satisfaction through the development of tailored products and services. As a paradigm, Hughes (2006) notes that the literature on CRM is sparse in different areas. This in turn has led to confusion about what exactly CRM is. While many scholars use the term CRM, there still remains need to resolve the uncertainty among academics and scholars as to what constitutes this concept (Maklan and Knox, 2009).

CRM has evolved from technological advances and organisational changes in customer-centric oriented processes (Jayachandran *et al.*, 2005). This suggests that CRM adoption issues are not just technical, but encompass a wide variety of factors

arising from the marketing and management disciplines as well as IT disciplines. Theory from these three disciplines, and areas relating to their interrelationships in the way they support each other, remains under-developed. Drawing on the CRM literature from marketing, information technology and management perspectives, the author seeks to bridge the gap surrounding CRM meaning and to develop an integrated and balanced approach to theories from these three perspectives, as shown in Figure 2.2. Consequently, a conceptual framework of the critical factors affecting organisational adoption of CRM is used as means of visualising an integration of these three perspectives.

Figure 2.2: Three Perspectives on CRM

Extensive reviews of the literature regarding factors affecting organisational adoption of CRM from those three perspectives are represented in sections: 2.4, 2.5 and 2.6.

Given that CRM uses information technology to help organisations acquire and retain their potential customers, it is evident that this would be best optimised by cross-functional engagement and development across departments on the part of marketing and technical personnel. CRM is becoming more complex especially in that it requires the use of sophisticated technologies to serve varied stakeholders including customers, employees, marketers and senior managers. This CRM complexity leads to differences amongst stakeholders as to tactical emphasis and a lack of agreement on the precise definition of CRM (Pedron and Caldeira, 2011). In fact, researchers suggest that organisational failure to adhere to a single set of CRM principles had led to a high rate of CRM project failure (Buttle, 2004). The definitions of CRM used by authors and scholars vary greatly. At one extreme researchers state that CRM is a technology solution and an IT subfield (Romano and Fjermestad, 2001; Shaw *et al.*, 2001; Goldenberg, 2002), while other researchers claim that CRM is a business subfield and a tool for more customer-centric marketing (Parvatiyar and Sheth, 2001; Christopher *et al.*, 2002; Baker, 2003). In the literature CRM is used by most researchers to refer to customer relationship management (Christopher *et al.*, 2002; Egan, 2008). Some researchers however use CRM to include customer relationship marketing, relationship marketing, database marketing, and customer management

(Buttle, 2004; Chaffey and Smith, 2008). However defined, the least said of CRM is that it is clearly a technology solution to a business practice focused on customers. Nevertheless, Chaffey and Smith (2008) state that CRM is not only about the technology or the process of delivering value, but essentially, a complete customer culture.

Over the last two decades, CRM has increasingly been a focal point of research within the business and IT disciplines, with considerable overlap between the two fields, although at the same time reflecting distinct differences in focus. From the perspective of business literature, CRM is linked to marketing and management functions and reflects the development of marketing strategies that focus on customers. Researchers in the business field have focused on business strategy (eg: Payne, 2006), relationship marketing (eg: Gummesson, 2008), and customer-centric orientation (eg: Reintarz *et al.*, 2004). Their position is that CRM implementation needs the essential of relationship marketing in order to be accepted as a customer strategy across all levels of organisation (eg: Goodhue *et al.*, 2002). IT research literature, conversely, has focused on software application, use, design, implementation, and support. It investigates the most efficient uses of technology in achieving value for businesses and looks for the critical success factors involved in technology implementation and use (eg: Romano and Fjermestad, 2003; Buttle, 2004). Figure 2.3 represents the similarities and differences in business and IT discipline and their contribution to the CRM field.

Figure 2.3: A Continuum of CRM Views

Source: Payne and Frow (2005:168)

The literatures of relationship marketing and technology adoption have both made a significant contribution to the theoretical base of the CRM research. Many researchers have suggested viewing CRM as a technique that handles relationship marketing in practice (Buttle, 2004; Doherty and Lockett, 2007). According to Christopher *et al.* (2002), CRM builds on the foundation of relationship marketing by using technology to enable businesses better to position profitable segments and to implement relationship marketing strategies. Figure 2.4 explains the correlation between relationship marketing terms, CRM, and customer management. Researchers have suggested that a definition of CRM should involve a reflective synthesis of business's

strategic vision along with the utilisation of information technology and software applications, in order to ensure successful implementation (Payne, 2006; Buttle, 2008).

Figure 2.4: Relationship Marketing and CRM- a Hierarchy

Source: Christopher *et al.* (2002:1)

In the literature CRM has been classified into each of the following subcategories: CRM, IT, marketing, service/support, and sales (Nagi, 2005). Since CRM is not restricted to any one discipline, a lack of agreement on its precise definition has persisted. Researchers have defined CRM in different ways (Pedron and Caldeira, 2011), such as being:

> a core business strategy that integrates internal processes and functions with 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, 2004:34).

> a strategic approach concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of IT and relationship marketing strategies to deliver profitable, long-term relationships. Importantly, CRM provides enhanced opportunities to use data and information, both to understand customers and to better implement relationship marketing strategies. This requires a cross-functional integration of people, operations, processes and marketing capabilities that is enabled through information technology and applications (Payne, 2006:22).

> a comprehensive set of processes and technologies for managing the relationships with potential and current customers and business partners across marketing, sales, and service regardless of the communication channel (Greenberg, 2002:16).

the values and strategies of RM- with special emphasis on the relationship between a customer and a supplier – turned into practical application and dependent on both human action and information technology (Gummesson, 2008:7).

The lack of apparent consensus on single universally accepted definition of CRM reflects a tendency for practitioners and researchers to approach CRM according to their beliefs about the correct level of CRM application (Reintarz *et al.*, 2004; Nguyen and Mutum, 2012). Given the many differing definitions of the concept, conceptualisation of what constitutes CRM is difficult to achieve. However, there are two ways of looking at this variety of definitions: either as a source of confusion for researchers and practitioners, or as a reflection of the multi-faceted nature of CRM schemes which allow a flexible and adaptive approach to application (Nguyen and Mutum, 2012). Gummesson (2008) for example, whose definition of CRM reflects his established approach to RM in the Nordic School, as mentioned in section 3.2.2, argues that RM is an interaction in a network of relationships, while Greenbery (2002) considers CRM as an integrative process that use technology to collect and analyse data across the organisation. This view is supported by recent studies, such as Ernst *et al.* (2011).

Parvatiyar and Sheth (2001), while recognising that it is difficult when CRM is not restricted to one discipline, have emphasised the significant need to develop a definition that encompasses all aspects of CRM, in order to manage and ensure its successful adoption across the board. Many have suggested viewing CRM as a technique that handles relationship marketing in practice and hence as a fundamental concept that links business and IT disciplines (Doherty and Lockett, 2007). In the literature, all CRM definitions have highlighted IT as an essential component to achieve and deliver CRM goals, with relationship marketing as its underlying foundation. Within the Anglo-Australian school of RM, which highlights the significant role of CRM into facilitating RM, Payne is a vigorous influence; in his attempt with Frow (2005) to develop a convergence of different aspects, he used a continuum, as shown in Figure 2.3, to depict CRM as functional from a narrow and tactical technology to a broad, holistic strategy. Payne (2006:22) defines CRM as following:

> CRM is a strategic approach concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of IT and relationship marketing strategies to deliver profitable, long-term relationships. Importantly, CRM provides enhanced opportunities to use data and information both to understand customers and implement relationship marketing strategies better. This requires a cross-functional integration of people, operations, processes and marketing capabilities that is enabled through information, technology and applications.

This definition, supported by several other studies (Ernst, 2011; Ahearne *et al.*, 2012) offers a definition which attempts to encompass all the key elements of CRM from the business and IT disciplines. As such, it has been seen as relevant for use in this study.

E-CRM has emerged from the use of internet and web technologies to facilitate the implementation of CRM. Additionally, it has focused on the web-based interaction between businesses and customers. In the literature, some researchers have differentiated between CRM and e-CRM, while others have suggested that e-CRM is an extension which integrates CRM technology into the e-commerce realm, rather than being a different application or system. Therefore, CRM and e-CRM term will be used interchangeably in this study.

2.3.2 Types of CRM

According to Payne (2006), CRM can be classified into three types: operational, analytical, and collaborative. Although Payne argues that businesses will need to integrate the three types/solutions of CRM in CRM implementation in order to successfully generate superior customer value and satisfaction, other researchers argue that research on how to incorporate these types of CRM is currently underdeveloped (Bose, 2002; XU and Walton, 2005).

Operational CRM is also known as a front-office CRM (Dyché, 2006), focusing on the automation of businesses processes. Buttle (2008) has suggested a variety of CRM applications that may enable the automation of marketing, selling, and service functions, such as market segmentation, campaign management, event-based marketing, product configuration, contact and call centres, and so on, as shown in Table 2.2.

Table 2.2: Forms of Operational CRM

- **Marketing automation**
  - Market segmentation
  - Campaign management
  - Event-based marketing
- **Sales force automation**
  - Opportunity management
  - Contact management
  - Proposal generation
  - Product configuration
- **Service automation**
  - Contact and call centre
  - Web-based service
  - Field service

Source (Buttle, 2004:5)

Analytical CRM is also known as a back-office CRM and is concerned with the capture, storage, organisation, analysis, and exploiting of customer data, to develop customer and business value. The significant role of analytical CRM has been recognised by marketing researchers, who hold that CRM facilitates business

understanding of individual consumers' behaviour, allowing in turn for better targeting and customising of marketing communication (Xu *et al.*, 2002). Therefore businesses now are more aware of the need for analytical CRM in order to deliver value for customers and shareholders (Payne, 2006). Developing analytical CRM solutions requires a cross-functional integration of information technologies such as a database, a data warehouse, data mining, online analytical processes (OLAP), a website, and an intranet/extranet. Businesses are sometimes challenged by the fact that the analytical function of the captured and collected data may be accomplished using separate systems, such as CRM systems, decision support systems (DSS), expert systems, and enterprise resource planning (ERP). As a result of the pressure from businesses and researchers, CRM vendors have either offered their analytical solutions or developed a partnership with business intelligence vendors to integrate analysis capabilities into their systems (Dyché, 2006).

Collaborative CRM is concerned with the interaction between a business and its multiple possible channels to allow greater responsiveness to customers throughout the supply chain (XU and Walton, 2005; Payne, 2006). It enables communication and interaction between the business, customers, employees, suppliers and partners. It also helps businesses to manage and synchronise customers' interaction points (such as online communities) and communication channels, develop B2B customer exchanges, and personalize services. Therefore, the customer-centric services are labelled as collaborative CRM, as opposed to the operational CRM services such as automation of sales and call centres. The Collaborative CRM's broader database has led to higher quality knowledge, as the consolidation and comparison of customers and market data has facilitated the exploitation of potential synergies (Kracklauer *et al.*, 2004). Although researchers have suggested that Collaborative CRM is significant to ensure the CRM efficiency and delivery of values to businesses and customers (Zeng *et al.*, 2003; Kracklauer *et al.*, 2004), only twenty percent of CRM vendors are understood to offer collaborative CRM in their system, to include employees, suppliers and partners (XU and Walton, 2005). Such data might explain the perceived high failure rate in CRM implementation.

2.3.3 CRM in E-Business

In the literature there is no one definition for e-business or e-commerce. Different association of the terms come from different perspectives; this is similar with frameworks for classifying e-commerce and e-business frameworks. Over the last few decades, researchers have investigated e-commerce from different perspectives including communication, business processes, commercial, service, learning, collaborative, community and online shopping (Turban, 2006; Chaffey, 2009). In the literature, the e-business and e-commerce terminologies have been discussed widely. Some researchers have suggested that these are equivalent and could be interchangeably used, while others distinguish between them (Chaffey, 2009; AMA, 2010).

According to Kotler and Armstrong (2008), e-business refers to the usage of electronic communication technologies to conduct a company business, and includes all the information exchange within or between businesses and customers. In this respect e-commerce is more specific than e-business in that it involves only the buying and selling process between the businesses and their customers through the internet. Kotler and Armstrong also state (ibid.) that e-commerce tools would lead to increased efficiency and flexibility, since they have a significant role in supporting customer relationship marketing, given the one-to-one interactive nature of the internet. Turban (2006) asserts that e-business refers to a broader definition and does not only include the buying and selling process, but also servicing customers, collaborating with partners and suppliers, and facilitating electronic transaction within the business. Other researchers view e-business as a newer term of e-commerce. They explain that e-commerce represents business transaction on the internet, while e-business means business models built around networking technologies; e-business encompasses much more than e-commerce, in that it utilises information intelligence for increasing efficiencies, knowledge management, building partnerships, and marketing strategies (Taylor and Murphy, 2004; Strauss *et al.*, 2005; Becker, 2007).

The existing literature seems to agree that e-business refers to a broader definition of e-commerce. E-commerce has been widely identified as referring to commercial transactions on the internet, while e-business is understood to embrace all business processes, including production, servicing customers, collaborating with partners and suppliers, and electronic transactions. Since CRM uses electronic communication media such as the internet to enhance relationship with customers, this means that CRM enables e-commerce functionality and is a key element of e-business (Chaffey, 2009). Therefore, this study is a subfield of e-business and e-commerce literature.

2.3.4 Software Vendors in the CRM Marketplace

The CRM market has grown drastically over the last few decades. However, perceived growth and penetration rates vary, depending on how CRM is defined. Researchers argue that a broad definition of CRM mean an enterprise–wide integration of technologies such as data warehouse, network, supply chain management (SCM) and enterprise resource planning (Bose, 2002; Xu *et al.*, 2002; Chen and Popovich, 2003; Payne, 2006; Buttle, 2008). Moreover, they argue that it is part of a global market in enterprise application software (EAS) that encompasses three major application suites: SCM, ERP and CRM (Buttle, 2006). Gartner (2008) estimates that the market for CRM exceeded $7.4 billion in 2007, with moderate growth rates thereafter, predicted to continue through 2012. Overall Gartner (2008) expects the CRM market to grow at a compound annual growth rate (CAGR) of 11.1 percent between 2007 and 2012. It is suggested by Buttle (2008) that organisations focus on their implementation of CRM for delivering consistent customer communication across sales, services and marketing. Though these areas may have reached a maturity level in the market, a future transformed focus is expected to

reflect a future growth in contact centres, marketing automation and analytics, customer service and automation across a variety of channels.

CRM vendors offer varying levels of sophistication for product tailoring, service innovation, customer segmentation, individual relationships, and customer profitability. They are all challenged by the complexity of managing sales, marketing, and customer services and supporting these in a cross channel environment. This has raised a great need for complex knowledge capability solutions, and integration with other existing software such as ERP and SCM. Hence CRM software vendors have offered front-office suites and integrated applications to enable all activities in direct contact with customers. One problem is that the increasing number of variant CRM vendors, and the combination of applications, has strained even highly adaptable CRM systems. Gartner (2008) identifies the key vendor groups as sales (Oracle and Siebel), customer service (SAP and Siebel), marketing (ATG, Facebook and Microsoft) and e-commerce (Oracle and IBM). A number of these vendors operate in more than one of these groups. Therefore, the nature of CRM solutions varies according to the category of the vendor. The variation in CRM vendor solutions reflects differences in the ways in which vendors define CRM.

Gartner (2008) also segments CRM application vendors, according to predetermined architectural styles, into five segments: the CRM application suite (E.piphany, Siebel), the integrated enterprise-application suite (Oracle, PeopleSoft, and SAP), the best-of-breed CRM (Avaya, and Broadvision), the model driven application (IBM and Oracle) and the model-driven framework (Portrait software and Garham).

It is essential for CRM vendors to position CRM in its strategic context so that they may deliver high value to their potential customers (Dyché, 2006). Failing to do so would risk a negative impact on businesses and their vendors. Strategic context involves an in-depth understanding of businesses situations, motivation, and behaviour. While CRM can improve business performance and sustain its competitive advantage, Payne (2006) suggests that CRM integration, specification and careful implementation are the key to its success.

2.3.5 CRM Adoption

According to Damanpour (1991), innovation adoption is conceptualised as a two-stage model: initiation and implementation. The initiation stage covers all activities pertaining to information gathering, forming an attitude, and resource allocation leading to the adoption decision. In the implementation stage, the organisation decides to purchase and make use of the innovation. Similarly, Ko *et al.* (2008) adapted Rogers's innovation adoption model and explored the status of CRM adoption among organisations by focusing on two main stages: perception and implementation. The perception stage refers to cognitive beliefs underpinning an attitude towards CRM. Positive perception about CRM benefits leads to decisions as to its adoption and implementation, the stages of which will depend on organisational deployment of specific CRM technologies/strategies.

In order to provide a holistic comprehensive picture of innovation adoption within an organisational context, technological innovation adoption literature should be examined. This is specifically true for CRM adoption, which has received considerable attention from academics and practitioners, but still faces major challenges in reaping its full benefits (Dibb, 2004). In the information technology area, the general problem of innovation adoption is discussed using different theoretical foundations, which all seem to benefit from the theory of reasoned action (Fishbein and Ajzen, 1975). This is also known as attitude theory, or Roger's (1983) innovation diffusion theory. The attitude theory (e.g. Fishbein and Ajzen, 1975) suggests that beliefs mediate the influence of external factors on behavioural decisions. In the context of organisational adoption of CRM, it has been noted that the beliefs or perception of individuals in organisations, in relation to CRM benefits, tend to mediate the impact of external factors on the implementation of CRM (Plakoyiannaki, 2005). A recent study indicates that aligning employees' needs with CRM strategies is vital for CRM implementation (Vella and Caruana, 2012). Hence, it can be concluded that employees' perception of CRM benefits plays a key role in shaping an organisation's behavioural decisions about the implementation of CRM (Day, 2002). In other words, positive perception of CRM gives both purpose and direction towards its successful implementation. Such an understanding enables organisations to commit their efforts to creating a positive attitude towards CRM among employees by providing an environment conducive to CRM adoption. This study focuses upon two stages of the adoption process: perception, and implementation, which offer specific adaptation of Rogers's innovation adoption process framework.

The Innovation Diffusion Theory (IDT) also known as Diffusion of Innovation (DOI) is adopted in this study, because CRM is perceived as an innovative and an emerging new modern marketing paradigm (Goldenberg, 2008). The IDT model, comprehensively developed by Rogers (1962, 1983, and 1995), has been applied across various disciplines such as anthropology, sociology, education, communication, marketing, management and geography (Rogers, 1995). According to *Chen et al.* (2000), IDT is one of the primary theories applied in technology innovation. However, to date, it has received minimal coverage amongst CRM adoption studies. Therefore, this study attempts to bridge this gap in the literature.

The main elements of the process of diffusion of innovation are based upon the concept of innovation as 'an idea, a product, a technology, or a program that is new to the adopters', and on the concept of diffusion as 'the process by which an innovation is communicated through certain channels over time among the members of a social system' (Rogers, 1995:5). The IDT suggests that the adoption process of a decision-making unit and the way it is approached is fundamental to the diffusion paradigm. The innovation adoption process is defined as 'the process through which an individual or other decision-maker unit passes from first knowledge of an innovation, to forming an attitude toward the idea, and to confirmation of this decision' (Rogers,

1983:163). The adoption decision unfolds as a series of stages, flowing from knowledge of the existence of the innovation through to persuasion, decision, implementation, and confirmation.

During the knowledge stage an organisation becomes aware on an innovation. In the knowledge phase, an organisation begins to gain an understanding of the innovation. In the persuasion phase, an organisation attempts to judge the salient characteristics of the innovation and forms an attitude towards the innovation. Searching for information about the innovation costs and benefits often helps to persuade an organisation to adopt the innovation (Rogers, 1995). Without such information, organisations may hesitate to invest in CRM if there is uncertainty about the benefits and costs of adopting and implementing CRM. During this phase, general perceptions about the innovation are formed and developed. In addition, specific perceptions about the characteristic of the innovation (perceived benefits) are shaped (Ko *et al.*, 2000). Researchers have suggested that during the persuasion phase the organisation is influenced by organisational characteristics, such as the size of the organisation or the external business environment (Ko *et al.*, 2008). At the decision stage, there will be an adopt/reject outcome. At the implementation stage, an organisation will act on the decision-maker unit's decision. Finally, at the confirmation stage, an organisation reflects on the innovation decision and implementation process and reassesses the adopt/reject decision. This study focuses upon three stages of the adoption process proposed by Ko *et al.* (2008): persuasion, decision, and implementation.

Many researchers have explored the benefits of CRM. Organisations are seeking not only to build competitive advantage by attracting new customers but also to satisfy and increase customer retention rates, by developing customer-centric business strategies that enhance customer relationships (Day 2002). Additionally, CRM facilitates the acquisition of customers and analysis of customer requirements more efficiently (Becker *et al.*, 2009). A sample of specific advantages identified in the literature includes the following:

- Gaining a competitive advantage.
- Analysing customer requirements more efficiently.
- Identifying new selling opportunities.
- Increasing customer satisfaction.
- Increasing customer loyalty.
- Increasing customer retention rate.
- Increasing revenue and profitability.
- Increasing employee productivity.
- Enhancing customer relationships.

The persuasion phase leads to a decision making process, wherein organisational members contribute with their direct perception to the adoption decision process, made by the decision-making individuals in the organisation who possess the power, status, or technical expertise. However, an organisation's culture also plays a

significant role in influencing the decision-making unit's perception of CRM initiatives (Zablah *et al.*, 2004). Once the adoption decision is made, organisations seek to implement specific CRM strategies/technologies. At this stage, it is essential for businesses to integrate the three component parts of CRM: analytical, operational, and collaborative, in order to achieve successful CRM implementation (Xu and Walton, 2005). Technology is defined in this context as 'the physical combined with the intellectual or knowledge processes by which materials in some form are transformed into outputs used by another organization or subsystem within the same organization' (Hulin and Roznowski 1985:47 as cited in Ko *et al.*, 2008). Ko *et al.*'s (2008) study is one of the rare CRM studies that has applied the innovation adoption process theory, hence this study follows Ko *et al.*'s (2008) list of technologies related to CRM, including:

- Personal customisation through customer database analysis.
- Developing products through customer involvement.
- Offering customer loyalty programs.
- Offering real-time customer services.
- Managing customer loyalty.
- Managing customer complaints.
- Developing member-only site in your organisation's website.
- Categorising/segmenting customers based on spending (lifetime value).
- Customising services depending on customer categories/segments.
- Providing customer with information via email.
- Developing sales promotion strategy.
- Providing products and services in one place.
- Automating cross-sell and up-sell capability.

2.4 CRM Adoption from the Marketing Perspective

2.4.1 Customer-Centric Orientation and CRM

Businesses are now focused on the values of relationships with their customers, and on transforming their strategies from product-centric to customer-centric (Bose, 2002). From a marketing perspective, CRM is most remarkable in its customer-centric relationship marketing as an effective business strategy. Through this customer-centric focus the business seeks to create overall or cumulative customer satisfaction, which is significant in building trustworthy relationships and retaining competitive advantage (Gummesson, 1994; Grönroos, 1995; Adamson *et al.*, 2003). According to Day (1999), the customer-centric approach lies in crafting accountability for managing customer relationships. In addition, Grönroos (2000) states that relationship marketing builds from a customer-centric approach to enhance customer loyalty and long-term relationships. Researchers summarise the differences between the product-centric and customer-centric business approaches (Shah *et al.*, 2006). The customer-centric approach focuses on customers' needs and relationships in every core aspect of the business, whereas the traditional product-centric approach focal point has been

the sale of products. According to Kim *et al.* (2005), customer-centric orientation places customers' knowledge, interaction, acquisition, value, satisfaction, and retention at the centre of the value creation process. Additionally, Wang and Qualls (2007) described the customer-centric orientation as an organisation's ability to segment, interact with, satisfy, and build long term relationships with its customers.

Many scholars have stressed that organisations need to consider CRM as a strategic marketing approach, to understand and influence customer behaviour through meaningful communication, and to improve customer acquisition, profitability, retention, and loyalty (Swift, 2000). This perspective is embedded in the Anglo-Australian school as discussed earlier in the section discussing schools of thought in regard to relationship marketing. More precisely, the organisation's marketing strategy should be customer-centric to maximise organisational profitability. According to Wetsch (2003:4) "the elements of relationship marketing when combined with a customer-centric approach to marketing serve as a foundation for CRM". Moreover, attaining CRM goals requires a customer-centric strategic orientation, which aligns business strategies with customer needs to generate profit by maximising customer lifetime value (Payne, 2006).

Studies of CRM implementation across the marketing, management and IT disciplines have used customer-centric terms, customer-focused, market orientation, and market-driven to reflect a similar concept. These disciplines agree on the need for customer-centricity as a foundation for CRM implementation (Plakoyiannaki and Tzokas, 2002; Abbott *et al.*, 2001; Ling and Yen, 2001). Researchers from the IT discipline emphasise that it is essential to CRM implementation that relationship marketing be accepted as a customer strategy across all levels of organisation (Goodhue *et al.*, 2002). Furthermore researchers from the business discipline underline that CRM adds value to the essence of customer-centric orientation (Wright *et al.*, 2002). In an attempt to develop a holistic approach to CRM, Payne (2006) argues that businesses need to position CRM in the strategic context of customer-centricity. Therefore, CRM is a comprehensive business and marketing strategy that aligns technology, process and activities around the customer (Anton, 1996; Anton and Hoeck, 2002). The conclusion is that technology advances enhance customer relationships by enabling the essence of customer-centric orientation through the deployment of the CRM (Dewhurst *et al.*, 1999). Promoting customer-centric orientation in the organisation needs strategic planning which starts with strategic alignment with customers through an effective customer-centric planning process, which then needs to be aligned with strategies and technologies (Gurau *et al.*, 2003).

Reynolds (2002) and Alshawi *et al.* (2011) explain that defined business and customer-centric strategies, combined with a clear understanding of how business objectives relate to CRM functions, should be in place before any technology adoption decision-making. Several studies have concluded that businesses which in developing a customer-centric strategy have grasped the potential of CRM technology, can provide return on business investment (Matsuno and Mentzer, 2000;

Reynolds, 2002; Alshawi *et al.*, 2011). However, according to Rigby *et al.* (2002:3), "installing CRM technology before creating a customer-focused organisation is perhaps the most dangerous pitfall". Additionally, a customer-centric approach should conceive and implement customer acquisition and retention strategies before adopting the CRM system. Consequently, customer-centric orientation towards initiating and continuing a relationship can be seen as an essential antecedent of CRM adoption (Abbott *et al.*, 2001). Moreover, Buttle (2008) concludes that businesses promoting a customer-centric philosophy in their culture make the adoption of CRM less threatening to business people. Additionally, Tan *et al.* (2002) identify critical phases for the implementation of CRM: researching and identifying objectives, establishing and communicating customer-centric strategy, planning, redesigning work processes and consolidating corporate resources, choosing the right CRM system, and finalising and continuously improving the process.

According to Ling and Yen (2001), businesses need to make a transition from the legacy of information systems designed for product-related processes to customer-centric systems, in order to become customer-centric, increase organisation knowledge of customers, exploit knowledge, maximise efficiency of technology, and build flexibility. In order to achieve successful CRM adoption, customer-centric orientation requires a comprehensive framework for systematic management of customer knowledge (Shaw and Ivens, 1999), which must integrate knowledge management capabilities and CRM activities (Bose and Sugumaran, 2003; Finnegan and Currie, 2010). Researchers show a significant relationship between knowledge management capabilities and CRM impact (Croteau and Li, 2003; Romano and Fjermesad, 2003).

In facilitating creation of superior value for customers and shareholders along with enhanced customer data capture and management, CRM helps businesses to maximise the lifetime value of desirable customers and segments (Buttle, 2008). Optimising customer relationship entails an inclusive understanding of profitable and non-profitable customers, and the alignment of business processes which will permit interaction with individual customers based on their needs (Chen and Popovich, 2003). Customer-centric orientation is a resourced and organised strategy which aims to satisfy profitable customers. This should involve many elements that are also characteristic of CRM adoption, including customer segmentation, acquisition, profitability analysis, satisfaction, and retention (Buttle, 2008). These characteristics of CRM adoption will be discussed in more detail in the following sub-sections.

a) Customer Segmentation

Marketing scholars have suggested that customer segmentation is significant for implementation of CRM, redefinition of CRM strategies and tactics, and effective resource allocation (Meadows and Dibb, 2008). Generating an in-depth understanding of the customer segmentation process may help businesses to identify the type and value of relationship they need to implement (Ling and Yin, 2001; Marcus, 2001;

Roberts *et al.*, 2005). The CRM system is a marketing tool that could be used to segment and target customers. It helps businesses to create and maintain their competitive advantage by promoting a comprehensive insight into the interactive customer's needs and behaviours (Marcus, 2001; XU and Walton, 2005). Researchers suggest that traditional segmentation methods which rely on customers' demographics, behaviours, and psychographics do not reflect customer-specific needs and preferences (Swift, 2000; Ling and Yin, 2001). The idea of serving smaller segments through the individualisation of offerings is only possible through CRM (Venkatesan and Kumar, 2004). Therefore, traditional segmentation methods should be combined with interactive CRM information (Roland and Verhoef, 2005). In other words, an effective segmentation scheme may be derived by means of convergence between traditional segmentation techniques and the current capabilities of CRM. In this light, CRM could be seen to improve and complement traditional segmentation thinking rather than replacing it.

Similarly, Bailey *et al.* (2009) suggest that organisations should optimise a traditional segmentation process using the rich data on individual customers offered from CRM. Furthermore, reinforcing the link between traditional segmentation and CRM allows for individualised customer treatment, increasingly imperative when businesses are seeking to broaden their understanding of customer needs, and to pursue the development of customer-centric marketing strategies (Clark and Baker, 2004). Rigby *et al.* (2002) proposes that the adoption of CRM without 'good old-fashioned segmentation' is doomed to failure. Indeed, one reason segmentation is so central is because it stresses the importance of gaining customer insights in order to plan accordingly for effective resource allocation. In particular, the effective use of traditional segmentation analysis plays a critical role in helping businesses relate more easily to CRM values.

This means that taking responsibility for segmenting customers, which may include the activities of building and updating a customer database, is essential in order to meet the challenges of adopting CRM (Blattberg *et al.*, 2009; Meadows and Dibb 2012). Meadows and Dibb (2012) propose that CRM adoption is a journey which begins with segmentation analysis and identification of profitable customers, and that customer insight provided by segmentation analysis is the first step towards customer-centric orientation. If organisations fulfil their responsibilities in building and updating customer databases with CRM analytical tools, they will be able effectively to segment customers and focus on serving every customer individually according to their unique needs and heterogeneity (Roland and Verhoef, 2005). CRM can segment customers in terms of their needs, frequency of purchase, recent purchases and contribution to profits.

b) Customer Profitability Analysis

Businesses do not always profit by every customer; more advantageous is the targeting of more profitable customers, in a process known in the literature as 'selective relationship marketing' (Kotler, 1992). The Pareto-Law, or 80/20 rule, suggests that 80% of revenues are generated by only 20% of customers, and that 80% of total costs are generated by only 20% of customers (Christopher *et al.*, 2002). Although profitability has always been considered as significant for business success, it has not always been easy to gauge real profitability where businesses have focused more on product and distribution channel costs than on customer costs. While most businesses know their revenue from customers, they tend to treat sales and marketing costs as well as service and support costs for individual customers as overheads (Reinartz and Kumar, 2003; Van Raaij, 2003). Alternatively, according to Buttle (2008), measuring customer profitability allows businesses to trace revenues and costs to customers, either at segment group or individual level (such as business-to-business companies). Segmenting customers based on profitability allows businesses to build up a portfolio of relationships with customers in precisely those segments which are, or have the potential to become profitable.

A study by Homburg *et al.* (2008) shows that prioritising customers reduces marketing costs and positively influences relationships with high value customers without having any negative influence on non-profitable customers. In spite of this, Homberg *et al.* (2008) acknowledge that prioritising customers based on their profitability is a concept which is frequently challenged by scholars for three reasons. First, organisations need to be careful not to eliminate non-profitable customers, as they provide a pool from which the profitable customers may emerge, though often only temporarily (Day, 1999). In this vein, prioritising customers may result in neglecting potential economies of scale (Johnson and Selnes, 2005). Second, it is argued by a number of researchers that differentiating between customers may leave non-profitable customers dissatisfied and apt to spreading negative word of mouth which may damage relationships with profitable customers (Reichheld and Sasser 1990; Kumar and George, 2007). Third, not prioritising customers enables businesses to hedge risks of investing in relationships with particular customers. Moreover, in the process of calculating customer lifetime value, businesses may ignore many relevant variables such as cost of service.

Against this background, it is largely argued that once businesses have identified their customers' drivers and profitability, they are better able to develop attractive offerings to maximise the profitable customer lifetime value and earn customer loyalty (Gleaves *et al.*, 2008). The concept of Customer Lifetime Value (CLV) is often used to refer to the monetary value of the individual customer over his/her lifetime; this is generally calculated by multiplying the customer's average spending by the customer average lifetime in a particular organisation. CLV is developed with a view to retaining customers than attracting new customers. It is a pivotal concept pervading many CRM studies (Venkatesan and Kumar, 2004; Blattberg *et al.*, 2009).

Although in order to identify profitable customers, businesses have used their traditional accounting systems to calculate the average cost of serving a customer, they have still failed to target the most profitable segments in their market. As a consequence, businesses have been motivated to use CRM as a means of exploiting technology advances, and to enhance customer data capture and management which will enable profitable customers to be attracted and retained. A central database of customer characteristics and behaviour provides a basis for creating consumer profiles, which will help predict customer life-time value and future profitability (Reinartz and Kumar, 2002; Kumar and Shah, 2004). Given the relative importance of customer profitability analysis to businesses, marketing researchers have suggested that customer profitability analysis is significant for CRM adoption (Bradshaw and Brash, 2001; Silva and Rahimi, 2007). Businesses can enhance the efficiency of CRM and increase profitability by assessing customer profitability, and thus plan and control customer-centric marketing strategies (Homburg *et al.*, 2008).

c) Customer Satisfaction

According to Kotler and Armstrong (2008), customer satisfaction is the extent to which a product's perceived performance matches or surpasses the customer's expectations. It is at the core of the marketing concept which has been the guiding force for leading businesses (Webster, 1988; Kotler and Armstrong, 2008). Business interest in customer satisfaction has rapidly increased over the last decades, as the strong link between customer satisfaction, loyalty and profitability has become clearer. Therefore, customer satisfaction has been widely used as the best indicator of evaluating business and marketing performance (Hill and Alexander, 2006; Tuli and Bharadwaj, 2009).

Traditionally, businesses have been able efficiently to satisfy customers with standardised products, demonstrating that mass production and mass marketing can be effective and efficient (Chen and Popovich, 2003). However, with an increasingly high intensity of competition, facilitated by a dramatically wider variety of alternatives available to customers on the internet, businesses have been pressured to acknowledge the changes in the power of customer choice, and to shift from mass marketing to customer-centric and relationship marketing. In this respect, CRM is widely acknowledged as a means of retaining customers and increasing customer loyalty through superior satisfaction (XU and Walton, 2005; Gartner, 2008).

According to Gartner (2008), most businesses actively implementing CRM have done so with a view to improving customer satisfaction, since CRM exploits and leverages interactive communication and genuinely involves customers with businesses to maximise their satisfaction (Chen and Popovich, 2003; Maklan and Knox, 2009). CRM helps businesses to identify customers' behaviour patterns and future needs, to determine their satisfaction level, and to support customer segmentation. It enables businesses to understand their customers and to use this knowledge proactively to create customer value and increase customer satisfaction, especially when businesses

share customer information with their suppliers and partners (Feinberg and Kadam, 2002; Khalifa and Shen, 2005). Thus, CRM could help in identifying and resolving dissatisfied customers' issues, since dissatisfied customers often do not lodge a complaint, but simply switch to another competitor (Payne, 2006). However, overall, researchers suggest that CRM features are not always unilaterally associated with improved customer satisfaction, and this could affect how CRM is adopted and defined within the business field (Feinberg and Kadam, 2002; Richards and Jones, 2008).

d) Customer Acquisition

CRM has become crucial in delivering a successful marketing strategy, as it has helped businesses to analyse and examine customers' past purchases and learned characteristics, so that they can improve acquisition, cross-selling and up-selling, and increase profits (Kotler, 1992; Peppard, 2000). Therefore, businesses are now empowered to make intelligent decisions as to which customers to acquire, which means to use in communicating with them, and which products or services to offer them (XU and Walton, 2005). CRM analytical tools help businesses to acquire the right customers based on customer knowledge, which in turn drives effective customer acquisition programmes and increased profits (Peppard, 2000; Christopher *et al.*, 2002). According to Buttle (2008), CRM operational tools could help in such customer acquisition processes as in-lead management, campaign management, and event-based marketing. They may also help to reduce the cost of customer acquisition by deploying automated electronic systems, such as automated sales forces and automated telephony services, which reduce costs such as staff costs and overheads (Baker, 2003).

Over the last two decades, marketing scholars have highlighted that the cost of customer acquisition is rising, while the cost of customer retention is lower and more profitable. Thus, business emphasis has shifted towards building loyalty and relationship with customers (Rosenberg *et al.*, 1984; Dyché, 2002; Sheth and Sharma, 2008). However, since even businesses with high retention rates can easily lose customers, acquiring new customers is essential as the first stage of the customer life-cycle (Ang and Buttle, 2006). CRM is said to help businesses to identify profitable customers and to reduce the cost in each target segment. According to Payne (2006:140), improving customer acquisition economics is concerned with 'acquiring customers at a lower cost, acquiring more customers, acquiring more attractive customers, and acquiring customers utilising new channels'.

e) Customer retention
As discussed earlier, there is a strong link between customer satisfaction, loyalty and profitability. The relative importance of customer retention or loyalty has been increasingly evolved by researchers over the last decade. It has been argued that it costs marketers five times more to attract a new customer than to keep an existing customer; therefore a small increase in customer retention can significantly increase

business profits, even after acknowledging that customer retention effect on profits may only be revealed in long-term financial statements (Reichheld, 1996; Pelsmacker *et al.*, 2007).

Designing a customer-centric organisation involves fostering customer loyalty by becoming proactive with customers. Jacoby *et al.* (1973:2) are cited in Parvatiyar and Sheth (2001) as arguing that 'Brand loyalty is essentially a relational phenomenon'. Marketing scholars have agreed that the better relationship a business has with its customers, the more loyal customers and profits it has (Zineldin, 2006). This is shown by a wide number of studies demonstrating that a long-term relationship is positively related to business performance (Baker and Sinkula, 1999; Gummesson, 2008). CRM has been used as a means of reinforcing customers' loyalty, increasing market share and profitability, and reducing the costs of acquiring new customers (Lee-Kelley *et al.*, 2003; Chen and Chen, 2004). With the advent of technology, customers have a variety of choices and more control. Therefore, CRM initiatives such as loyalty and affinity programs have helped businesses to closely align customer needs, product/service offering, and marketing, in order to foster customer loyalty and create mutually beneficial long-term customer relationships (Lee-Kelley *et al.*, 2003). It has been claimed that 93 percent of businesses actively implementing CRM have maintained increased loyalty and satisfaction, which would justify their investment in a CRM system (Dyché, 2002).

f) Optimising customer experience

The marketing discipline has been fundamentally concerned with the quality of customer experience since it is this which may differentiate a business's positioning from its competitors (eg: *Lemke et al.,* 2011). Researchers have suggested that a superior quality customer experience may increase customer loyalty, trust and the psychological cost of switching to a different supplier (Reichheld and Sasser, 1990; Friman *et al.*, 2002; Lee-Kelley *et al.*, 2003). By repeatedly offering positive value to the profitable customer in an extended relationship, a positive customer experience can be generated to enhance customer loyalty and trust and decrease customer price-sensitivity. In this way the customer's experience eventually creates a highly profitable long-term relationship and retention. According to Schmitt (2003), customer experience provides more guidance on evaluating business and marketing performance than customer satisfaction because it identifies the details that result in satisfaction. Therefore, it is important for businesses to translate their strategy and processes into value-adding activities with customers.

Customer experience embraces every aspect of a business's offering: product or/service, packaging, advertising, reliability, quality of different interaction channels, and ease of use (Meyer and Schwager, 2007). However, with such a multiplicity of factors, it is difficult to identify those most likely to maximise positive customer experience. This is where the advent of CRM technology may enable businesses better to understand their profitable customers, offer products/or services that will

continuously delight them, manage their experience, and increase their profitability. CRM activities involve collecting and using customers' data intelligently to shape and deliver a continuous and customised superior experience and to build relationships (Payne and Frow, 2005). The advent of technology and the internet has enabled customers to interact with businesses through more than one channel (to include websites, call centres, mobile access and retail outlets) throughout all stages of the sales cycle such as pre-sale, sale and post-sale. This has increased the necessity for businesses to offer integrated activity across a variety of channels in order to maximise customer value and ensure positive customer experience (Payne, 2006). Hence CRM should enable businesses to consistently offer individualised relationships and satisfy customers via any interaction channel.

2.5 CRM Adoption from the IT Perspective

CRM is enabled by technological advances. As a result technology is one of the most important components of CRM. IT researchers have focused mainly on two technological themes: CRM alignment with knowledge management dynamics, and CRM usage and implementation factors. These two main themes arising from the literature from an IT perspective are discussed in the following sub-sections.

2.5.1 Knowledge Management

The relationship of CRM with technological capabilities and knowledge management is recognised as an important research field for exploring factors affecting CRM adoption (Dous *et al.*, 2005). Knowledge management has recently gained attention from academics from marketing, management, and information technology disciplines. From the marketing point of view, customer-centric analysis needs a comprehensive framework for systematic management of customer knowledge and therefore needs to integrate knowledge management capabilities with CRM activities in order to achieve successful CRM implementation (Finnegan and Currie, 2010). CRM relates to the acquisition of customer knowledge and the dissemination of that knowledge (Boulding *et al.*, 2005). Knowledge management in turn enables marketers to reap the rewards of CRM, as it complements CRM in working with processes that integrate customer knowledge throughout the organisation (Campbell, 2003).

From the managerial point of view, knowledge management is a firm-wide initiative maximising effectiveness of and returns on the firm's knowledge. This concept is closely related to CRM in the need to create knowledge-enabled CRM processes which will allow firms to evaluate their organisational performance, such as customer profitability and satisfaction to aid their managerial decisions (Gebert *et al.*, 2003).

Since CRM relies heavily on data warehouse capabilities, from a technological point of view knowledge management has become a significant catalyst of CRM (Romano and Fjermestad, 2003). In conclusion, a review of the various literatures of knowledge management shows that varied disciplines provide similar yet distinct forms of knowledge management.

Since gaining customer information and subsequently customer knowledge is a means to attaining CRM objectives, it is concluded that CRM is strongly related to KM and especially to customer knowledge management (Massey *et al.*, 2001). From the potential synergy between CRM and KM, a theoretical model has emerged, known as customer knowledge management (CKM) (Gebert *et al.*, 2003). Some researchers such as Chou and Lin (2002) go further to consider CRM as an application of knowledge management, in that it reveals strong knowledge intensity. According to Von Krogh *et al.* (2000), knowledge management (KM) is the process of capturing, managing and transmitting knowledge through the organisation and across the organisational boundary. CRM implementation entails refining and realigning an organisation's knowledge management methods in order to obtain value-added knowledge from and about customers; this in turn informs not only customer purchasing behaviour and trends but preferences and attitudes (Romano, 2000; Stefanou *et al.,* 2003). Such realignment involves a change in organisational vision and thus learning and innovation within an organisation (Moreno and Meléndez, 2011).

Given that data warehouse capabilities are a significant catalyst of knowledge management, it could be argued that the technology infrastructure within an organisation is fundamental to these capabilities (Ocker and Mudambi, 2003). Customer interaction with organisations is not restricted only to sales and marketing departments, but to a wide variety of personnel and departments at different levels. This suggests that CRM implementation efforts are successful when top management implement suitable processes and technologies that support KM dynamics. These dynamics include coordinated information gathering and sharing throughout all customer channels (Lee-Kelley *et al.*, 2003; Racherla and Hu, 2008).

An organisation implementing a CRM system needs the capability of capturing and pulling together vast amounts of information about customers. In particular, knowledge about profitable customers is vital for CRM, as it aids the development of a 'learning relationship' between the organisation and the customer (Sin *et al.*, 2005). Information on customers can be captured indirectly through business intelligence tools such as data mining or data warehouses, and directly through employees. Business intelligence tools help to incorporate customer information into business strategy (Sin *et al.,* 2005). However, it cannot be ignored that the challenge of getting employees to record and share information they have cultivated on customers is daunting (Gibbert *et al.*, 2002), unless an adequate incentives plan is devised to serve knowledge generation and sharing.

Knowledge management dynamics or capabilities are paramount for CRM strategy, in order to equip all staff with knowledge of customer wealth so as to enhance long-term relationship with profitable customers (Bose and Sugumaran, 2003). Hence, KM is considered to be a main sub-process of CRM (Zablah *et al.*, 2004). In fact, the majority of CRM projects fail due to improper KM, which leads to a narrow view of the customers (Gebert *et al.*, 2003; Romano and Fjermerstad, 2003; Sigala, 2004). In

conclusion, CRM revolves upon knowledge management capabilities, since capturing, managing, and transmitting relevant knowledge for CRM initiatives make the deployment of KM capabilities necessary.

2.5.2 Usage and Employee Adoption of CRM

IT researchers indicate that system use has a strong effect on employees' adoption of CRM in organisations. This refers to the idea that employees must use the CRM system to achieve their marketing goals which are often correlated with other constructs (eg: Wu and Wu, 2005). A number of studies have successfully adopted and extended the technology acceptance model (TAM) developed by Davis (1989), to examine the acceptance of new technologies in the CRM domain. The TAM explains IS usage-behaviour, which is subsequently influenced by behavioural intention, which is in turn influenced by attitude and perceived usefulness of the system. Additionally, attitude and perceived usefulness are influenced by the perceived ease of use.

The TAM is an adaptation of the theory of reasoned action (TRA) specifically tailored for modelling user acceptance of information systems. A number of studies have applied a variety of theoretical models to examine different aspects of technology adoption. These theoretical models include: TRA (Fishbein and Ajzen, 1975), TBP Ajzen (1985, 1991), TAM (Davis, 1989) and IDT (Rogers, 1962, 1983, 1995, 2003). This study examines theses theoretical models as follows, in order to gain insight into innovation characteristics which may influence employees' adoption of CRM.

a) Theory of Reasoned Action (TRA)

Derived from the social psychology field, Fishbein and Ajzen (1975) proposed the theory of reasoned action (TRA) to predict and explain human behaviour across many industries and domains. Researchers have suggested that the TRA as a general model has formed the backbone of many technology acceptance theories and studies (Davis, 1986; Glassberg, 2000). The TRA model explains individual behaviour (B) as a positive function of an individual behavioural intention (BI) to perform the behaviour. It also proposed that an individual's behavioural intention is driven jointly by personal and social factors. The personal factor is termed 'attitude' (A) and is defined as "an individual's degrees of evaluative effect toward the target behaviour" (Fishbein and Ajzen, 1975: 216). The second factor in this model is termed 'subjective norm' (SN) and is defined as "the person's perception that most people who were important to him think he should or should not perform the behaviour in question" (Fishbein and Ajzen, 1975:302). Figure 2.5 presents the TRA model.

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Figure 2.5: Theory of Reasoned Action

Source: Ajzen and Fishbein (1980:84)

Fishbein and Ajzen (1975) also suggest that an individual's attitude, and the beliefs they hold about themselves and their environments are underpinned by subjective norm factors which eventually determine an individual's behavioural intention. However, the TRA is a general model, and as such, it does not specify which beliefs are effective for a specified context. In the model, beliefs are classified into two types: behavioural beliefs towards the behaviour, and normative beliefs. According to the TRA model, an individual's attitude towards behaviour consists of behavioural beliefs while performing behaviour would lead to a certain consequence, and an evaluation of the consequence of that behaviour. Moreover, a subjective norm consists of normative beliefs, perceived expectation of referents (friends, classmates, family, and or community), and referent motivation to comply. In the TRA, normative beliefs are theorised as being similar to subjective norms, except that normative beliefs refer to specific individuals or groups around the individual rather than a generalised individual or group.

The TRA has been applied to a variety of research areas. Researchers have found significant evidence for the validity of TRA predictions across research boundaries (Sheppard *et al.*, 1988). This conclusion is based on 87 studies using 12,625 subjects. Riemenschneider (1997) supported the relationship between attitude and subjective norm to behavioural intention. The significance of TRA theory has been understood as its capacity to integrate numerous theoretical perspectives from psychology into technology acceptance research. Although current models of technology acceptance have their roots in many theoretical perspectives, most of them begin with the TRA model. Davis (1989) introduced an adaptation of TRA, the technology acceptance model (TAM), to explain and predict the behavioural intentions of individuals toward IT usage (Riemenschneider and McKinney, 2001; Pavlou, 2003). Davis *et al.* (1989) also provided a further explanation of the TRA in the context of technology adoption and showed that user adoption and usage of IT innovation is ultimately determined by personal beliefs and attitudes toward information systems. According to Sathye (1999), adoption is the acceptance and continued use of a product, service, or idea. Researchers have shown that the more accepting users are for IT systems, the more willing they are to change their practices and invest their time and effort spent in using IT systems (Succi and Walter, 1999). The TRA in an IT usage context explains an individual's behaviour as a positive function of an individual intention to use the

technology; this intention is driven jointly by an individual's attitude and subjective norms regarding the technology.

b) Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) (Ajzen 1985, 1991) was developed from the Theory of Reasoned Action (TRA) to introduce a new construct known as perceived behavioural control (PBC). The TPB, developed to address behaviours not completely under volitional control, theorises that behaviour is a direct function of behavioural intention, which is determined by three factors: attitude, subjective norm, and perceived behavioural control. Attitude and subjective norm are consistent with the TRA. However, perceived behavioural control is an extension to the TRA model that can contribute to the prediction of the behaviour in question.

The main difference between the TRA and the TPB is the addition of perceived behavioural control. Ajzen (1991) suggested that perceived behavioural control referred to an individual's perception of his/her control over performance of the behaviour, and reflected individual beliefs regarding the access to mandatory resources (such as time, physical abilities and money) and opportunities needed to enable him or her to perform the behaviour (Ajzen and Madden, 1986).

The TPB has been applied across a wide range of disciplines, including marketing, medicine and leisure (Ajzen and Driver, 1992; Berger, 1993). In the IT discipline, several studies have successfully applied the TPB to understand individual acceptance and usage of many technologies. For example, Harrison *et al.* (1997) studied the adoption of technology in small businesses and applied the TPB, with results showing that attitude, subjective norm, and perceived behavioural control were significant to the adoption decision. In addition Hu *et al.* (1999) utilised the TPB to test the adoption of technology using 431 physicians in the voluntary use of technology. The major conclusions were that attitudes and perceived behavioural control were significant predictors of intention whereas there was no significant relationship between subjective norms and intention. One study, which utilised the TPB to test age difference influence on technology adoption, indicated that younger individuals were influenced by attitudes, whereas older individuals were influenced more by subjective norm (Morris and Venkatesh, 2000). Armitage and Connor (2001) analysing previous studies using the TPB in a meta-analysis study, demonstrated that there was a significant effect of perceived behavioural control on intention, and suggested the need for more work on the subjective norm's variables to increase the predictability of the TBP. However, Riemenschneider *et al.* (2003) combined the TPB and the technology adoption model (TAM) and found that an integrated model representing each model construct provided a better fit than each model alone. Another study has compared the TRA and the TPB and concluded that the TPB, with decomposed or deconstructed perceived behavioural control construct that included perceived control and self-efficacy as a predictor of intentions and behaviour, gave a more satisfactory explanation of the salesperson's adoption of IS systems (Celuch *et al.,* 2004).

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Taylor and Todd (1995) described the decomposed theory of planned behaviour (DTPB), arguing that the value of deconstructing or breaking down belief constructs in the TPB into their underlying structures can potentially provide a better understanding of the relationships between belief structures and antecedents of intention. Shimp and Kavas (1984) held that an underlying structure of beliefs cannot be organised into a single conceptual construct. Taylor and Todd (1995) integrate the TPB, the TAM and the IDT so that the main components of the DTPB are the same as the TPB although the attitude factor was integrated with the IDT and the TAM, as shown in figure 2.6. In the DTPB attitudinal beliefs are based on the theory of the IDT (Rogers, 1983) and the TAM, and further broken down into relative advantage, compatibility and complexity. According to Taylor and Todd (1995), the DTPB gives a better explanation of the power of intention in technology adoption than the pure TPB and TRA.

Figure 2.6: Decomposed Theory of Planned Behaviour (DTPB)

Source: Taylor and Todd (1995:170)

Relative advantage is defined as "the degree to which an innovation is perceived as being better than the idea it supersedes" (Rogers, 2003:229). It is one of the IDT factors, which has been found to positively affect the adoption of innovations (Rogers, 1983; Tan and Teo, 2000; Lee *et al.,* 2004, Wu and Wu, 2005). Researchers have conceptually associated relative advantage with perceived usefulness construct in the technology acceptance model (Adams, 1992; Taylor and Todd, 1995; Tung *et al.*, 2009). Compatibility of innovation is defined as the "degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of the

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potential adopters" (Rogers, 2003:240). Researchers prove that compatibility has a positive relationship to innovation adoption (Premkumar, 2003; Wu and Wu, 2005; Tung *et al.*, 2009). Complexity of innovation is defined as "the degree to which an innovation is perceived as relatively difficult to understand and use" (Rogers, 2003:257). Technology complexity diminishes a user's understanding of the technology and generates greater uncertainty for successful implementation; consequently, it increases the risks in the adoption decision (Premkumar and Robert, 1999; Ramdani *et al.*, 2009). Researchers find that when technologies are perceived to be easier to use and less complex, there is a greater possibility of their being adopted by the individual; therefore complexity has a negative relationship to innovation adoption (Wu and Wu, 2005; Chen *et al.,* 2009a; Ramdani *et al.*, 2009). Researchers suggest that complexity can be explained by another attribute (although in an opposite direction), which is perceived ease of use construct in the TAM (Taylor and Todd, 1995; Wu and Wu, 2005). Perceived behavioural control depends on self-efficacy and perceived facilitation conditions. Self-efficacy is defined as being confident of the ability to successfully execute procedures to achieve the result in the situation (Ajzen, 1991; Compeau and Higgins, 1995), while the facilitating conditions reflect the presence or the absence of resources needed to perform a specific behaviour (Triandis, 1980).

Different studies apply the DTPB and prove that the DTPB has a better predictive power to behaviour than the pure TPB and TRA models. Hence it has been employed across a wide range of IT usage disciplines. For example, e-brokerage adopters (Bhattacherjee, 2000), Chau and Hu (2001) integrated TAM, TPB and DTPB models to explore telemedicine acceptance of information technology, e-services (Hsu and Chiu, 2004), e-commerce (Pavlou and Fygenson, 2006), and internet banking (Hernandez and Mazzon, 2007).

c) Technology Acceptance Model (TAM)

According to the TRA, an individual's behaviour is a positive function of his/her intention to perform the behaviour. Moreover, an individual behavioural intention is influenced by two constructs: attitude and subjective norm regarding the behaviour. Since the TRA is a general model designed to predict individual's behaviour in a wide variety of disciplines, Davis (1986) introduced and designed the TAM to look specifically at technology adoption and uses. The TAM adopted the beliefs-attitude-intention-behaviour causal sequence put forward by the TRA (Fishbein and Ajzen, 1975). The TAM suggests that two beliefs, namely perceived usefulness and perceived ease of use, are instrumental in explaining an individual's attitude and behaviour intention. Evidently the TAM excludes subjective norm construct as a determinant of intention due to theoretical and measurement problems; as Fishbein and Ajzen acknowledge (1975:204), "this is one of the least understood aspects of TRA". However, subjective norm was included in Davis's later study (1989) to test its influence on intention and attitude, where it was found to be non-significant. The TAM provides a foundation for tracing the impact of external factors on beliefs,

attitudes, and intention to use technology. The TAM model (Figure 2.7) posits that user acceptance and usage determine behavioural intention, which is affected by an individual's attitude toward using the system and the perceived usefulness of the system. Additionally, attitude and perceived usefulness are influenced by perceived ease of use.

Figure 2.7: Technology Acceptance Model (TAM)

Source: Davis *et al.* (1989:985)

Davis (1989:320) defines perceived usefulness and perceived ease of use below:

- Perceived usefulness (PU) is defined as "the prospective user's subjective probability that using a specific application system will increase his or her job performance within an organisational context" (Davis *et al.*, 1989:985). In the literature, perceived usefulness has emerged as the key determinant of acceptance and usage behaviour (Venkatesh and Davis, 2000).
- Perceived ease of use (PEOU) is defined as "the degree to which the prospective user expects the target system to be free of effort" (Davis *et al.*, 1989:985). Generally, technologies that are perceived as easy to use are more likely to be adopted than technologies that are perceived as too hard to understand or use.

Similar to the TRA, the TAM suggests that technology usage is closely determined by behavioural intention, which is in turn viewed as being jointly influenced by an individual's attitude toward using the system and perceived usefulness of the system, with relative weights statistically evaluated by regression. The attitude and intention relationship suggested in the TAM implies that, if the consequence of the behaviour seems beneficial to the individual, he/she forms an intention to participate in the behaviour. The attitude and intention relationship in the TAM was adapted from the TRA. The TAM suggests that perceived usefulness is related to behavioural intention in that an individual forms intentions to perform the behaviour that he/she believes will increase his or her job performance. A plausible instrumental reason for this enhanced performance is reward, such as pay increase and promotion (Davis, 1989). The TAM postulates that perceived usefulness has a significant effect on behavioural intention over and above the attitude factor. Furthermore, the TAM suggests that both perceived usefulness and ease of use constructs have significant correlations with

attitude. Regression analysis indicated relative weights of each construct (Davis, 1989).

According to Davis (1989), perceived ease of use determinants are underscored by two basic mechanisms by which it influences attitudes and behaviour: self-efficacy and instrumentality (Venkatesh and Davis, 2000; Davis, 1989). On the one hand, self-efficacy is one of the main factors behind intrinsic motivation. It refers to individuals' beliefs about their ability and motivation to perform specific tasks (Bandura, 1986). In the field of IT particularly, the easier a system is to use, the greater should be the user's sense of efficacy (Bandura, 1986) and personal control regarding the user's confidence in their ability to behave successfully in the situation (Lepper, 1985). On the other hand, perceived ease of use could also be instrumental, contributing to improved user performance. Effort is a finite resource that a user may redeploy to the various activities for the same effort (Radner and Rothschild, 1975; Venkatesh, 2000). Efficacy determinants are thought to operate autonomously from instrumental determinants of behaviour (Chung, 2005).

In addition, perceived ease of use has been found to be a fundamental antecedent to perceived usefulness, and it has been reported that ease of use explains a greater amount of variance in usefulness, because perceived ease of use contributes to improved performance (Davis, 1989; Venkatesh *et al.*, 2003; Avlonitis and Panagopoulos, 2005). Therefore, perceived usefulness can be influenced by external variables over and above perceived ease of use (Davis, 1989). Taylor and Todd (1995) suggested additional antecedent constructs that underscore technology adoption. Additionally, researchers found perceived ease of use was relatively less salient in determining usage behaviour than perceived usefulness (Davis, 1989). Similar to the TRA, the TAM suggests that the effect of external variables on intention is mediated by two key beliefs: perceived ease of use and usefulness. Concerning external variables, Davis *et al.* (1989) argued that they provide the bridge between internal beliefs, attitudes and intentions stimulated in the TAM and individual differences, situational restrictions and managerially controllable interventions that have an effect on the behaviour.

The TAM explained that the influence of external variables is mediated through user beliefs and attitude. Numerous studies obtained in work related to information technology have sought to explain the TAM's comprehensive influence across a broad range of information systems in a variety of contexts, and have identified various external variables and factors which correlate with perceived ease of use and perceived usefulness. However, the findings of such studies tended to differ in their identification of external variables related to a variety of technology, target users, and context (Moon and Kim, 2001). Researchers found the TAM model useful in providing a framework for investigating the significance of external variables on technology acceptance and usage (Hong *et al.*, 2001). Studies have represented various external variables including individual differences, situational constraints, system features and organisational support affecting behaviour (Igbaria *et al.*, 1995;

Hong *et al.*, 2001). Technology experience, training, and support are some of the external factors which have been acknowledged as antecedents of perceived ease of use in some technology adoption studies. However, system features are some of the factors specifically intended to enhance usability, such as content of the system, screen design, and touch screen (Davis, 1989).

With the increasing use of technologies has come the increasing interest of researchers in examining and explaining user acceptance of technology. Over the last two decades, strong empirical support has been accumulated in favour of the TAM (Venkatesh and Morris, 2000; Hong *et al.*, 2001). Researchers stated that the TAM is the most influential model in explaining technology adoption (Mathieson, 1991). Recently, the TAM has been applied and extended to examine individual acceptance and usage of information technology in different contexts such as CRM (Wu and Wu, 2005), marketing (Chen *et al.*, 2000), website and electronic commerce (Gefen *et al.*, 2003; Van der Heijden, 2003; Eriksson *et al.*, 2005), e-mail (Szajina, 1996), e-banking (Lai *et al.,* 2010), wireless internet via mobile phone (Lu *et al.*, 2003), data management systems (Szajina, 1994), e-collaboration (Dasgupta *et al.*, 2002), microcomputer usage (Igberia *et al.*, 1995), spreadsheets and voice mail (Adams *et al.*, 1992), online help desks and new multimedia systems (Venkatesh, 2000), e-learning (Abbad *et al.*, 2009), and digital libraries (Hong *et al.*, 2001). The TAM has also been applied across different cultures (Gefen, 1997; Gefen *et al.*, 2000).

d) TAM2

Since across several studies, perceived ease of use was found not to be an underpinning driver of usage behaviour, few studies have been conducted to examine the determinants of perceived ease of use (Venkatesh and Davis, 1996). On the other hand, PU has been observed as consistently having a strong determinant of usage intention (Venkatesh and Davis, 2000). Therefore, Venkatesh and Davis (2000) developed a theoretical extension of the TAM, the TAM2 which includes social influence and cognitive determinants in examining the antecedent of perceived usefulness. The TAM2 provides a detailed explanation of the beliefs underlying the antecedent of perceived usefulness, explaining up to 0.6 of the variance in behaviour as being linked to intention. The TAM2 extended the TAM to encompass subjective norms, image, job relevance, output quality, result demonstrability, and perceived ease of use as determinants of perceived usefulness (Figure 2.8). Attitude construct was dropped as a variable because it had been found to only partially mediate the effects of key beliefs on behavioural intention (Venkatesh, 2000; Venkatesh and Morris, 2000).

In addition to including social influence and cognitive instrumental constructs to examine the antecedent of the PU, the TAM2 also used experience as a moderating variable. The TAM2 revised the original TAM to reflect the impacts of three interrelated social forces on an individual adoption of technology: subjective norms, voluntariness, and image. Subjective norm is consistent with the TRA, defined as the

degree to an individual thinks that others who are important to him/her think that he/she should perform the behaviour. Voluntariness reflects the extent to which potential adopters perceive the adoption decision to be non-mandatory. Image is the degree to which one perceives the use of technology as a means of enhancing one's status within a social group. According to Venkatesh and Davis (2000), only when system use is perceived as mandatory does subjective norm have any direct effect on intention, over and above the PU and PEOU. Voluntariness significantly moderates the direct effect of subjective norm on intention to use. The TAM2 found that subjective norms have a positive influence on image, and they both have influence on the cognitive belief of perceived usefulness. In other words, an individual's perception on usefulness is seen as likely to increase in response to persuasive social information. Venkantesh and Davis (2000) also considered the influence of user's experience on these relationships. They found that an individual's increased experience with the system will lessen the influence of subjective norms on perceived usefulness and intentions to use the system. That is, over time a user's experience may supplant the reliance on the subjective norm as a basis for perceived usefulness and intentions to use the system.

Beyond the social influence determinants of PU and intention to use, the TAM2 suggested that there are four cognitive instrumental determinants of PU: job relevance, output quality, result demonstrability, and perceived ease of use, relative to the original perceived usefulness construct in the TAM. Job relevance reflects an individual's judgment as to how the target system is applicable to his/her job function. Output quality reflects how well the system performs tasks that match the user's job description. Result demonstrability is defined as tangibility of the results of using an IT system (Moore and Benbasat, 1991). The definition of PEOU in this extended model is similar to the definition in the original TAM. According to Venkatesh and Davis (2000), all cognitive determinants will be significantly related to the PU construct, as shown in Figure 2.8. Researchers have suggested that the TAM2 improves understanding of the effective of cognitive processes on PU of a technology (Hart *et al.*, 2007).

Figure 2.8: Technology Acceptance Model 2

Source: Venkatesh and Davis (2000:188)

Recently, researchers have tested and extended the TAM model to explain CRM adoption within organisations (Avlonitis and Panagopoulos, 2005; Schillewaert *et al.*, 2005), extending the TAM model to include the effects of individual characteristics, personal innovativeness, organisational support, social influences, technology experience, and computer self-efficacy. The model also confirms the role of PU as a fundamental driver of CRM adoption, and PEOU as a secondary driver in determining usage behaviour.

Avlonitis and Panagopoulo (2005) suggest that the most prevailing influence on CRM acceptance comes from CRM perceived usefulness, followed by the setting of accurate expectations regarding system usage, the salesperson's innovativeness towards new technological tools, the CRM perceived ease of use, and the management's encouragement and support. According to Jegham and Sahut (2004), organisational and operational support has a direct and indirect effect on employees' acceptance of CRM system. However, user experience, training, and task autonomy are not found to have influence on users' acceptance of CRM. Studies have suggested that organisations' adoption of technology is influenced by technological, organisational, and environmental factors. Moreover, organisations with greater perceived usefulness are predicted more likely to become adopters of CRM system (Ramdani *et al.*, 2009).

Although the TAM is an empirical and useful model for explaining IS usage behaviour, it has been suggested that it is insufficient for understanding an organisation's adoption of CRM (Wu and Wu, 2005; Tung, 2006); the adoption of CRM involves employees' acceptance while is also related to the diffusion of organisational use. Therefore, several researchers have combined the TAM with Innovation Diffusion Theory (IDT) to suggest guidelines that may assist CRM adoption within organisations. This suggests that using a hybrid technology

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acceptance approach as a theoretical framework will help businesses and researchers to better understand why people adopt/resist using the CRM information system, to predict how individual users will respond to the CRM, and to increase their acceptance by improving the processes with which CRM is implemented (Tung *et al.*, 2009).

e) Innovation Diffusion Theory (IDT)

Innovation Diffusion Theory (IDT) is also known as Diffusion of Innovation (DOI). The IDT model, comprehensively developed by Rogers (1962, 1983, and 1995), has been applied across various disciplines such as anthropology, sociology, education, communication, marketing, management and geography (Rogers, 1995). According to Chen *et al.* (2000), IDT is one of the primary theories applied in technology innovation. The main elements of the process of diffusion of innovation are: innovation as "an idea, a product, a technology, or a program that is new to the adopters", whereas diffusion is "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 1995:5). The IDT suggested that the adoption process of a decision-making unit and the way it is approached lie as fundamental to the diffusion paradigm. The innovation adoption process is defined as "the process through which an individual or other decision-maker unit passes from first knowledge of an innovation, to forming an attitude toward the idea, and to confirmation of this decision" (Rogers, 1983:163). The adoption decision unfolds as a series of stages, flowing from knowledge of the existence of the innovation through persuasion, decision, implementation, and confirmation. During the knowledge stage an individual becomes aware of an innovation. In the knowledge phase an individual begins to gain an understanding of the innovation. Researchers have suggested that during the knowledge phase the individual is influenced by personal characteristics, socioeconomic factors, and access to mass media (Wood and Swait, 2002). In the persuasion phase, an individual attempts to judge the salient characteristics of the innovation, and forms an attitude towards the innovation. The decision stage has an outcome according to whether there has been a decision to adopt or reject the system. At the implementation stage, an individual acts on his/her decision. Finally, at the confirmation stage, an individual reflects on the innovation decision and implementation process and reassesses the adopt/reject decision. Rogers (2003) states that the adopters of any innovation can be classified into five categories based on their innovativeness: innovators, early adopters, early majority, late majority, and laggards.

The IDT suggests five factors that influence the adoption of an innovation: relative advantage, compatibility, complexity, trialability, and observability. Relative advantage reflects the individual perception that an innovation will be better than its predecessor. Compatibility is the extent to which an innovation is perceived as similar and congruent with existing values, needs, and past experiences. Complexity refers to the extent to which an innovation is perceived as difficult to comprehend and use. Trialability reflects the extent of accessibility to the innovation for experimentation

before individual adoption. Finally, observability is the extent to which the innovation's results are available and visible to an individual.

In the field of IT adoption, Speier and Venkatesh (2003) used a variety of theories including IDT and TPB, to examine salespeople's acceptance of sales force automation (SFA) technology. They proposed a comprehensive model and found that not all innovation factors arose from the IDT drive usage of the SFA tools. In addition, Wu and Wu (2005) integrated the TAM with IDT and empirically concluded a number of guidelines to improve diffusion of CRM in organisations. They found that both complexity and compatibility had indirect impact through the mediator of relative advantage on CRM adoption, and argued that relative advantage played a significant role in predicting employees' adoption of CRM. Some other studies have proposed an integrated model, which incorporates organisational and technological factors, and have used the IDT to explain the technological factors of CRM adoption (Hung *et al.*, 2010).

2.6 CRM Adoption from the Management Perspective

Within management theory, CRM can be defined as a management approach that includes identifying, attracting, developing and maintaining long-term successful customer relationships in order to increase the retention of profitable customers (Bradshaw and Brash, 2001; Massey *et al.*, 2001; Stefanou *et al.*, 2003). Recently, research into the critical factors that influence successful adoption of CRM has continued to attract management scholars such as Ocker and Mudambi (2003) and Srinivasan and Moorman (2005). From a management perspective, businesses are concerned with organisational issues related to CRM business strategy development and implementation, and the role of employees and the organisation in managing the adoption of CRM. The review of the literature suggests that these organisational issues may also include strategic planning, culture and leadership, internal marketing, and project management.

2.6.1 Strategic Planning

Business strategy entails identifying clear future directions to create competitive advantage faster than competitors (Payne, 2006). Several researchers have framed their argument in terms of shifts in management paradigm (Gale, 1994; Sheth, 2005). Understanding and responding to customers' needs, and raising the level of quality and service have become imperative elements of corporate business strategy. Over the last decade, a highly competitive marketplace has brought pressure on businesses to reduce costs, while consistently being customer-centric. Hence, organisations have adopted CRM systems to support these strategies. According to Day and Wensley (1983), the position of marketing within organisations has been eroded or displaced by the development of strategic planning. Strategic planning is defined as 'a process of developing and implementing a course of action or direction that an enterprise should take to achieve its objectives. Chaffey (2008) explains that CRM is a strategy supported by technology, not a tactic; rather, it involves substantial restructuring of

organisational elements and processes, often planning strategic organisational change, with an aim to maximising the value of relationships with company customers. In such a case, strategic planning processes need to be adapted for the new customer-centric philosophy (Gurau *et al.*, 2003).

Recently, researchers have noticed that the adoption of CRM is not an easy process, since it is deeply embedded in other business processes (Harrigan *et al.*, 2011). Therefore, they have suggested that the CRM strategy must be incorporated within a wider context of business strategy formulation and implementation process (Reynolds, 2002; Ballard, 2008). Accordingly, CRM adoption involves identifying and planning all strategic processes that take place between a business and its customers. Based on this, it has been found that strategic planning at corporate level can help businesses to maintain a strategic fit between business strategy and CRM adoption (Ocker and Mudambi; 2003; Foss *et al.*, 2008; Meadows and Dibb, 2008). Strategic planning has been defined as "a process of developing and implementing a course of action or direction that an enterprise should take to achieve its objectives. The strategy is the course of action while the plan is the detailed set of tasks to achieve the objectives" (Cory, 1988:5). Researchers have suggested that a strategic plan is needed for the success of CRM practice in an organisation, as it plays a key role in forming the organisation's behavioural activities towards customers and creating an environment that is conductive to CRM implementation (Day, 2002). Hence strategic planning must consider the fundamental business values and contribute to the shift from product-centric to customer-centric approach (Gurau *et al.*, 2003; Ballard, 2008). Consequently, in order to ensure CRM success, management need to emphasise customer-centric philosophy at different phases of the strategic planning process, and to highlight CRM objectives and drivers.

According to Ocker and Mudambi (2003), a strategic plan should drive the business unit plans and IT plans; IT executives who participate more in business planning believe they have a better understanding of a top management's objectives than those who participate less. A strategic plan is also needed to ensure that organisations have clear objectives, goals, and an implementation plan in order to keep the organisation engaged, focused and effective (Chen and Chen, 2004; Osarenkhoe and Bennani, 2007). Gurau *et al.* (2003) has suggested that the strategic planning process needs to adapt the new customer-centric philosophy. Reynolds (2002) and Payne (2006) agree that a strong strategy is a prerequisite to focusing CRM solutions on business objectives which will yield the highest return on investment. According to Brown and Vessey (2003), CRM adoption should also enable strong support among senior management, in order to create an organisational environment that is conducive to effective implementation of CRM strategy across the organisation. Researchers conclude that businesses actively engaging in a strategic planning process achieve financial improvement, whereas business not utilising strategic planning show no improvements in financial performance (Gurau *et al.*, 2003; Ocker and Mudambi, 2003; Foss *et al.*, 2008).

The strategic planning process offers a coherent framework for allocating organisational resources, managing challenges, exploiting opportunities, and evaluating CRM and business performance (Bohling *et al.*, 2006). Batenburg and Versendaal (2007) suggest that a critical success factor of CRM implementation relies on the alignment of CRM with business strategy, organisation and process, monitoring and control, information technology, and employee and culture. Therefore, organisations always need to locate the interrelationships among CRM activities and their business strategy and goals (Kim and Hwang, 2003), especially since the analysis of such interrelationships can lead to deeper insights into the effectiveness of CRM, not just to clarify what should be done to achieve better outcome, but also to help senior management and marketers to determine their CRM strategy. Consequently, it has been found essential for organisations to cover CRM activities in their performance measurement systems, in order to assess the operation of their vision and the reliability of the strategic plan formulated to adopt CRM systems.

The success of strategic planning depends on aligning business processes across the organisation to maximise customer values, leading to better financial performance. Consequently, businesses are re-engineering their strategies to meet the evolving needs of customers and incorporate CRM into their business strategy. Gurau *et al.*, (2003) outline how the strategic planning process for customer-centric business may involve market research, planning and implementation phases. Market research should analyse the historical relationship with customers, segment customers based on their needs, calculate customer lifetime value, create segment specific strategies to fulfil customers' needs, and update future business plans based on feedback and analysis. During the planning phase, businesses need to create multi-functional teams, agree on specific objectives for value creation, and provide a detailed implementation plan. The implementation phase should implement operational procedures, measure results, and adjust plans according to results obtained. Therefore, the strategic planning process has developed a coherent framework for allocating organisational resources, managing challenges, exploiting opportunities, and evaluating CRM and business performance (Ryals and Knox, 2001; Rigby *et al.*, 2002; Raman *et al.*, 2006).

2.6.2 Internal Marketing

Much of the marketing literature focuses on customer-centric requirements (Chen and Popovich, 2003) and a strategic shift from product-centric to customer-centric orientation. In this, adoption of CRM is a vital process for organisations to be more effectively customer-centric. However, some researchers argue that CRM adoption can only be effective when the business redesigns its structures, processes and incentives to accommodate the process (Frambach and Schillewaert, 2002). The leading exponents of CRM adoption have cautioned us as to the kinds of organisational and communication issues which may potentially hinder the effective adoption of CRM (Cascio *et al.*, 2010), indicating that internal marketing plays a vital role in resolving issues in relationship marketing and CRM implementation (Christopher *et al.*, 2002). Grönroos (1981), a vigorous leader of the Nordic school,

stresses that effective relationship marketing is only attained by organisational practice of internal marketing which generally involves creating an appropriate organisational climate.

Ballantyne (2000) defines internal marketing as any form of marketing that focuses on changing employees' attention to the internal activities of the company, in order to successfully implement marketing plans. The basic premise behind internal marketing involves improving customer awareness and quality, and removing human barriers to business effectiveness. There are a number of different forms of internal marketing. These all forms interrelate in considering the customer as inside the organisation; the employee in this study. Internal marketing has been seen as a means of affecting organisational change and implementing marketing strategies (Piercy and Morgan, 1990; Ballantyne, 2003). According to Sin *et al.* (2005), internal marketing process involves market training and education, internal communication, reward systems, and employee involvement. In the literature, researchers have used internal marketing terms to conceptualise the development of customer-centric orientation, employees' involvement, management support, and changing management issues.

Internal marketing is a pivotal strategy to develop customer-centric orientation and facilitate coherent understanding of relationship marketing essentials (Sheth and Parvatiyar 2002; Lings, 2004). According to Krauss (2002), employees are the critical components of customer relationships, and the most difficult element to engage in customer-centric organisational change. The concept of internal marketing is also concerned with ensuring communication between employees, and their engagement with business and CRM strategy (Hwang and Chi, 2005). Internal marketing is directed at motivating employees to be involved in the processes of implementation and integration of technological advances and organisational change in customer-centric processes (Chen and Popovich, 2003). As such, there is a strong need for businesses to motivate and influence employees to adapt to the internal process as needed for effective CRM implementation (Chen and Chen, 2004; Galbreath and Rogers, 2012). This is important for organisational development and change, as it reduces employee resistance towards change process and adaptation, whilst improving business performance through the creation of strong organisational culture (Grönroos, 1996). This can be attained by the efficient interaction between management and employees, since intensive and high quality communication better informs employees about the nature of internal and external environment changes and pushes them to understand the need of change. In relation to CRM, this includes not just actions but also behaviours and attitudes to the customer-centric orientation of the business (Ryals and Knox, 2001; Chen and Popovich, 2003).

CRM implementation may be challenged by varying perspectives and attitudes of employees from different business units within an organisation. In order to co-ordinate these, researchers have suggested collaboration of cross-functional teams from different business units (IT, Marketing and HRM) and management hierarchies in devising an internal CRM based marketing process, which will align the different

perspectives of CRM across business units within the organisation (Ryals and Knox, 2001; Payne, 2006). This suggests that internal marketing as a concept can be extended to creating an organisational climate with cross-functional working quality (Ballantyne, 2000).

Internal marketing must ensure the management support of such a devised CRM marketing plan, as previous research findings indicate that CRM implementation efforts are successful only when there is adequate top management support, communication, and knowledge sharing (Goodhue *et al.*, 2002; King and Burgess, 2007; Osarenkhoe and Bennani, 2007). Furthermore, Payne (2006) highlights that a supportive management culture underpins any established CRM strategy and customer-centric values, which will be one that serves cross-functional working across the organisation. The main characteristics of supportive culture and cross-functional working are discussed in more detail later in the culture and leadership section.

Winer (2001) suggests that the influence of change management on CRM success is to date largely under-investigated. Therefore, internal marketing must carry forward HRM perspectives on aspects of change management into the marketing domain. Empirical evidence from studies shows that CRM projects suffer from high failure rates where businesses neglect change management principles, or ignore the potential impact of substantial change in organisational culture and employee involvement (Kale, 2004; Plakoyiannaki; 2005; Payne, 2006). This suggests that the move towards CRM adoption must be supported by a means of analysing organisational problems, such as the 'Seven S' framework. According to Payne (2006), the 'Seven S' framework, developed by McKinsey, is a powerful instrument for examining CRM change management initiatives. This framework includes seven elements: strategy, structure, system, style, staff, skills, and shared values to address all possible issues of organisational change and drive an organisation to excellence. In addition to these, researchers suggest that change management efforts could be aided by effective internal communication between employees across the organisation (Chen and Popovich, 2003). Finnegan and Currie (2010) have defined good internal communication as involving improved information sharing within and across the organisation, creating an integrated view of the customer, and aligning a unified message to cope with external communication with customers. According to Ryals and Knox (2001), CRM adoption and organisational culture change require enhanced quality of internal communication within an organisation. Consequently, managers are urged to communicate clear objectives in driving forward CRM strategy, since understanding of objectives is critical to shaping the perceptions of employees across the organisation (Ramdani *et al.*, 2009). A clear understanding of the objectives and drivers of CRM would help employees to realise the strategic importance of CRM in the organisation and what they are expected to achieve through the CRM process (Plakoyiannaki, 2005). Given that the achievement of CRM goals rests on employees' understanding of CRM initiatives and processes, the best strategy for building

employees' understanding of motivation for a new working environment is the creation of internal forums for cross-functional communication (Osarenkhoe and Bennani, 2007). To this end, Raman *et al.* (2006) have argued that senior managers should show commitment and support to building a team orientation and bringing various units of the company together.

The implementation of CRM strategy has required a shift to a culture of more freely sharing information and knowledge (Finnegan and Currie, 2010). Ryals *et al.* (2000) have described CRM adoption also as a change programme, which requires management support, new information systems to re-configure business's processes, and alignment of rewards and measures to shape the behaviour of employees motivating them to excel in customer service. Moreover, organisations have been recommended to use their rewarding system to monitor employees' behaviour (Lopez *et al.*, 2006). Literature shows that CRM implementation is aided by the organisations' use of a reward system to boost motivation of the employees and reduce their resistance to change (Reintarz *et al.*, 2004; Plakoyiannaki, 2005). In particular, organisations offering incentives strongly oriented towards retaining, rather than capturing customers, are seen to be engaged in developing a very customer-centric culture (Day, 1999). According to Plakoyiannaki (2005), reward systems should acknowledge and reward the contribution of employees, since it is they who can best influence outcomes on the job. Such rewards are likely to result in an enhanced sense of impact, and to reinforce perception of personal competencies. Finally, successful CRM implementation needs an organisational structure and a reward system that serve CRM initiatives rather than undermining them. For example, an organisation needs to have a way of measuring and rewarding customer satisfaction, which can be attained directly through surveys, or indirectly through monitoring proxy measures (Day, 1999).

2.6.3 Organisational Climate, Culture and Leadership

Organisational Climate

Organisations increasingly aspire to pursue creative ideas and approaches to be more competitive. They seek to encourage creativity by developing a working environment that is conducive to innovation, change and continuous learning orientation. While the capabilities of an organisation to react quickly and support new innovative solutions must start at individual level, evidence suggests that these capabilities are impacted by a variety of organisational variables such as organisational climate and culture (Trainor *et al.*, 2011). Both of these variables are proved to be useful in explaining how organisations influence the attitudes and behaviour of organisational members, why some organisations are more innovative and more willing to adopt new technologies, and why some organisations are more successful than others (Glisson and James, 2002).

The two concepts of organisational climate and organisational culture, although described as conceptually district, are closely interconnected forming dynamic interrelationship. Schneider *et al*. (2011) state that despite the overlap and similarities between these two concepts, limited research has looked at the relationship between them. Although climate has a longer history in the literature, culture received more attention in recent literature (Glisson, 2009). As a result, the term 'organisational culture' has gradually replaced the term 'organisational climate'. These two terms are "two alternative constructs for conceptualising the way people experience and describe their work settings" (Schneider et al., 2011:2). Moreover, Moran and Volkwein (1992) concede that climate is a subset of culture. In the context of CRM, Payne (2006) approves that a supportive culture serving CRM implementation should include elements of a positive organisational climate.

In a bid to avoid confusion between organisational culture and climate, Denison (1996) recommends to use the term organisational culture to refer to the deep structure within an organisation, which is rooted in the values, assumption and beliefs held by organisational members, whereas to use the term organisational climate to refer to elements of an organisational environment as being perceived by organisational members. In other words, climate is the way organisational members perceive and interpret culture quality and characteristics (French *et al*., 1985, Armstrong, 2009). Hence, it could be argued that culture is concerned with the traits and features of the actual organisational settings, while climate is concerned with individuals' perception of this setting. French *et al*. (1985) concede that it is more difficult to identify the characteristics of the actual settings (culture) within an organisation especially when individuals' perceptions (climate) represent different perspectives of the organisational settings. The point is that, in contrast with culture, climate can be empirically assessed (Moran and Volkwein, 1992).

In his attempt to clarify the differences between culture and climate, Glick (1985) considers the differences between applied methodologies, especially because the two concepts are drawn from different disciplines. The concept of climate is rooted primarily in the field of social psychology, while the concept of culture is rooted firmly in the field of anthropology. Evidently, both disciplines address different levels of reality and need different research paradigms and methodology (Denison, 1996). Moreover, Denison (ibid) contends that both of culture and climate address a common phenomenon, focusing on the development and influence of social contexts within an organisation. However, differences between them rely principally on interpretation rather than differences in phenomenon (Moran and Volkwein, 1992).

The concept of organisational climate is defined as the employee perceptions of the organisational environment including policies, features, events, and processes (Schneider, 2008). Morgan (1991) state that organisational climate is concerned with 'mood' or 'atmosphere' within an organisation. Moran and Volkwein (ibid: 20) describe organizational climate as a relatively persistent enduring quality of an organisation, which differentiates it from other companies. They further argue that

organisational climate i) embodies members' perception of organisational practices, ii) is a result of internal interaction, iii) serves as a basis for interpreting the situation, iv) reveal the predominant norms and attitudes of the organisational culture, v) and acts as a stimuli for shaping behaviour.

Trainor *et al*. (ibid) suggest that appropriate climate and culture within an organisation is crucial for facilitating e-marketing and, more specifically, CRM. Clark and Smith (2003) argue that organisations should coordinate their efforts to align organisational climate with organisational culture to enable more effective adoption of CRM. Organisational climate is a determinant of individuals' behaviours within an organisation and further reflects organisational values. It is described in the literature as a critical means to achieve customer satisfaction (Yagil and Gal, 2002), customer retention (Clark, 2002), and service quality (Schneider *et al*., 1998). It is therefore prudent to consider organisational climate as a critical determinant in how organisations relate to customer-centric orientation for the service sector context (Schneider and Bowen, 1995). This has important implications not only for the adoption but also the sustainability of CRM. Researchers stress that the quality of organisational climate is a key determinant of CRM adoption (Goodhue *et al*., 2002; Payne, 2006). Hence, by developing an appropriate organisational climate that nurtures CRM initiatives and facilitates diffusion of innovation, management can considerably boost CRM adoption. Organisational climate manifests a wide range of characteristics and factors. However, progress in this area of research (Clark, 2002; Schneider *et al*., 2011) suggests that a range of elements could be accommodated from there to the context of this study: customer-focused (Chen *et al*., 2009c; Garrido-Moreno and Padilla-Melendez, 2011), rewards (Clark, ibid), appropriate learning climate (Payne, 2006), and cross-functional team-working (Clark and Smith, ibid).

Organisational Culture

CRM adoption is successfully achieved only if organisations craft the right culture and attitudes of employees around it (Gupta and Shukla, 2002). It would appear that the people element involved in organisational culture and leadership is critical in actively supporting CRM implementation, and improving customer and shareholder values (Goodhue *et al.*, 2002; King and Burgess, 2007; Osarenkhoe and Bennani, 2007). CRM adoption can be challenged by a resistance to change at various levels of the organisation (Bohling *et al.*, 2006) and to overcome these challenges a high level of top management commitment to overcome employees' resistance to change is essential (Zablah *et al.*, 2004). In addition, organisations which are open to accepting innovation and embracing learning culture tend more readily to support CRM adoption (Payne, 2006). Given this literature, in this study the author divides this conceptual factor further into three sub-factors: Resistance to change (Goodhue *et al.*, 2002), Supportive organisational culture (Boulding *et al.*, 2005; Payne, 2006), and Leadership (Ryals and Knox, 2001).

Given these factors, it has become essential for managers to assess and understand how CRM goals fit within an organisation's culture and values. A study by Deshpande *et al.* (1993) suggests that organisational culture reflects deeply embedded sets of values and beliefs within an organisation, which serve to establish the norms for appropriate behaviour within that organisation. Since organisational culture exists within all organisations, it can be seen as one of its potential competencies. The type of organisational culture which develops will reflect the history of its being established, its development over time and the environmental influences which have impacted upon it (Hall *et al.*, 2001). Organisational culture shapes the characteristics of human resources and the degree of readiness to change in the organisation (Minguzzi and Passaro, 2001).

Thus the complex nature of CRM necessitates creating the right environment, culture and attitudes of employees. Furthermore, CRM adoption is achieved only if specific advanced technology skills are attained, together with significant changes in work practices and structures (Ramdani *et al.*, 2009). This explains why CRM adoption can be challenged by employee resistance to change and innovation at various organisational levels (Bohling *et al.*, 2006). Hence, managers need to respond promptly to such concerns and resolve them at the early stages of CRM implementation (Bull, 2003). Moreover, the personal characteristics of management are found to have a direct impact on the changes in an organisation, as personal characteristics of managers might affect the adoption of changes. Several studies have investigated the social behaviour and frames of reference of top management personnel when adopting innovation (Thong and Yap, 1995; Riemenschneider and McKinney, 2002). Numerous studies show that the more top management are seen to value and understand an innovation, and advertise their positive attitude towards IT, the more rapidly and successfully an innovation is likely to be adopted (Fuller and Lewis, 2002; Bassellier *et al.*, 2003; Nguyen, 2009). This suggests that in terms of innovativeness, both general and IT-specific, the role of management is important, because of its impact on the organisation's innovation and motivation to change (Premkumar and Roberts, 1999).

Adoption of CRM is a change within an organisation that affects the organisational culture of that organisation and vice versa. The adoption of CRM initiatives can bring in significant changes to organisational culture including the work practices of organisations (Premkumar and Roberts 1999; Ali, 2007). In such a case, resistance to the innovation itself and disagreements as to change among various departments, are likely to result. Piderit (2000) indicates that resistance can be viewed as a multidimensional attitude towards change, comprising types of beliefs, emotions, or behaviours. Resistance to change can be articulated through the expression of negative beliefs about the change, or displays of strong negative feelings about the change, or actions or intentions to oppose the change effort. These three components are not independent of each other. Of course behavioural resistance represents the strongest resistance to an innovation, which can be mediated by management through

use of internal marketing methods. In the context of CRM adoption, behavioural resistance is the manifestation of employees' unwillingness to adopt and utilise CRM tools properly (Zablah *et al.*, 2004).

In adapting to CRM strategy and adopting CRM technology, it is very common for organisations to be challenged by the change process. This is especially true for traditional companies that need to change their focus from product to customer (Boulding *et al.*, 2005). Re-engineering a customer-centric approach involves cultural changes which can be achieved through the participation of all employees within the organisation. However, employees may react in different resistant ways to new ideas and processes resulting from CRM implementation (Payne, 2006). Such employee resistance to change at various levels of the organisation has been one of the major factors found to hamper the success of CRM projects (Bohling *et al.*, 2006).

Zablah *et al.* (2004) propose that this resistance may occur when the change is considered as painful, or involving loss; and given the high level of uncertainty normally generated by organisational innovation efforts, such resistance behaviour can be seen as logical and predictable. Since the implementation of CRM initiatives may imply significant changes to some jobs in an organisation, it would be normal for employees to resist these initiatives (Ramdani *et al.*, 2009), and to fear CRM as a mere efficiency approach and cost cutting exercise to replace their contribution to the organisation and cut their jobs (Bull, 2003). Buttle (2004) suggests that organisations promoting a customer-centric philosophy to their culture may be able to render the adoption of CRM less threatening to employees, especially if accompanied by an appropriate reward system, compensation programs, and job evaluations on the basis of facilitating and rewarding customer-centric orientation (Chen and Popovich, 2003). According to Coltman (2007a), managers of CRM adoption should be sensitive to the potential tension between perceptions of new CRM strategies, and existing forms, systems and resources. Therefore, it is recommended that CRM adoption deploy a champion who can conduct an analysis of the current organisation's culture via different types of techniques (i.e. management by walking about and surveys), and on this basis, acts towards developing the desired new culture.

According to Boulding *et al.* (2005), little attention is given to the role of employees in the successful implementation of CRM activities. Several studies suggest that organisations which are open to accepting innovations, and embracing a new learning culture, are more likely to advance technology and gain competitive advantage over competitors (Hall *et al.*, 2001). Additionally, Payne (2006) explains that a supportive culture serving CRM implementation should include four elements: a positive organisational climate, a customer-centric culture, a strong culture, and a learning climate. Research also shows that employees' ability to learn new ways of working with customers (new processes and technologies) contributes to effective CRM implementation (Galbreath, 2002; Mithas *et al.*, 2005; Chalmeta 2006). A number of scholars have emphasised that preparing businesses with a supportive organisational

culture is paramount for CRM success (Goodhue *et al.*, 2002; Chen and Ching, 2004; Raman *et al.*, 2006).

Overall, researchers suggest that CRM processing requires team working and a cross-functional integration between people from different departments across the organisation (Payne, 2006). The Anglo-Australian relationship marketing school particularly highlights that organisations adopting CRM strategy needs a degree of cross-functional reorganisation (Lindgreen *et al.*, 2006). This is supported by researchers who have suggested that a cross-functional working requires an organisational culture that promotes effective collaboration and cooperation among business units (Ling and Yen, 2001). However, others warn that a cross-functional communication between IT and marketing departments is not an easy process, given the different cultures they inhabit (Wilson *et al.*, 2002; Payne, 2006). Consequently, a product champion, as key facilitator in the CRM adoption process, should understand how individual organisational activities may contribute to customer success, and how individual commitment may be established to contribute to new processes and techniques (King and Burgess, 2007).

Leadership

According to Schein (2004), the dynamic process of constructing and managing organisational culture is the essence of leadership. Therefore, nurturing a supportive organisational culture for CRM implementation is a continuous leadership task at all organisational levels (Payne, 2006). Researchers have found that leadership and top management commitment actively support CRM activities in a relevant matter (Finnegan and Currie; 2010). This underpins the message that in order effectively to implement CRM, organisations cannot hope merely to adopt CRM and then stand back to watch from far. Even if the organisation is using the latest technology and providing the atmosphere of innovation, employees may still not move forward without daily motivation to accept CRM initiatives. Because CRM involves changing employee attitudes and the culture of an organisation, top management support and commitment is an essential factor affecting the success of CRM adoption. According to Payne and Frow (2006), effective CRM strategy relies on management support and having customer-centric values in place; this way a culture is created to support cross-functional working across the organisation. Therefore, organisations should enable strong support among senior management, in order to create an organisational environment that is conducive to effective implementation of CRM strategy across the organisation (Brown and Vessey, 2003).

A senior management team should view itself as a sponsor and champion for the adoption of CRM as a major goal for the organisation. Researchers propose that leadership from top management has played a critical role in CRM implementation, by demonstrating full support across all levels of management for CRM strategy. In relation to this, top management support has been found to be the biggest influencer for maintaining transformation initiative and reducing change resistance, including

enhancing employee motivation to become more customer-centric and reinforcing the importance of IT management practice (Locander *et al.*, 2002; Bohling *et al.*, 2006; Kennedy *et al.*, 2006). Therefore, CRM adoption needs a champion who is able to conduct analysis of the current organisation's culture and then to act to develop the desired new culture. It has also been noted that businesses that have CRM champions are more proactive in heavy investment to ensure that CRM different initiatives work together efficiently (Goodhue *et al.*, 2002; King and Burgess, 2008).

Somers and Nelson (2001) stress that technological innovations often require the presence of a champion who delivers the critical aspects of transformational leadership, facilitation, and internal marketing of the project to the employees. This champion needs to have a comprehensive and extensive understanding of both the business and technology contexts. Hence, it is critical for CRM success to position a champion high in the organisation; a senior manager with extensive knowledge of the organisation's processes and authority to move large and complicated projects through the transition (Galbreath, and Rogers, 2012). This champion would enable coordination of the diverse CRM developments and implementation stages across the whole organisation, and promotion of the CRM objectives to various employees within different departments. In conclusion, top management support is instrumental in ensuring that CRM implementation receives the necessary resources, time and priority. Unfortunately, some studies suggest that senior managers do not often support CRM implementation. This is mostly due to the following reasons:

- Short-term management orientation, ignoring that CRM adoption takes a long time to achieve results (Ryals and Knox, 2001).
- Managers relating mostly to quantitative financial results, failing to recognise the potential benefits of CRM to organisation profitability (Ryals and Knox, 2001).
- Managers failing to understand their critical role in supporting the change process (Maklan *et al.*, 2007).
- Managers considering CRM implementation as a 'project' rather than as a holistic ongoing approach or process (Maklan *et al.*, 2007).

2.6.4 Project Management

Project management can be defined as a practical professional capability framework for delivering a project in a set time frame, meeting a given mission by organising a dedicated project team, and effectively combining the most appropriate technical and managerial methods (Gentle, 2002). The vast combination of technical elements (hardware and software) and the myriad of organisational and employee issues make CRM adoption/implementation projects vitally complex. For this reason, it is impossible to disregard the role of project management techniques and skills in determining successful CRM adoption. The lifecycle of the CRM system offered by Marcus and Tanis (2000 as cited in Yang and Seddon, 2004) includes four phases: chattering, implementation (project), shakedown, and onwards and upwards However,

the Marcus and Tanis lifecycle model has been criticised for not including a definitive stage of the use of the system (Chan and Rosemann, 2001). To counter this, Chan and Rosemann (2001) have suggested using a lifecycle framework including selection, implementation, use, and continuous change of the system. The two lifecycle frameworks are similarly involved with both pre and post implementation phases. This section focuses on the implementation phase, as the other phases seem to overlap with other concepts discussed in this study (i.e. internal marketing, and culture and leadership).

Project planning could be seen as an essential step in implementing CRM projects, since without a project plan, CRM implementation risks experiencing issues such as inadequate resources, unclear scope, poor scheduling, and the lost of quality control (Man *et al.*, 2006). Organisations need to identify CRM objectives and recognise their priorities; such objectives should be derived from the corporate objectives and sustain the overall business strategy. Accordingly, a project manager is advised to clarify the goals of CRM project/projects and the means for measuring project performance against these goals (Somers and Nelson, 2001). Clarification and implementation of these goals can be seen to constitute the critical success factors of the project, to be used as benchmarks for evaluating CRM initiatives. On the other hand, it must be recognised that CRM projects are large-scale projects requiring attention beyond their completion, as the true benefits of CRM are only recognisable once the initial projects have been completed (Meyer, 2005).

According to Payne and Frow (2006), CRM credibility runs the risk of being completely or significantly damaged, if a CRM project plan slips badly, for instance coming to completion after original agreed deadlines or coming in over original agreed budget. Thus realistic advance scoping of a project in terms of management capacity is essential so that the planning of CRM objectives is clearly known to all stakeholders; in this way the risk of overrunning budgets and timescales is minimized. Hence, having appropriate project schedules, plans and a clear strategy for CRM implementation is a necessity for CRM projects (Somers and Nelson, 2001; Ranjan *et al.*, 2008). In this, a project manager should be cautious of too broad or ambitious a project scope, as sometimes initial commitments overlap or lack specifics (Somers and Nelson, 2001).

Another factor which has received considerable attention among researchers is the role of user training to facilitate and support CRM implementation (Schillewaert *et al.*, 2005). In the CRM literature, user training seems to be an element which overlaps with project management and internal marketing concepts. Because CRM projects entail technical, business and process changes, preparing and training users how to work with CRM systems and how to relate to CRM processes is essential early in the implementation phase. From an individual employee perspective, user training is useful for coming to value and appreciate CRM as a palatable and compatible process in line with their organisation's objectives (Zablah *et al.*, 2004). According to Somers and Nelson (2001), large-scale projects like CRM projects appear to demand a six

month learning curve, within which particular types of training are seen to improve the steepness of the learning curve. The CRM adoption process is supported by user training, which often includes two important elements, first, technical training which supports employees' IS skills and second, employee understanding of CRM as contributing significantly to the financial success of the organisation (Ryals and Knox, 2001). Research shows that initial user training often supports employees' technical skills, although in itself insufficient to help employees value the implications of CRM in relation to their organisational objectives (Bull, 2003). Overall, user training needs to be complemented by collaboration and communication flow within an organisation (Riseley, 2004). In addition user training should be considered as a continuous method used throughout the CRM implementation process, to reinforce existing procedures and to implement new organisational values and processes (Payton and Zahay, 2005).

According to Reynolds (2002), project managers need to implement specific CRM initiatives in order to achieve CRM goals. These initiatives include creating a multi-functional project team, agreeing on specific objectives for value creation, providing detailed implementation plans, providing appropriate training of users, laying out clear milestones, carrying out monitoring, and motivating employees (Reynolds, 2002). The implementation plans should implement operational procedures, measure results, and adjust plans according to results obtained during the implementation of CRM projects (Bose, 2002; Ocker and Mudambi, 2003; Payne, 2006).

The use of good project management practices effectively underpins customer management capabilities. This capability refers to the project management team's ability to adjust project plans on an ad-hoc basis. Wilson *et al.* (2002) emphasise that project management teams need to monitor and control CRM implementation, in order to ensure flexibility and adjustments to unexpected changes. Additionally Mckay (2009) highlights that an agreement before the start of the project as to the distribution of milestones could facilitate the monitoring and control process. However, because of the complex nature of CRM projects, project managers may face difficulties in monitoring and adjusting project plans. Therefore, a CRM project plan needs to embrace cultural change issues within the project's scope, and to design for flexibility (Wilson *et al.*, 2002). Researchers suggest that organisations with a cross-functional team assembled from different departments react more rapidly and constructively to changes than mono-functional teams (Gefen and Ridings, 2002; Payne, 2006). This is because a cross-functional team is able more effectively to communicate across IT and marketing departments. This results in maintaining employee team commitment to the success of a CRM project which, in turn, may lead to a better effective customised project that meets users' requirements. Such good communication management can increase the success rate of CRM projects, as it would enhance stakeholder understanding of the project, thus obtaining their support, and gaining their commitment to deliver the CRM project's results (Man *et al.*, 2006).

2.7 The Impact of Organisational Characteristics on CRM Adoption

There is considerable evidence to show the importance of organisational characteristics in determining the CRM adoption (eg: Sin et al., 2005; Ko *et al.*, 2008). Barney (1992) describes organisational characteristics as the capabilities that enable a firm to consider, choose, and implement strategies. Partanen and Möller (2012) argue that resources and capabilities drive a firm ability to achieve competitive performance. The view that resources and capabilities affect business process and performance is well supported by the marketing and management scholars (Day, 2002; Prithwiraj *et al.*, 2010; Partanen and Möller, 2012). The resource-based theory provides a sound foundation for examining how resources can be managed to form a competitive advantage. It emphasises the importance of resources and capabilities (Teece *et al.*, 1997). The basic underlying premise of this theory is that the value of these two components is reflected in better business performance (ibid). The resource based theory makes a distinction between its two main components: resources and capabilities. The term 'resources' is defined as "stocks of available factors that are owned or controlled by the firm", and the term 'capabilities' is defined as "the ability of the firm to use its resources" (Amit and Schoemaker, 1993). Resource-based theory implies that organisations have different types of resources and varying levels of capabilities (ibid). Moreover, businesses survival relies on their ability to create new resources, build their capabilities, and make the resources and capabilities more inimitable to facilitate superior performance (Teece *et al.*, 1997; Partanen and Möller, 2012). Hence, the allocation of resources, by itself, cannot achieve sustainable competitive advantage for an organisation, but how the organisation deploys it existing resources and complements existing capabilities can improve its competitive position (Peteraf, 1997; Nath *et al.*, 2010).

The resource based theory has spread throughout strategic management (Amit and Schoemaker, 1993). Within a relatively short span of time, it found a wide acceptance in the marketing management literature (Day, 2002), and gradually in the information system literature (Coltman, 2007b). In his review of the resource-based theory development, Foss (2011) argue that this theory is micro-oriented, which has the advantage of bringing strategic management closer with internal resources and capabilities controlled by a firm. Gouthier and Schmid (2003) argue that the resource-based theory has the potential to systematically analyse service customers and customer relationships. Moreover, Coltman (ibid) concedes that this theory is a useful multidimensional perspective to the adoption of CRM as it seeks to relate superior performance to the unique various resources and capabilities possessed by the firm. In developing a CRM capability, researchers suggest that CRM adoption requires persistent synergistic investment in a combination of human, technological and organisational resources and capabilities (Coltman, ibid; Partanen and Möller, 2012). Yet, evidence suggests that CRM adoption is a selective process in which organisations choose whether to make CRM the central drive of their strategies and working process, or just another approach of change (Day, 2002). Concluding that

both academics and researcher must address how resources and CRM capabilities emerge, evolve, and change over time (Srivastava *et al*., 2001).

2.8 Summary

The complex nature of CRM creates differences in tactical emphasis and a lack of agreement as to the precise definition of CRM (Pedron and Caldeira, 2011). Payne and Frow (2005) use a continuum to define CRM from three different perspectives. At a low level of detail, CRM is narrowly and tactically defined, while at a high level of abstraction, CRM is broadly and strategically defined. The first perspective applies a narrow and tactical outlook where CRM is accomplished through a defined technology initiative project. Tactical CRM approaches tend not to gain top management support, and are not embedded in business strategy and organisations. This tactical perspective takes technology as its driving force, and describes CRM as using data to drive marketing activities (Kutner and Cripps, 1997). It also looks upon CRM as a marketing promotional activity linked to marketing databases focusing on efficient selling of products and services (Winer, 2001). Researchers from the IT discipline have contributed to this tactical CRM approach by providing guidelines on how to make efficient use of the technology (Romano and Fjermestad, 2003). This perspective also looks upon CRM as a marketing promotional activity linked to a marketing database focusing on efficient selling of products and services (Winer, 2001). Tactical CRM tools include data mining, direct mailings and telemarketing tools.

Strategic approaches apply a holistic approach to CRM, and embed it in a business's wider strategy. This strategic orientation of CRM links to customer-centric strategy that aims to develop one-to-one relationship with customers. Through combining all processes and functions of an organisation, CRM is used to manage customer relationships by covering all customer contact points, with the aim of developing value for the customer and profitability for the organisation (Parvatiyar and Sheth, 2001). Researchers from the business discipline have contributed to this perspective by focusing on business strategy, relationship marketing, and customer-centric orientation (Buttle, 2004; Gummesson, 2008). The implementation of strategic CRM approaches are conducted through a long-term prospective, which does not only predict changes to organisational structure but also organisational culture. Strategic CRM tools include affinity programs and segmentation tools. Payne and Frow (2005) are in favour of the strategic perspective of CRM, since it links CRM to a customer-centric orientation strategy. This orientation should lead to focusing organisation structure and culture around customers. Dibb and Meadows (2008) observe that the differences between CRM perspectives reflect what they describe as a journey from segmentation to customer relationship management.

The review of the literature has demonstrated that the concept of CRM is a joint development between marketing, management and IT disciplines, where a considerable overlap between the three disciplines appears to exist. For example,

researchers from the IT discipline focus on CRM characteristics and usefulness, which are linked to a certain extent to the elements of customer-centric orientation that receive most attention from marketing researchers. The insights from these disciplines and their overlaps are relevant for extending each discipline's perspective. However, as a consequence of the different success criteria, each discipline appears to have its own distinct view of what constitutes successful CRM implementation, as depicted in Table 2.3.

Table 2.3: A List of Sub-factors for Each Factor in the Conceptual Framework

<table>
<tr><td rowspan="2"></td><td colspan="8" align="center">Discipline</td></tr>
<tr><td>Marketing</td><td colspan="5" align="center">Management</td><td colspan="2" align="center">IT</td></tr>
<tr><td>Factors</td><td>Customer-centric orientation</td><td>Strategic Planning</td><td>Internal marketing</td><td>Culture and leadership</td><td>Project Management</td><td>Knowledge management</td><td>Innovation</td></tr>
<tr><td rowspan="5">Sub-Factors</td><td>customers' profitability</td><td>Clear direction embracing CRM strategy.</td><td>Change management</td><td>Resistant to change</td><td>Project Management Techniques</td><td>Capture</td><td>Ease of use</td></tr>
<tr><td>Segmentation</td><td>Covering CRM in the performance measurement system</td><td>Communication</td><td>Supportive culture</td><td>Change control methods</td><td>Manage</td><td>Usefulness</td></tr>
<tr><td>Acquisition</td><td>Developing a strategic set of activities for CRM adoption</td><td>Reward CRM usage</td><td>Leadership</td><td></td><td>Transmit</td><td></td></tr>
<tr><td>Satisfaction</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Retention</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Marketing scholars view CRM as a concept that adds value to the customer. They are primarily concerned with the essentials of customer-centric and relationship marketing, as an effective business strategy. Given that, customer-centric orientation places customer knowledge, interaction, acquisition, value, satisfaction, and retention at the centre of the value creation process.

IT researchers focus on CRM usage and implementation factors (Wu and Wu, 2005). They indicate that system use has a strong effect on employees' adoption of CRM in organisations, referring to the idea that employees must use the CRM system to achieve the marketing goals which are often correlated with other constructs. A number of studies have successfully adopted and extended the technology acceptance model (TAM) developed by Davis (1989), to examine the acceptance of new technologies in the CRM domain.

The management literature has focused on the notion that an appropriate CRM adoption calls for considerable attention to organisational and communication issues surrounding the development and implementation of business strategy, and the role of the employees and the organisation in managing the adoption of the CRM. Overall, researchers from this area propose that an organisation's strategic plan, internal marketing, organisational culture and leadership, and project management have the strongest influence on the successful organisation's adoption of CRM. In the next chapter, the methodology choice will be discussed in detail.

Chapter 3: Methodology

3.1 Introduction

Following on from the research question, which examines what factors affect CRM adoption within organisations, and the multi-disciplinary review of CRM adoption developed in the previous chapter, this chapter presents an account of the research design. The research was designed in order to collect and analyse data appropriate to addressing the research problem. The validity and reliability of any research depends to a great extent on the appropriateness of the methodology and design selected by the researcher. This chapter presents the research design and methodology employed in this study. It begins by defining the parameters: that is that a research design serves as a framework or blueprint for conducting the research, which details the procedures necessary to obtain the required information to structure/design a study that will seek possible answers to the research problem (Malhotra and Peterson, 2006). As a first step, several philosophical research perspectives are acknowledged within which the philosophical standpoint of the author is situated. To follow, a detailed discussion is offered of different alternatives for research approaches, strategies, and methods, leading to the specific choice made in this study. Finally, the summary of this chapter is presented.

In this study, the following research cycle is employed to develop the research conceptual model by: i) starting with an exploratory study (in-depth interviews) leading to the development of hypothesised research model and a survey, ii) developing an appropriate survey to test and validate the research model. A subsequent confirmatory study to test the research model, resulting from the empirical data, is conducted to discuss the validity and reliability of the research model.

3.2 Research Philosophy

The values, beliefs and experiences of a researcher are inseparable from his/her research design and the particular way a research is conducted. Particularly, the way a researcher views the world underlies the choice of research practices to be used including research approaches and strategies. According to Hughes and Sharrock (1997), the researcher's beliefs about how to create knowledge constitute a research philosophy, that is, concerning the nature and development of knowledge, and in particular how that knowledge is created. Given that the philosophy incorporates important assumptions about the researcher's world view, it is essential to discuss the research philosophy of the thesis before going into the detail of the chosen research methodology, since this discussion in itself can help a researcher to clarify the fundamental beliefs underpinning choice of research design and methodology (Easterby-Smith *et al.*, 2002). The several philosophical perspectives debated and criticised among researchers help us at an early stage to appraise different methodologies, clarify the research design, avoid incompatible applications and

redundant work and recognise limitations of diverse research approaches at an early stage.

In the marketing research community, a variety of epistemological and ontological philosophies can be drawn upon, each containing important differences which may influence the way a researcher thinks about the research process (Carson *et al.*, 2001 as cited in Law, 2009). According to Kvale (1996), reviewing ontological and epistemological issues is important to minimise methodological error, and to maximise the success of the research investigation process. The selection of methodology arises from researcher's own ontological and epistemological position and hence affects both the research process and the expected output format. Some researchers work within frameworks known as research paradigms (Healey and Perry, 2000). According to Deshpande (1983:101), "a paradigm is a world-view or set of linked assumptions about the world which is shared by a community of scientists investigating the world". Healy and Perry (2000) enumerate four dominant research paradigms: a) positivism, b) critical theory, c) constructivism, and d) realism. In addition, they offer three elements of paradigm: a) ontology, b) epistemology, and c) methodology.

Ontological and epistemological approaches are briefly discussed here. Eaterby-Smith *et al.* (2003:31) define ontology as "the assumptions that we make about the nature of reality". This raises questions as to the assumptions held by the researcher in relating to the world, and how it is seen to operate. Ontology involves the portrayal of the basic categories and relationships of being, and deals with the structure and properties of reality in which social phenomena are described, either objectively, understood as independent of humans, or subjectively understood as having existence only through humans (Saunders *et al.*, 2007). On the other hand, epistemology is defined as "a general set of assumptions about the best ways of inquiring into the nature of the world" (Easterby-smith *et al.*, 2002: 31). Epistemology is the branch of philosophy that studies what constitutes acceptable knowledge with respect to possible methods of gaining knowledge and validating it. As shown in Figure 3.1, the ontology of a research design precedes its epistemology, which is then followed by a chosen methodology that elucidates the techniques used by the researcher to investigate the reality of world.

Figure 3.1: The Interrelationships between the Building Blocks of Research

Adapted from Hay (2002:64)

Understanding available philosophical alternatives is critical in helping the researcher to make ontological and epistemological choices suitable for the research methods undertaken. Each potential epistemological approach emphasises a particular ontological position. At one extreme, the social constructionist ontology, which is determined by a focus on the collective reality constructed by people, rather than by objective and external factors, is associated with inductive approaches, where theory follows data, generating conclusions from observations and lending itself to qualitative methods (Easterby-Smith *et al.*, 2002). Alternatively at the other extreme, objective positive ontology is followed by deductive epistemology where hypotheses are accepted/rejected objectively, and theory precedes data, lending itself to quantitative research methods. Between these two extreme philosophical domains lie a number of alternatives, all of which tolerate some affiliation to the dominant philosophies. Although there is controversy about which and how many research paradigms are firmly established, most scholars recognise several types, including the post-positivist paradigm (Carson *et al.*, 2001; Moisander and Valtonen, 2006). Denzin and Lincoln (1994) argued that the positivist paradigm is bounded and challenged by the post-positivist paradigm, which accepts that objectivity in research is desirable but not perfect. Carson *et al.* (2001) defined post-positivist as combining both inductive and deductive research approaches, with the view that "true quantitative understanding might emerge from rich qualitative understandings " (Hughes and Sharrock, 1997:18). Hence, this stance is considered suitable for both qualitative and quantitative research.

An affiliation to any particular research philosophy results from a) philosophical position of the researcher, and b) the requirements stemming from the research aim and the objectives (Yin, 2009). In this research, the main factors which influence the

adoption of CRM by organisations are explored This conceptual framework will help to develop improved approaches to CRM demonstrating conceptual foundations for the disciplinary integration of CRM within business settings. Previous studies in both business and IT disciplines have utilised both qualitative research methods for building a theoretical model (Goodhue *et al.*, 2002; Kapoulas *et al.*, 2004), and quantitative methods for empirically testing the proposed model (Croteau and Li, 2003; Peters and Fletcher, 2004; Reinartz *et al.*, 2004). Because the complex nature of the CRM system includes subjective perception and objective measures of business outcomes (John and Reve, 1982), this research is conducted within a broadly post-positivist paradigm. Hence, it begins with an extensive literature review in order to develop a conceptual framework of the relevant factors that affect organisations' adoption of CRM, and to inform the interview design. It follows with a qualitative study of data derived from individual interviews. The interview design aims to explore the subjective perceptions and experiences of a variety of marketing managers, CIOs, and employees working with CRM. This qualitative part of the study serves not only to explore issues that are important to the relationships in the proposed conceptual framework, but also to ensure that the proposed framework is efficient in tackling significant aspects of the study. The second stage of this research is to empirically test the proposed conceptual framework across a wider sample of population, and develop an appropriate survey, sample and measures. Hence, the quantitative study is designed to offer additional breadth and generalisation to the results. Results of this part of the study are found using statistical techniques. Finally, the significant findings, implications and limitations for practitioners seeking to extend their use of CRM are presented.

3.3 Research Approaches

There are two broad approaches to research: inductive and deductive. An inductive approach, often called a bottom-up approach, is drawn from empirical observations moving to broad generalisations and theories (Sekaran, 2003; Trochim, 2006). Using this approach, the researcher observes certain phenomena, detects patterns and regulations, and generates some general conclusions and theories based on his/her observations. On the other hand, a deductive approach, often called a top-down approach, works from general theory to specific (Sekaran, 2003; Trochim, 2006). Using this approach, the researcher begins with a theory about the topic of his/her interest, narrows the topic down into more specific hypotheses that can be tested, collects observations to address the hypotheses, tests the hypotheses with specific data, and draws conclusions from available facts.

Many researchers view qualitative enquiry as mainly an inductive process. Qualitative enquiry starts with examining specified topics and themes, then assessing any emergent patterns that suggest relationships between variables, and finally generating and building theory. On the other hand, in research community, a quantitative method is more often associated with deductive processes, and is used to test theory and prove generalisations about the phenomenon (Easterby-Smith *et al.*, 2002).

3.4 Research Strategy

Within the field of social science there are many research strategies which a researcher may adopt. Remenyi *et al.* (1998:44) describes research strategy as a way of going about one's research, embodying a particular style and employing different research methods. In other words, research strategy specifies how the researcher will manage to answer research questions systematically rather than haphazardly. Zikmund (2003:740) defines research strategy as "a plan specifying the methods and procedures for collecting and analysing the needed information". Several types of prominent research strategy exist, including experiment, survey, analysis of archival information, ethnography, and case study (Sekaran, 2003). According to Yin (2003) the research strategy should be chosen as a function of the research situation. In general, it refers to different ways of collecting and analysing empirical evidence of the research interest. The choice of research strategy is guided by a) the nature of research aim and objectives, b) the amount of time and financial budget required to undertake the research, and c) and the researcher's philosophical foundations (Saunders *et al.*, 2007).

Each of these potential strategies has its own specific approach to collecting and analysing empirical data, and may offer different kinds of advantage and disadvantage in accessing research data. Most of the strategies mentioned are seen as inappropriate for the aim and objectives of this research. For instance experiments, which fall under the positivist research approach, are normally used in natural science studies, and typically involve two or more experimental groups and a control group. Two main features of this method are manipulation and control. One drawback of this method is that a laboratory setting is often different from the real world (Collis and Hussey, 2003). On the other hand, and because of the limitation of the researcher's time, an ethnographic approach seems to be an inappropriate strategy because it requires the researcher to be a full-time member of a work group as well as doing the research, and involves direct participation in the activities of that particular workplace (Collis and Hussey, 2003).

Yin (2003) argues that the case study approach is preferable for questions relating to 'why', 'what' or 'how', firstly because the researcher has 'no control over events' and secondly because such questions deal with operational links needing to be traced over time, rather than by frequency, and will focus on a contemporary phenomenon within a real-life context. In business studies, a common case study focuses on a company or parts of a company, but may also focus on other things, such as a group of people or events. Some drawbacks of using a case study strategy include difficulties in finding organisations that are willing to participate in a research study, and in contextualising events within a particular period of time. Furthermore, case studies are described as very time consuming and costly (Saunders *et al.*, 2007). This strategy is additionally not appropriate in developing a general conceptual framework, hence is not used in this research.

The use of survey is one of the most popular and prevalent strategy in business and management research (Saunders *et al.*, 2007). In addition, it is commonly favoured in CRM studies (Karimi *et al.*, 2001; Croteau and Li, 2003; Wu and Wu, 2005). The rationale for using a survey method in this research is that this method will favour the elicitation of responses from several organisations across different sectors. A survey allows for the development of trends, such as determining whether there is a tendency for particular types of organisation to display behaviours different from organisations of another type. The survey method strategy is generally used in descriptive and exploratory research, and is mainly associated with a deductive research approach. In addition surveys are used successfully by researchers from diverse domains to help test proposed hypotheses, develop measurement scales, and build theoretical models (Chen *et al.*, 2000).

To maintain continuity in CRM research, the survey design of this study reflects the key themes and factors emerging from previous studies, as discussed in Chapter two. The survey questions are informed by previous work in the CRM field. The data collected by survey method can be used to test and validate which factors influence different organisations' adoption of CRM, and to produce a model of these factors. Moreover, the survey strategy is popular because it allows the collection of a large amount of data from a substantial population in a highly economical way (Remenyi, 1998). Because the aim of this research is to build a model of factors affecting the adoption of CRM by different organisations, there is a need to test the model on a large sample.

Of the two main methods utilised, qualitative and quantitative, the qualitative approach tends to be associated with the phenomenologist paradigm, while quantitative research tends to be linked with the positivist paradigm. A qualitative research method is based on methods of data generation, which are flexible and sensitive to the social context in which data are produced (Collis and Hussey, 2003). The nature of reality is defined by the interaction of the researcher with the phenomenon under study. Qualitative research usually emphasises words rather than quantification in the collection and analysis data. A quantitative research method generally involves numerical data, which can be quantified to help answer research questions, and normally takes the form of a questionnaire (Saunders *et al.*, 2007). Quantitative research is commonly large-scale research based on substantial samples. The data obtained from a quantitative method is usually descriptive, providing data which illustrates frequencies (Collis and Hussey, 2003). Collis and Hussey (2003) summarise the main features of the two approaches in Table 3.1.

Table 3.1: The Main Features of the Quantitative and Qualitative approaches

Qualitative	Quantitative
•Is concerned with generating theories	•IS concerned with hypothesis testing
•Uses small sample	•Uses large sample
•Data is rich and subjective	•Data is highly specific
•Reliability is low	•Reliability is high
•Validity is high	•Validity is low
•Generalises from one setting to another	•Generalises from sample to population

Source: Collis and Hussey (2003:55)

As mentioned, there are two phases of data collection for this research. The first phase aims to develop a theoretical conceptual model using the extant literature and the results of in-depth interviews (qualitative methods) with varied stakeholders involved with the CRM system. In the first phase, the in-depth interviews are intended to ensure that the researcher takes into consideration the main factors that may affect different organisations' adoption of CRM in the research context. The results from phase one are used to construct the proposed conceptual framework of factors that may affect organisations' adoption of CRM. The second phase of the research aims to develop an appropriate survey (quantitative methods) to test and validate this model empirically. After completion of the required data collection in this second phase, the data is analysed using various statistical techniques, as will be discussed in the analysis chapter. The analysis starts with an Exploratory Factor Analysis (EFA), which is used to explore, identify and report the factors identified in the questionnaires. Subsequently, Confirmatory Factor Analysis (CFA) is applied on the hypothesised measurement model. Finally, a Structural Equation Modelling is applied to the structural model, to investigate any relationships that could lead to better understanding of organisation's adoption of CRM.

The research philosophy reflects the researcher's view of reality and the requirements stemming from the research aim and objectives (Yin, 2009). Because of the quantitative and qualitative nature of the research objectives, mixed approaches will be adopted in this study for the purpose of achieving the research objectives. In business and management research, using a combination of qualitative and quantitative approaches is increasingly advocated. Using multiple research approaches has its advantages, which include serving different purposes in a research. In this research, the researcher employs interviews at an exploratory stage, seeking insight into the general nature of the problem, before building a questionnaire to collect explanatory or descriptive data to gain confidence he/she is addressing the key issues. These different ways of approaching the same complex phenomena, such as CRM adoption, will result in better understanding of the key issues, and an increased reliability of the research (Kvale, 1996). The combination methods will also support credibility in findings through triangulation of the data, which suggests that the more correlation on a particular issue is found between different data sources, the more reliable the interpretation of the data. The basic assumption of triangulation is the

potential gaps or weaknesses in each single data collection method are compensated by the counterbalancing strengths of another method (Piekkari and Welch, 2004).

In this research, there are two main phases to data collection. The initial phase employs qualitative approach and is concerned with identifying the main practical issues (categories or factors) which influence organisations' adoption of CRM system. The second phase is proposing a conceptual framework or model, and establishing a pool of key items (subcategories or themes) that will be used for the questionnaire development. Categories are identified to classify factors collected; theses categories are modelled on those found in the relevant literature discussing CRM adoption within different categories. Based on the literature, the main categories are classified into more detailed subcategories.

3.5 Research Methods

As mentioned earlier, the survey strategy is one commonly found in CRM studies (Becker *et al*., 2009), with the advantage of allowing researchers to collect a substantial population of data at a relatively low cost (Saunders *et al.*, 2007). Consequently, this research employs a survey strategy, since the strengths of this method promise solid research results. In particular, the data collected by using a survey strategy can be used to examine associations between the dependant variables and the independent variables in the proposed conceptual model, and to produce a model of theses associations.

A survey strategy is often based around a questionnaire method. Nevertheless, the questionnaire is not the only data collection method that can be used within this strategy. Structured observation and interviews with standardised questions often fall into survey strategy. Individual interviews and questionnaires are the two data collecting methods applied in this research.

3.5.1 Interviews

In order to narrow and crystallise the research problem, this study begins with an extensive review of a literature about relationship marketing, CRM, and CRM adoption. Reviewing the literature has helped the researcher refine the scope of the research, leading to a specific research question and a list of theorised factors affecting CRM adoption. The first phase of this research is an exploratory study aiming to identify the main factors that may explain the organisational adoption of CRM systems. In addition, this exploratory study is designed to contextualise the research framework within Jordan, and to refine research understanding of key issues before using a questionnaire to collect descriptive or explanatory data. Robson (1993) suggests that in an exploratory study, individual or in-depth interviews can be very useful for finding out what is happening or for seeking a new insight. Accordingly, in-depth interviews with various stakeholders, including a variety of marketing managers, chief information officers (CIOs), and employees working with CRM, are employed to achieve the required objectives of this study.

An interview is a "purposeful discussion between two or more people" (Kahn and Cannell, 1957:149 as cited in Saunders *et al.*, 2007:318). In other words, research interviews are an interpersonal situation, a conversation between two persons regarding a theme of mutual interest (Kvale, 1996:14). Kvale (1996) explains that research interviews are a form of human interaction, in which knowledge and understanding evolve through a dialogue. Interviews involve the researcher speaking to the respondent directly, listening to the replies, ensuring that respondent replies are clear and accurate, and recording answers (Hair *et al.*, 2006). The interaction between the participants and the interviewer may lead to greater awareness of their organisation's point of view on CRM, and their interactions as to the main factors that may affect their adoption of CRM systems.

There are many different classifications and types of interviews. The two best-known types of interviews are: in-depth (individual) interviews and focus group interviews. The in-depth interview is used to gather a rich insight from respondents as to what is happening in their context (Robson, 2002). According to De Vos (2002: 298), the in-depth interview is used throughout research in academia to determine people's perceptions, opinions, facts, and to forecast their reactions to initial findings and potential solutions. Additionally, Kumar *et al.* (1999) suggests that researchers should employ the in-depth interview method when it is important to explore a subject in detail, or to probe for latent attitudes and feelings. On the other hand, the focus group interview is a valuable method for assessing how several people can work out a common view, or for eliciting a range of views. It is a way of listening to people and to create lines of communication (Saunders *et al.*, 2007). In this study, in-depth interview method is chosen over focus group interview for three reasons: firstly the ability to conduct focus group interviews with employees and managers has proven almost impossible, due to the difficulties of grouping various staff from different organisational levels or functions into one place at one time. Secondly, since the aim of data collection is to elicit different stakeholder views, this could be more difficult to obtain in a group situation, because of time limitations and group normalising. Thirdly, views related to some elements of CRM might be considered sensitive by some participants; electing sensitive areas/topics might be inhibited in a focus group context (Fontana and Frey, 1994 as cited in Ryals and Payne, 2001). Moreover, at the initial phase of this study, it seemed more likely that in-depth interviews would help to determine the desired spectrum of insights and views in regard to the CRM system, and the factors that maight affect its adoption. This initial exploration can also assist in formulating and designing the survey to collect descriptive data, and test the validity of the research hypotheses.

Lee (1999) classifies the in-depth interviewing process into three types, characterised by the extent to which the interview questions are determined and standardised beforehand: structured, unstructured, and semi-structured. Briefly, the structured interview follows a sequence of standard questions providing systemic data which might provide insight into procedural knowledge. The unstructured interview, on the

other hand, relies mainly on the spontaneous generation of questions, and allows questions based on the interviewee's response (Sekaran, 2003). Although unstructured interviews offer a high level of flexibility that may help the researcher determine what aspects need further explanation, this interview type has some disadvantages as it generally generates less systematic data, requires a greater amount of interaction time, and provides respondents with too much control (Saunders *et al.*, 2007). Between these two spectra falls the semi-structured interview type, which involves the interviewer entering into the interview setting with a list of key themes and questions to be explored during the interview. However, at the same time, "there is an openness to changes of sequence and forms of questions in order to follow up the answers given and the stories told by the subjects" (Kvale, 1996:124). It is even possible to deviate from the interview's pre-determined themes or questions, if the interviewer thinks that this could provide more fruitful answers, enabling "the participants to take any direction he/she wants" without presuming answers (Seidman, 1998:69). According to Gillham (2005), the semi-structured interview is especially useful for gathering data when the concepts are not well understood and participants' views are subject to considerable investigation and debate. Since these characteristics are compatible with this research purpose, (concerning factors that may affect organisations' adoption of CRM), this study has followed a semi-structured in-depth interview approach allowing participants to describe their opinions and perceptions of the factors affecting CRM adoption.

The interviews conducted for this study help the researcher to set up the research hypotheses for empirical testing. The conceptual framework design of this research is based on the results of the literature review and the interview results. The interviews are converted into text by fully transcribing their recordings, then transcribed interviews are analysed by processing their words and phrases. All the interviews sessions are conducted in Arabic. In accordance with previous CRM studies (Dous et al., 2005; Law, 2009), qualitative interviews are analysed using two specific techniques: one is called within-case analysis (comparing data against theory), and the other one is called cross-case analysis (data in one case compared to data in other cases). The objective of the within-case analysis is to check how the interviews' findings fit with previous findings in the literature. On the other hand, the cross-case analysis is to locate and examine the similarities and differences across various data sets (interviews).

3.5.2 Questionnaire

In adopting the strategy of employing survey as a purposeful quantitative method in addition to the qualitative method of in-depth interviews, the study aims to maximise the opportunities for gathering data which will offer a broad spectrum of the results. The questionnaire is a convenient data collection mechanism and is most commonly used within a survey strategy (Saunders *et al.*, 2007). A questionnaire is defined as a research instrument consisting of a set of questions that is designed to collect information from respondents (Sekaran, 2003). A questionnaire collects information

by asking a set of pre-formulated questions in a predetermined sequence in a structured questionnaire to a sample of individuals drawn so as to be representative of a defined population (Yin, 2009).

A questionnaire survey is generally broad in nature, focusing on scope rather than depth of data collection. A questionnaire is an effective way to find out what organisation members are thinking and how they feel (Blaxter *et al.*, 2001). This explains why questionnaires have been used extensively in quantitative studies aiming to measure service quality, customer satisfaction and customer loyalty. In other words, survey questionnaires have a history of use in this specific area of marketing and management studies. Given that the majority of previous studies investigating CRM adoption have relied on the survey strategy (Wu and Wu, 2005; Meadows and Dibb, 2008), this study has employed the survey method in order to investigate the factors that may affect organisations' adoption of CRM. This survey is conducted with managers and employees believed to have relevant experience with, and insights into the factors affecting their organisations' adoption of CRM system.

Once a survey questionnaire has been chosen as the appropriate research methodology, the next task is to determine the method of communication with the respondents. The type of questionnaire differs according to how it is administered and in particular, the amount of contact that the researcher has with the respondents. According to Saunders *et al.* (2007), questionnaires are of two types: the first type is a self-administered questionnaire which is usually filled in by the respondents; this type includes on-line questionnaires, postal questionnaires, and collection questionnaires. The second type is an interviewer- administered questionnaire which usually involves the interviewer recording each respondent's answers; this type includes telephone questionnaires and structured interviews (face-to-face). Sekaran (2003) points out that the self-administered technique has many advantages over the other techniques of data collection in a survey study, mainly because it is less expensive when administered to groups of respondents. Furthermore, this technique has the potential to establish rapport and motivate respondents and gives the researcher/administrator a chance to clarify respondents' doubts. Such methods may increase the questionnaire response rate to almost 100%.

A survey is a strategy associated with the deductive approach and positivist philosophy (Collis and Hussey, 2009). It is one of the most common research strategy in business and management studies as it enables the collection of a large amount of data from a large population relatively economically (Sim and Wright, 2000). Questionnaires and structured interviews often fall into the survey strategy. However, the questionnaire is the most common data collection method within this strategy.

However, using a questionnaire in the survey has certain limitations that the researcher should consider before deploying this method. Firstly, the creation of an appropriate questionnaire is a complex process, which needs to ensure that the collected data are going to answer the research questions (Saunders *et al.*, 2007).

Secondly, a questionnaire is time-limited, often offering only one chance to collect data; as such, it needs to be piloted to verify the accuracy and consistency of responses (Oppenheim, 1992). Thirdly, the importance of item wording and ordering of questions must be monitored carefully in order to avoid the risk of respondents' misinterpretation of questions (Burns, 2000).This study is one of few investigations to explore the concept of CRM as a joint development between marketing, management and IT disciplines, seeking to develop a conceptual framework to unravel the complex nature of CRM. Hence, the previous literature was first reviewed to develop the set of indicators (observed variables) for each latent variable in this study. In addition, the conducted in-depth interviews were used to elicit items that could measure the latent variables in the research context. Furthermore, ahead of conducting research, the questionnaire was evaluated by experts (Prof. Lyndon Simkin: Professor of Strategic Marketing at Oxford Brookes University; Dr Ana Domingos Canhoto: Senior Lecturer at Oxford Brookes University; Prof. Yuksel Ekinci: Professor of Marketing at Oxford Brookes University). Since the data collection was conducted in Jordan where most participants would have better understanding of Arabic than English, the questionnaire was translated into the local language. This was far harder than expected as all items and questions found from previous studies were in English. According to Müller (2007:210), "translation is not merely representation or reproduction – it creates something new and unique". Moreover, Temple and Young (2004) state that transferring cultural meanings between languages is a challenging task mainly because researchers can represent meanings in different ways. Consequently, an external professional fluent in both English and Arabic was consulted, in order to ensure that the participants' understanding of the Arabic version would be close to the original English version. The Arabic questionnaire was also pre-tested with three employees from the participating organisations.

3.6 Sampling Design and Procedures

For some research, it can be possible to survey the whole population and undertake census if such research focuses on small potential population. However, even if most research involves a large potential population, it would be impossible, impractical, and too expensive to collect data from all of it. Consequently, it is common for a researcher to take a small portion of the population, which is referred to as a sample which may be defined a subset of the population embracing different members selected from the whole group of interest (Bajpai, 2010). On the other hand, sampling is the process of selecting a portion of the population so that it represents the whole population. Most researchers need to utilise sampling procedures because often, in research, the group of interest is large, including various parts or members, which make it unfeasible to collect data from all of them. Sampling procedures offer a variety of methods to help researchers generalise their study by establishing the representativeness of the whole population and considering only a small potential sub-group (Sekaran, 2003).

This study employs a survey research strategy to answer the research question and achieve the research purposes. Particularly, it seeks to develop a conceptual model of the major factors affecting organisations' adoption of CRM system by using primary data collected from varied stakeholders including a variety of marketing managers, chief information officers (CIOs), and employees working with CRM. In this research context the sampling consideration is needed as the group of interest is large. The following section discusses sampling procedures and gives details as to where to collect data. The major steps in the sampling process include sampling population, sampling frame, sampling design, sample size determination, and execution of sampling process (Sekaran and Bougie, 2009).

3.6.1 Sampling

The sampling process starts with deciding who is to be surveyed (target population). Furthermore, the target population must be defined early in the sampling process. The target population is defined in terms of shared characteristics assessed and measured accurately by the researcher (Sekaran and Bougie, 2009). Improper definition of the target population leads to misleading results which might pose real risks for a research success. According to Churchill and Iacobucci (2005), the research questions and the scope of the study play a crucial role in defining the target population and its specifications. Due to the complexity of diverse business functions involved in handling CRM, this study entailed conducting empirical investigation with varied stakeholders including marketing managers, chief information officers (CIOs), and employees working with CRM. This study was conducted with organisations that had implemented CRM technology. The researcher has not differentiated between mature and less mature adopters. This tactic was necessitated partly to improve the response rate, but at the time it provided opportunities to widen the range and diversity of approaches to CRM adoption. The presence of such a wide range of organisational approaches to CRM reflects needs for developing a comprehensive and holistic view of CRM and its adoption. Once the target population is defined, the next step is to develop a sampling frame to give everyone in the target population a known chance of inclusion in the sample.

3.6.2 Sampling Frame

The sampling frame is a list of all the elements composing a target population from which the sample is drawn (Babbie, 2007). It is a convenient list that a researcher can gain access to and use to obtain a sample for inclusion in research. Sampling frame completeness is very important, due to its implications regarding the extent to which a researcher can generalise from research findings to the whole population. Hence, care should be taken to select an appropriate list. Excluding some elements from the sampling frame may result in a number of biases and consequently the selected sample may not be representative of the whole population (Saunders *et al.*, 2007). Nonetheless, although researchers may attempt to find a complete list of the sampling frame, it is rarely feasible to select a sampling frame that offers details of the entire population (Sekaran and Bougie, 2009). According to Churchill and Iacobucci

(2005:284) "there is rarely a perfect correspondence between the sampling frame and the target population of interest". Since it is unlikely that any sampling frame will be ideal, researchers ought to acknowledge deficiencies and issues in the sampling frame mainly when generalising the research findings to the entire population. However, there is always some degree of sampling frame error, which may occur especially when inclusive segments of the defined target population are not accurately represented in the sampling frame.

In this study, there is no existing sampling frame in Jordan, the country under study in the sample, which highly represents the general population of various organisations adopting CRM across the four different sectors (banking and finance, telecommunication, hospitality and automotive). Hence the researcher contacted a number of local CRM experts aiming to build a list of organisations working with CRM in Jordan across the four sectors. These experts were chosen for their knowledge of practices that were widespread among the IT, Hotels, Telecommunications, and Banking industries, as well as their professional ability to provide references to organisations that use CRM in Jordan. A brief profile of the experts is represented in Table 3.2. The selection of CRM experts was done to ensure that they represented a variety of backgrounds and industries. By doing so, a triangulated view of the research sample was established.

Table 3.2: A Brief Profile of the CRM Experts

Expert No	Sector	Job Description	Education	Relevant Responsibilities	Experience with CRM
1	IT	CRM Technical Specialist	BSc Computer Science	-Demonstrating CRM solutions to companies -Managing CRM products	More than 6 years
2	Hotels	Business Development Consultant	MSc Hotel Management	-Driving Marketing and CRM for a Hotels Chain -Supporting departments in developing functional excellence -Acting as a change catalyst in the cultural and organizational transformation	More than 10 years
3	Telecomm	Marketing and CRM officer	BA Marketing	-Assisting with day to day tasks with PR activities -Assisting with branding related activities -Planning and identifying the CRM annual action plan	More than 6 years
4	Banking	Customer Service Executives	MBA Finance	-Achieving defined sales target - Building relationships with profitable customers - Increasing customer satisfaction and retention	More than 8 years
5	IT	Senior Business Analyst	BSc Management Information System	-Ensuring that agreed Business requirements are in compliant with the overall Technology and Business Strategy. -Managing the process of establishing business requirements for new systems or enhancing existing systems and proposing efficient solutions to satisfy these requirements.	More than 10 years

The collective experience of these experts helped the researcher to understand the latest development of CRM, in the region. The experts represented a variety of backgrounds and different types of organisations to offer timely insights, case studies of leading edge firms, and essential guidance to select organisations that possessed sufficient technology resources and capabilities relevant to customer service.

It should be noted that there is no existing evidence to validate the completeness of this list. Nevertheless, contextual information of the respective industries under investigation in this study can provide a valuable reassurance of the quality of the sample. As mentioned in Chapter one, there are 25 private banks, 4 telecommunication firms, and over than 470 hotels in Jordan, of which 21 are five-star hotels. It should be noted that there is no existing information which indicate the number of automotive traders in Jordan. In this study, the researcher randomly invited 10 banks and hotels, 3 automotive firms, and the four telecommunication firms in Jordan to participate in the study. As a result, 3 banks, hotels and telecommunication banks, and 1 automotive trader agreed to participate in this research. In regard to the sample size, it was not possible to determine in advance the number of participants, as participation was optional by responses.

3.6.3 Sample Size

After selecting a sampling frame, the next step involves determining the sample size. Essentially, choosing the sample size reflects how confident a researcher need to be that the sample reflects the entire population and will permit a valid generalisation of research findings. Generally the smaller the population, the better researchers can generalise to the population. Furthermore, in theory the appropriate sample size can be determined in two ways. The first is to use a statistical formula, and the second is to use some ad hoc methods. Ad hoc methods are based on rules of thumb, previous similar studies, the researcher's own experience, or simply what is affordable. On the other hand, a statistical formula is used to determine a minimum sample size which offers a researcher confidence when generalising the findings. Taking into account these two opposite influences, it is almost common to find the final sample size is a matter of judgement and statistical calculations.

Malhotra (2007) suggested that required sample size depends on elements including the proposed data analysis techniques, and access to sampling frame. This study employs Structural Equation Modelling (SEM), which is sensitive to sample size, and is affected negatively when applied to small samples. Although Bollen (1998) suggests using a minimum sample size of 100, others state that a sample size of 200 is sufficient, 100 as poor, and 1000 as excellent (Spector 1992; Hair *et al.*, 2010). As a general rule of thumb, a study should have at least between 10-15 participants per variable for generalisability purposes (Hair *et al.,* 2006), and a sample size of 300 participants is deemed comfortable (Tabachnick and Fidell, 2001).

On the other hand, statistical calculations are considered when deciding the appropriate sample size. Saunders *et al.* (2007) highlight that the choice of sample

size is usually governed by the margin of error that a researcher can tolerate. The margin of error is defined as the degree of accuracy a researcher needs for any estimate made from a sample. Researchers normally work with a confidence level of 95 percent, which means that they use a 5 percent level of margin error. Table 6.1 represents the different sample sizes at a confidence level of 95 percent. Based on Table 6.1, the sample size of 384 is very good for any population size. In this study, the sample used for factor analysis is 301 participants (cases), the analysis is conducted on 21 variables (items), and the ratio of items to cases is 14. Hence, the sample size of this study seems to be sufficient.

Table 3.3: Different in Sample Sizes at a Confidence Level of 95%

Population Size	Degree of Accuracy/Margin of Error			
	0.05	0.035	0.025	0.01
10	10	10	10	10
20	19	20	20	20
30	28	29	29	30
50	44	47	48	50
75	63	69	72	74
100	80	89	94	99
150	108	126	137	148
200	132	160	177	196
250	152	190	215	244
300	169	217	251	291
400	196	265	318	384
500	217	306	377	475
600	234	340	432	565
700	248	370	481	653
800	260	396	526	739
900	269	419	568	823
1,000	278	440	606	906
1,200	291	474	674	1067
1,500	306	515	759	1297
2,000	322	563	869	1655
2,500	333	597	952	1984
3,500	346	641	1068	2565
5,000	357	678	1176	3288
7,500	365	710	1275	4211
10,000	370	727	1332	4899
25,000	378	760	1448	6939
50,000	381	772	1491	8056
75,000	382	776	1506	8514
100,000	383	778	1513	8762
250,000	384	782	1527	9248
500,000	384	783	1532	9423
1,000,000	384	783	1534	9512

Source: Saunders *et al.* (2007:212)

3.6.4 Sampling Techniques

Sampling techniques are divided into two types: probability sampling and non-probability sampling technique (Saunders *et al.*, 2007). In the probability sampling, the probability of selection of each respondent is known, and all respondents in the sampling frame have an equally known chance of being included in the sample (Robson, 2002). Probability sampling is often associated with survey research strategy (Churchill and Iacobucci, 2005). There are four major types of probability sampling techniques/approaches: simple random sampling, systematic sampling, stratified sampling, and cluster sampling. The key features of each technique are described as following:

Simple Random Sampling
This technique is the most basic form of probability sampling, where all elements of the population have similar characteristics. This technique is completely random, which allows each element of the population to have an equal chance for being selected in the sample (Robson, 2002). Hence simple random sampling requires a full list of the population (Gray, 2009).

Systematic Sampling
This sampling technique involves systematically spreading the sample through the list of the population, where every xth case of the population is sampled from the sampling frame. It is believed that this technique has an element of randomness (Fellows and Liu, 2008). Both simple random sampling and systematic sampling are suitable for studies that cover a wide geographical area, where fact-to-face interaction is not essential for collecting data. The selected samples are more likely to be disseminated throughout the area. Saunders *et al.* (2007) suggests that systematic sampling can be employed for all sample sizes in contrast to simple random sampling, which is only appropriate for small sample sizes.

Stratified Sampling
This is a modification of random sampling in which stratification (i.e dividing the population into a number of homogeneous groups where members of the group have common characteristics) is necessary in advance. A random sampling or systematic sampling technique is then applied to take a sample from various strata (groups) (Gray, 2009). This technique improves the representativeness of a sample, in terms of stratification variables (Babbie, 2007). It also needs accurate information on population and a list which includes groups sharing specified characteristics.

Cluster Sampling
This sampling technique requires dividing the population into a number of groups called clusters, each of them containing a range of characteristics. These groups are called clusters because all members of selected clusters

would be included in the sample. The process of selecting clusters often employs a simple random technique (Walliman, 2005). Cluster sampling is normally used for a widely dispersed and large population. Nevertheless, it has some limitations with respect to representing the total population, since it represents the populations less accurately than stratified sampling approach.

For the non-probability sampling, no statistical inferences about the characteristics of the population are made, and the probability of each case being selected from the population is unknown. Hence it enables a researcher to rely on personal judgment to answer research questions without the intention of creating statistical generalisation (Robson, 2002). Non-probability sampling is often associated with case study research (Churchill and Iacobucci, 2005). Its techniques include four major types: convenience sampling, quota sampling, purposive sampling and snowball sampling. The key features of these four types are described in the following.

Convenience Sampling
This technique involves the selection of convenient respondents whom are easily or simply accessible to the researcher (Fellows and Liu, 2008). The assumption underlying this method is that the target population is homogenous, hence the individuals selected to act as participants have a better chance to represent the overall target population. Although this technique is used broadly, it is prone to bias as the sample may not be representative to the target population (Saunders *et al.*, 2007). Consequently, Gray (2009) suggests using this technique with extreme caution as a result of the problem of generalisation.

Quota Sampling
This technique is an extension to the convenience sampling. However, it involves the selection of prospective respondents or participants according to pre-specified strata or dimensions defined based on demographic characteristics, specific attitudes, or specific behaviours (Robson, 2002). A quota is then decided for each dimension which forms part of the sample. Convenience sampling is usually used within the strata. The underlying purpose of this technique is to provide assurance that the variability in target population as a whole is represented (Gray, 2009). Saunders *et al.* (2007) suggests considering quota sampling as a type of stratified sampling method in which the selection of respondents within strata is entirely non-random. This might explain the traditional application of quota sampling for survey sampling and large populations (Blaikie, 2000; Neuman, 2003). Quota sampling has a number of advantages including its cost effectiveness. In addition, quota sampling does not require a sampling frame and may therefore be the only technique the researcher can use if a pertinent sampling frame for the target population determined by the researcher is not available. On the other hand, it should be used with sensible and relevant quotas to avoid data

bias. This necessitates having sufficient respondents in each quota to enable the undertaking of subsequent statistical analysis (Neuman, 2003).

Purposive Sampling

Purposive or judgmental sampling depends entirely upon the researcher or some other judgement or experience where a deliberate selection of the participants is made into a representative sample that meets research objectives. It is commonly used with very small samples such as case study research and when the researcher wishes to select participants that are particularly informative (Robson, 2002). This technique has its disadvantages, in particular the unintentional exclusion of essential characteristics from the population by the researcher, which may result in subconscious bias in picking the sample (Gray, 2009). Consequently, such a sample cannot statically represent the whole population.

Snowball Sampling

In this sampling approach the research subjectively identifies and qualifies a small number of initial prospective participants and collects data from them (Robson, 2002). Subsequently, they help the researcher identify other potential participants with similar characteristics to be included in the study. Those identified will then be approached to become part of the sample, and in turn will be asked to identify other potential participants and so on until the required sample size is gained. This technique is commonly used in case studies and when participants of the desired population cannot be easily identified (Fellows and Liu, 2008). The main disadvantage of this approach is the unintentional exclusion of essential characteristics from the population by the researcher, which will result on subconscious bias in picking the sample (Gray, 2009). Consequently, such a sample cannot statically represent the whole population.

According to Aaker *et al.* (2004), probability sampling has a number of advantages over non-probability sampling; firstly, it allows the researcher more control over the research process and secondly it can provide a group of participants whose characteristics may be taken to demonstrate those of the larger population. Babbi (2004:182) observes that "today, probability sampling remains the primary method of selecting large representative samples for social research". For the above reasons, probability sampling is favoured in this study.

The choice of sampling techniques mainly depends on the research objectives. Subsequently, the sampling frame of the research influences the researcher's choice of sampling techniques. In this study, a stratified random sampling technique is used to ensure the representation of different sectors implementing CRM (banking and finance, telecommunication, hospitality sector, and automotive) in Jordan, the country under study in the sample. Also represented are varied stakeholders working with

CRM within each sector (managers, CIO, and employees). Stratified sampling divides the population into groups and locates samples randomly within each group. Stratified sampling has several advantages; it is the most statistically efficient technique resulting in lower standard deviations and higher confidence in research results, and it allows the investigation of the characteristics of interest for particular strata/group within the population (Churchill and Iacobucci, 2005). Contacts with CRM experts in Jordan helped to determine how the sampling should be stratified, where it should be focused, and how much new information would be required to meet the objectives of the study. See section 3.6.1 for more details about those experts.

3.7 Summary

This chapter outlined the methodologies to be used in this study. The research was divided into two phases. The initial phase used in-depth interviews seeking insight into the general nature of the problem, and to reinforce researcher hypotheses regarding the main factors that might affect different organisations' adoption of CRM within their practical context. Details about this phase and its results will be discussed in the next chapter. The second phase was built upon the outcome of the initial phase. It employed a questionnaire method to test and validate the constructed model which included factors developed from the initial phase. Questionnaire development utilised existing scales and measures from a large number of studies. After completing the required data collection stage, the data was analysed using various statistical techniques, as will be discussed in the analysis chapter. Finally, a confirmatory study adopting qualitative methods was employed to meet the research aim of building a rich conceptual model, increasing the flexibility of model representation, and providing a tighter linkage between the adopted research methods at different research stages.

Chapter 4: Conceptualisation and Formulating Research Hypotheses

4.1 Introduction

Building on the literature review of CRM's meaning and CRM adoption, this chapter aims to present the conceptual framework of this study by combining the results of the exploratory stage of the study with insights from the present literature. This chapter will start by outlining the purpose of conducting exploratory research as a first stage of the study. This exploratory research aims to provide insights from practice which will contribute to identifying the main factors affecting CRM adoption for subsequent testing. The overarching purpose of the exploratory study is to uncover the dynamics of the CRM phenomenon within the context under study, and to understand what CRM initiatives mean to those participating in this study, where the adoption is actually occurring. Hence, employing a qualitative study in this research is helpful to contextualise the embedded conceptual framework from the literature within the views of practitioners in Jordan. This study employs in-depth interviews for which the sample selection process and respondent characteristics will be described. In the data analysis phase, two steps for data analysis were followed: analysis within case data, and search for cross-case patterns. The combination of interview results and reviewed literature presented in Chapter two will be used to develop research hypotheses. Based on the results of this stage, the proposed conceptual framework of this study will be presented.

4.2 Purpose of Exploratory Interviews

The mixed research approach of qualitative and quantitative methods is used as the overarching methodology for this thesis. The exploratory qualitative study enables the development of a conceptual framework while the subsequent quantitative study allows the framework to be validated and tested via a sample survey. This methodology is detailed in Chapter three. The rationale of this chapter is to sketch out some of the details linked with the exploratory qualitative phase of the research.

Although the literature review generated a number of factors considered to be significant in affecting CRM adoption, not all of them are necessarily applicable to the population of the current study, which suggests that the factors generated from the literature may not be significant or complete. According to Miles and Huberman (1994:1), "qualitative data are a source of well grounded, rich descriptions and explanations of processes in identifiable local contexts. With qualitative data one sees precisely which events led to which consequences and derived fruitful explanations". Hence, qualitative data elucidates constructs within the context under study (Churchill, 1999). For that reason, a qualitative study has been conducted to contextualise the embedded conceptual framework as informed by the literature

pertinent to CRM conditions in Jordan. The qualitative study is necessary to refine and seek factors relative to the research context, in order to aid the development of the conceptual framework and its validation through a questionnaire (Saunders *et al.*, 2007). Additionally, such a qualitative study supports the researcher in going beyond preliminary conceptions in order to develop and refine the conceptual framework. Qualitative data are rich and holistic with a valuable potential for revealing the complexity of issues embedded in the study. Such data also add depth and nuance to quantitative findings by rendering accessible any potential insights for exploring new areas in depth and for developing hypotheses (Greene *et al.*, 2005).

As suggested by Steckler *et al.* (1992), in the current research climate the issue is not whether to use qualitative or quantitative methods but rather how to combine a broad spectrum of qualitative and quantitative methods effectively. This study benefits from such a combination, as explained in the beginning of this chapter. Qualitative research methods are increasingly employed for inquiry within social science studies (Marshall and Rossman, 1995). These methods have a number of merits which allow for rich and holistic data, with significant potential to reveal complexities which might otherwise be misplaced when employing only quantitative methods. In addition, qualitative studies facilitate a breakdown of large and amorphous problem statements into smaller, more manageable sub problems and subsequently into propositions (Churchill, 1999). Qualitative research also lays emphasis on individual experiences and how such individuals locate meanings related to events, processes and structures in their lives (Kvale, 1996). It is popular to use qualitative studies in the marketing discipline for generating and refining items for a questionnaire, especially when the research aims to evaluate subjective experience of practitioners. As a result, conducting a preliminary qualitative study is considered essential to obtain an insight into practitioners' experience with CRM, to discover issues, to develop a research framework, and to generate items for the research questionnaire.

There are five major traditions in qualitative research: biography, phenomenology, grounded theory, ethnography, and case study. In this particular case, the case study is the preferred strategy when questions such as "how" and "why" are being posed, when the researcher has little control over events, and when the focus is on a contemporary phenomenon within its real-life setting (Yin, 2009). Case studies are especially appropriate when the boundaries between the phenomenon of the study and the social context are not clearly evident (Yin, 2009:18). In fact, most qualitative CRM research has employed single or multiple case studies to understand the issues of CRM adoption (eg: Wilson *et al.*, 2002; Alshawi *et al.*, 2011). In addition, case studies are seen to provide a means to review theory and practice iteratively, which is very relevant to the aim of this research. Hence, after evaluating a variety of research strategies as proposed by Yin (2009), this study has opted for multi-case study interviews supported by secondary data collection. The adoption of multiple cases assures that common areas of interest are identified rather than being chance occurrences (Eisenhardt, 1989 as cited in Barrat *et al.*, 2011).

Exploratory interviews are considered to be a key tool of successful cases in qualitative research for data collection (Janesick, 2000). In this study, the interview tool is considered to be suitable for evaluating the relevance of factors identified from the literature as well as the relevance of such factors for organisations across different sectors in Jordan. Before developing the research hypotheses, it is necessary to gain an insight into practitioners' views in Jordan as the location for this study, in order to verify how far views and understanding reflected in the literature, and the use of various terminologies, are relevant to the research context of the study. This will help the researcher to ensure that survey questions are developed in a way that respondents can understand at the quantitative stage. As mentioned in Chapter three, this study adopts a semi-structured in-depth interview approach, in order to gather data that will offer further clarification of participant views that may have been unavailable through the use of other tools.

4.3 Sample Selection and Characteristics

The purpose of the study is to investigate factors affecting CRM adoption in organisations. The complexity of CRM, as a result of varied stakeholders views of what constitutes CRM within a complex business setting, lends itself well to the in-depth interview method. Defining what constitutes CRM is complex, given that its applications may be interpreted differently according to the perspectives of stakeholders in different areas of business. As such, research methods for investigating its properties need to be sufficiently flexible to reflect this complexity. One such method for allowing flexibility is the in-depth interview. Hence, in-depth interviews with various stakeholders are employed, which can be adapted to accommodate the perspectives of a variety of stakeholders in different business contexts, in order to achieve the study purpose.

In more detail, the complex nature of CRM systems has obliged the author to include a wide variety of experiences and perspectives involved with CRM during the data collection. The exploratory preliminarily study consists of nine in-depth interviews, including a pilot exploratory interview, with a variety of marketing managers, IT managers, senior managers and employees working with the CRM system from two industries in the service sector in Jordan. In Jordan, the GDP share of the service sector is 67% (JEDCO, 2011), representing the most prominent sector in the economy. Hence, this sector is chosen as the focus for the research, and the sample of participants is recruited from organisations in the service sector.

A convenience sampling method was adopted for selecting participants for the interviews. In convenience sampling, the researcher selects convenient participants whom are easily or simply accessible to the researcher. In the study, relevant participants were accessed through personal contacts developed during the researcher's residence in Jordan, and through publicly available information in the trade press. The criterion for inviting potential participants to interview was based on work status; that is, a potential participant had either to be a manager with overall or

partial responsibility of a CRM system, or an employee who was using CRM on a daily basis. All participants would ideally have more than two years' experience in managing or using CRM systems.

The author contacted fifteen senior managers of different organisations to conduct appointments with the companies' executive level. The aim of these appointments was to introduce the study, provide the company with the participant information sheet, as shown in the appendix 4.1, and to solicit participation. A follow-up email was then sent to each senior manager who recommended participants and provided contact details of potential managers and employees in the respective organisation. In order to avoid any dependency issues or implicit pressure relations between a company's executive level and employees, information about the research was distributed to potential participants 24 hours in advance in order to give individuals time to reflect on whether they wanted to participate or not. This was followed up the next day with a short conversation with the researcher in order to ensure participants' approval of the consent form. As a result, only nine out of fifteen potential participants agreed to take part in the interviews. However, two of the nine participants only briefly engaged in the interviews and answered only a few questions. Nevertheless, their responses were taken into account as a valuable contribution to new insights into some important issues surrounding CRM.

A pilot test of the interviews was conducted (July 2010) in a single session with one manager at a regional bank in Jordan. The purpose of the pilot study was to determine the time required for interviews. The pilot study was also valuable to test and learn more about the content themes of the discussion and potential responses, the dynamics of interaction, and the mechanics of discussion. Another eight interviews were carried out after the pilot study, from September 2010 to October 2010. In order to facilitate record keeping, all interviews were audio-taped with the approval of the participants. The recordings were used to transcribe the collected data, as most of data is in the form of text, which is easy to misunderstand. All formal research interviews were audio-taped with the interviewees' permission. Details of the sample are listed in Table 4.1.

Table 4.1: Details of the Sample

Organisations	Respondents' job title
Bank A	Strategic planning manager
	Marketing manager
	IT specialist
	Relationship manager
	Investment manager
Hotel B	Front office manager
	IT manager
	Reservation Supervisor
	Development manager

Although a convenience sampling method was used for selecting organisations participating in the interviews, the broad range of data generated was sufficient to create an inclusive view of CRM adoption in Jordan. I was fortunate to have access to a sample that enables me to identify challenges and best practices that organisations are facing in varying sectors and at different maturity levels. Understanding differences among organisations at different maturity levels would serve the purpose of the study because it provides a variety of perspectives for understanding CRM and an opportunity to explore a wide variety of issues and practices surrounding CRM.

It was difficult to schedule appointments with the managers or employees dealing with CRM in Jordan; not only did they have busy schedules, few were motivated to invest their time in academic research. As a result, nine interviews were conducted; this number is consistent with the recommendations of Yin (2009) and Perry (1998). A similar CRM study applying the same type of mixed methods rested on eight in-depth interviews (Law, 2009). Because Law employed mixed methods, the small sample size was not considered as a limitation. According to Hammersley (1992), results can be compared across qualitative and quantitative studies (which would need to have a larger sample) to establish the representativeness of qualitative research findings.

All interviews were conducted in Arabic and recorded on tape. The interview transcripts were translated into English, as described in Chapter three. Although time consuming, the double or back translation was undertaken, with the rationale that "Translation is not merely representation or reproduction – it creates something new and unique" (Müller 2007:210). On the other hand, transferring cultural meaning from one language to another is considered as one of the most challenging tasks of translation (Temple and Young, 2004), since there may be more than one way for researchers to represent meanings resulting from the translation process. Hence, choices of conducting the translation process have epistemological implications (Temple and Young, 2004). It is ethical for researchers to acknowledge the role of the translator in their research to establish critical translation, and to make clear that a translated/target text is not a representation of an objective equivalence of the original/source text but rather a construct of meaning reflected by a translator. The intention is that the situated practice of knowledge production captures the intended meaning (Rose, 1997; Müller, 2007), while being acknowledged that this is a subjective reflection which inscribes the translator's life and values into the translation. The benefits are that employing translators may open up an opportunity to explore different views about meanings (Temple and Young, 2004). On the other hand, the choice of the translator and how to translate the data is determined by the time period and funding available for the research. Translation services are expensive, and if the translation is to be at a high standard appropriate to research, the process can be very time consuming, requiring discussions between researcher and translator about the research context and any related perspectives (ibid).

In light of the above discussion, an independent translator was engaged for this study, to carry out the translation process of the interview scripts from Arabic into English. Following this, the author looked into the results from the previous step and translated the scripts back to Arabic. The results were compared by the author of this study for any mistranslation, inconsistencies, and missing meanings or phrases. Subsequently, the author conducted some correction as it would have proven beyond the budget of the study to further consult the translator or engage in further discussions. Finally, a UK editor was consulted to advise the author on any loss of meaning resulting from the translation process, and to tidy up any grammatical errors in the interview scripts.

4.4 Design of Interview Questions

According to Kvale (1996:95), interview questions should be based upon the thematic research content and on the purpose of the investigation. Hence, an extensive review of the CRM and CRM adoption literature across the marketing, management, and IT disciplines was used for identifying the overarching general themes that should be explored through the in-depth interviews. Semi-structured interviews with multiple stakeholders working with CRM were carried out. First, the participants were asked about their understanding and views on CRM, then about the development of CRM practices in their organisations. Finally, the main discussion focused on drivers and difficulties in adopting CRM. Some of the questions used to develop a discussion within the interviews are summarised in appendix 4.3.

This research used semi-structured in-depth interviews. Thus, the researcher had a predetermined list of suggested questions and themes to be discovered. But at the same time, there was an open-endedness which allowed for refining and adding questions which might follow up on the dimensions introduced in the initial question. A variety of probes was used to elicit further follow-up questions or to build rapport through the researcher's use of active listening skills (Rubin and Rubin, 1995). Furthermore, the interview questions were rephrased and explained accordingly, in the case that any respondent was unclear about the questions. Following Seidman's (1998) suggestion, a considerable effort was made to keep the questions short in order to ensure that the participants were not overwhelmed in the interviews.

Prior to the interviews each participant was briefed about the purpose of the interview within the broader context of the study. This helped to break the ice and get each participant to say something and to feel involved. The interviews typically lasted between 40 to 60 minutes, and were designed to be conducted as more of an informal conversation than a formal interview. The resulting qualitative exploratory data offered a novel insight into factors affecting CRM adoption in the participants' organisations. A summary of the interviews is presented in appendix 4.4.

4.5 Results and Hypotheses

This section presents and analyses qualitative data to develop and set up research hypotheses and framework. This study builds on the literature review and the interview results to develop a conceptual framework. All the interviews were recorded and transcribed, and then the transcripts were audited against the recordings to have the final texts ready for analysis. Eisenhardt (1989: 16) stated that "analysing data is the heart of building theory from case studies", but recognised that it is one of the "most difficult and least codified part of the process". In accordance with Eisenhardt's (1989) suggestions, a within-case analysis (comparing data with theory) was used and followed by a cross-case analysis (comparing data across cases). The within-case analysis allowed unique patterns of each case to emerge, while the cross-case analysis of two organisations identified similar themes and patterns across all cases. These patterns should be derived from iterative rich comparative methods, by crossing between data and emerging concepts thereby defining and refining the insights that emerge (George and Bennett, 2005). This analysis method allows for an in-depth understanding of the dynamics resident within a research setting and facilitates numerous levels of analysis (Creswell, 1998).

4.5.1 CRM Meaning

The review of the literature demonstrates that the definition of CRM has evolved from a confluence of marketing, management and IT disciplines. On one hand, scholars from the business discipline broadly define CRM as incorporating business strategy, relationship marketing, and customer-centric orientation (Buttle, 2004; Baker and Hart, 2007; Gummesson, 2008). On the other hand, IT researchers narrowly define CRM as a technology solution, and are more concerned with technology implementation and use issues (Romano and Fjermestad, 2001; Goldenberg, 2008; Greenberg, 2009). Most researchers lack both integrated and holistic views of CRM. To reflect the different aspects of CRM, Payne's (2006) definition of CRM is adopted in this study, as indicated in Chapter two: it is found to be one of the most relevant and comprehensive definition of CRM. Payne (2006) defines CRM as a strategic approach which focuses on the development of suitable relationships with key customers and customer segments with the purpose of improving shareholder value. In doing so, CRM ties in the potential of IT and relationship marketing strategies, aiming to create profitable long-term relationship with customers, employees, and shareholders. The goal of CRM is to manage the interaction with customers and maintain long-term relationship marketing elements such as commitment, trust, and satisfaction (Park and Kim, 2003).

Researchers in business literature have focused on business strategy, relationship marketing, and customer-centric orientation (Baker and Hart, 2007; Buttle, 2008; Gummesson, 2008). They also emphasised that CRM implementation should focus on the essentials of relationship marketing as a customer strategy across all levels of organisation (Goodhue *et al.*, 2002), while the IT discipline should focus on the

software applications use, design, implementation and support. Researchers in IT literature have focused on making an efficient use of the technology to achieve value for businesses, and it is more concerned with critical success factors involved in technology implementation and use (Romano and Fjermestad, 2001; Goldenberg, 2008; Greenberg, 2009).

a) Case 1: Bank (A) in Jordan

The participants from the bank case study under investigation in this study pointed out at the point of interview that they were only at an early stage in adopting CRM in their organisation. They all had a common view which suggested that their bank's use of CRM was limited to their investment department dealing with the most profitable customers (VIP). However, the bank was planning to widen the scope of their CRM activity to include more departments and branches such as retail banking (the largest department in the bank).

In accordance with the views developed in the literature review chapter, the views of CRM amongst stakeholders in this bank, such as the relationship manager and the IT manager (whether as actual or potentially future users of CRM), correlated in seeing CRM as a set of processes and technologies that use information or data to build, manage, and sustain long term relationship with customers. The objective of the bank was to retain the most profitable customers by maintaining long-term customer relationships. The following statements were given by three different stakeholders of CRM at Bank A:

> *"CRM is a process that helps the bank to organise customers' information, and to communicate with them… It uses the technology to organise and automate the information about the clients, and provide the employees with the history of the clients' transactions and calls, in a timely way, which will facilitate and support building relationship with the clients in an organised way."* (Investment manager, Bank)

> *"CRM is an information system that resolves business needs to manage relationships with clients… it helps the employees to record information about the clients which can enable them to better manage the relationship with the profitable clients"* (IT specialist, Bank)

> "*CRM is a facilitator for enhancing our one-to-one relationships with our profitable clients through managing our knowledge about them"* (Relationship manager, Bank)

Most participants agreed on the basic idea of CRM, which is to manage customer relationships by maximising the advantages of IT. However, a number of participants emphasised that CRM is a strategy that serves cross-selling, delivering superior customer values to desirable customers and segments, customers' acquisition, and customers' loyalty. This is consistent with the literature review, which highlighted

that CRM involves many elements including customers' segmentation, acquisition, profitability analysis, satisfaction and retention (Buttle, 2008). The following are examples that illustrate such emphasis:

> *"CRM is a company-wide business strategy implemented to reduce costs and increase profitability by increasing clients' loyalty. It brings information from all data sources within the bank to offer one, holistic view of the clients in real time... it informs decisions on everything from cross-selling, segmentation, profitability analysis, and communication channels in our competitive market... CRM helps us to cross-sell different services to different segments, which will increase profits."* (Strategic planning manager, Bank)

> *"CRM is a concept to manage the relationship with clients. This concept is implemented using a set of tools and techniques that facilitate building and developing a direct relationship between the bank and the clients. It helps us understand clients better in order to develop a customer-centric approach in the bank."* (Marketing manager, Bank)

After interviewing the participants, it was seen from the findings that the CRM stakeholders had a good understanding about CRM. The above quotes showed similarities as to the basic idea of CRM; the differences may be influenced by the nature of each individual's job and responsibilities. Thus, marketing and corporate managers seemed to define CRM as a strategic approach that underlines customer-centric orientation. However, employees seemed to adopt a tactical approach which viewed CRM as a technology used to process information about the customers, in order to better manage long-term customer relationships. Consistent views were, however, obtained from all the participants, and reflected accurately the characteristics of CRM mentioned in the literature review chapter.

b) Case 2: Hotel (B) in Jordan

All of the four interviewed participants agreed in claiming their hotel to be highly engaged with CRM. They argued that CRM was seen in their hotel as an essential approach and business process to be used extensively across all departments. More specifically, they claimed that CRM had become an umbrella system for co-ordinating a large number of core business processes, and a facilitation point for cross-functional work to achieve more effective and closer interactions with customers. As a result, all employees valued CRM as a necessity for successfully expediting their jobs. The following statements were taken from four different stakeholder-users of CRM at Hotel B:

> *"This system should be available and focused on helping our staff doing their jobs effectively. The system is there to serve all parties in the Hotel in all aspects. It serves employees; customers, guests, sales, and also serves,*

communications, accounting and revenues. For example, employees in our outlets will be able to retrieve a customer's name or phone number from the smartcard linked to the system and which stores his/her information when checking-in at the hotel. This system is an integral process in our customer-focused environment in terms the workplace" (Front office manager, Hotel).

"CRM facilitates the reservations, check-in, check-out, and central billing. It enables our workers to access and communicate all the information they need to complete their jobs... We use CRM for segmentation to cross-sell different products/services, and so increase our profits." (Reservation supervisor, Hotel)

"CRM is a central system that manages all aspects of business processes including: central reservation, check-in, check-out, billing, and etc. Its central database system serves to integrate and provide access to all customer information and history." (IT manager, Hotel)

These views of CRM are relevant to the literature suggesting that CRM is essential for businesses to integrate internal processes and functions to create value for targeted customers (Buttle, 2004). Furthermore, Payne (2006) suggests that CRM enhances opportunities to use information to understand customers and manage relationships better. It is enabled through technology which facilitates the cross-functional integration across organisations towards improving shareholder value. Whilst most of participants from this hotel viewed CRM as an essential comprehensive set of business processes for managing customer relationships, several of them also emphasised that CRM is about segmentation, customer satisfaction, customer retention, and cross-selling. The following are two statements that illustrate such emphasis:

*"CRM is to understand different needs of customers in order to meet their preferences by providing a one-to-one personalised service… It facilitates a better communication within the hotel and between the hotel and its customers, in order to satisfy customers and maintain relationships with them, in order to increase the profits and reduce costs. Additionally, it helps all the hotel's employees to perform their jobs efficiently. "(*Front office manager)

"CRM is an inclusive set of processes and technologies for managing relationships with potential and current customers. It centralises customer information which would be used by employees across the hotel to serve customers and sell suitable products/services at the right time... More satisfied customers leads to more chances of retention and this can be done through one-to-one relationships." (Development manager, Hotel)

In Chapter two, the author of this study demonstrated that CRM analytical tools are effective for segmenting customers and for focusing provision of individual and unique service, according to customer need and heterogeneity (Roland and Verhoef, 2005). These analytical tools are also useful for predicting cross-selling opportunities for different segments or individuals. Additionally, as mentioned in Chapter two, CRM enables businesses to gain knowledge about customers and use it proactively to create customer value and increase satisfaction, especially when knowledge about customers is shared across all functional units (Feinberg and Kadam, 2002). On the other hand, CRM should be used as means of retaining customers and reinforcing their loyalty (Lee-Kelley *et al.*, 2003).

c) Cross-Case Analysis

After interviewing the participants from both organisations in Jordan, it was found that varied stakeholders had a good understanding of CRM, which matched the existing academic views discussed earlier in Chapter two. Although consistent views were gained from all participants, it seemed that there were some differences in the perceived definitions of CRM among different stakeholders (managers and employees). In particular, managers seemed to capture the strategic and broad meaning of CRM more than employees and IT managers, who tended to perceive CRM as an information system that manages aspects of customer relationships.

Kale (2004:44) stated that "CRM mandates a synergetic combination of interdepartmentally constructed strategies, programs and processes". The two cases under investigation in this study represented a different level of engagement with CRM. In the hotel case study, participants pointed out that they were highly engaged with CRM, recognising that CRM was vital to integrate all of their business processes to create value for customers and profits for the hotel. On the other hand, the case study of the bank represented a use of CRM exclusive to the investment department which deals with the top profitable customers of the bank. These two different adoption levels seem to contribute to the differences between the two cases in participant views of the significance of CRM. However, perceptions of participants resembled the elements of CRM discussed in Chapter two. Therefore, the following elements were kept in mind when designing the questionnaire in the later stage of this thesis.

- Business strategy to develop a customer-centric approach
- Customer segmentation (micro segmentation and segmentation by expected lifetime value)
- Customer profitability analysis
- Customer satisfaction
- Long-term retention of selected customers
- Cross-selling of products to targeted segments.
- Customer value creation through integrated internal processes
- Collecting and integrating information on customers
- Using knowledge about customers proactively

4.5.2 CRM Adoption

Employee Perception of CRM Benefits

After analysing the responses of different stakeholders about their individual perception of CRM benefits strategies, most respondents appeared to have accepted that CRM was beneficial to their organisation. Additionally, the in-depth interviews identified subcategories of this stage according to the indicators used in the literature, namely, with no particular ranking:

- Gaining a competitive advantage.
- Analysing customer requirements more efficiently.
- Identifying new selling opportunities.
- Increasing customer satisfaction.
- Increasing customer loyalty.
- Increasing customer retention rate.
- Increasing revenue and profitability.
- Increasing employee productivity.
- Enhancing customer relationships.

This result was compatible with the finding of most previous studies about CRM adoption (Wu and Wu, 2005; Ko *et al.*, 2008). As a result, these elements were suggested as the main indicators used to measure employee perception/attitude towards CRM adoption. The quotations from respondents, shown below, illustrate how different stakeholders from two different organisations perceived different benefits of CRM and its adoption.

> *"CRM enables the bank to develop a better understanding of the clients, achieve a better access to targeted segments, and reduce the costs of delivering services to clients"* (Marketing manager, Bank)

> *"CRM is good because it increases clients' satisfaction and bank profitability, as CRM is not only about developing relationships with clients but also about organising and directing this relationship to create profits for the bank"* (Strategic planning manager, Bank)

> *"OPERA is a user-friendly system and it is easy to use. It benefits the hotel with the speeding up the reservation process and serving guests; it stores information about every guest or potential guests and their personal preferences so when a guest requests a service the system displays all his/her history with the hotel. It facilitates the reservation process (check-in and check-out). Besides, it allows employees to check on clients' bills easily and quickly."* (Reservation supervisor, Hotel)

According to Plakoyiannaki (2005), the perception of members of an organisation in regard to CRM benefits mediates the impact of external factors on the implementation of CRM within an organisation. The interviews conducted with practitioners in this study confirmed that organisations should be committed to creating a positive attitude to CRM among employees, before its implementation stage. The following are quotes stressing such a suggestion:

> *"CRM was developed to help the employees in carrying out their tasks, taking into consideration that employees were trained in this system. Meantime, the technology vendor/supplier of CRM system is always available to our requests at any time to resolve our issues with CRM and serve the employees. This will facilitate the work of the employees."* (Front office manager, Hotel)

> *"In our bank we prepare employees to accept and work with the CRM system and they are also informed of how to properly deal with customers."* (Strategic planning manager, Bank)

> *"Certainly, there are efforts to create a positive attitude to CRM among our employees. These are represented in training the employees to implement the system and internal marketing. These efforts are essential to conform to the nature of the service we provide. The hospitality sector contains great competition. Hence satisfying and serving customers are very important. However, we have to support the employee in improving service by using CRM."* (Front office manager, Hotel)

On the other hand, one participant stated that the mediating effect of employees' perceptions on CRM implementation and usage was not as significant, from her point of view, as management's decision to implement CRM features, regardless of employees' perceptions. It is worth noticing that this view came from an IT specialist deploying and maintaining a CRM system at its infancy stage. The respondents from the same organisation also reported limited use of CRM in the organisation because management commitment to it was ambivalent. It would seem therefore that different stakeholders dealing with CRM might have different views on what most influences the motivation to adopt CRM systems. According to Ross and Weill (2002), IT personnel may know the technology but not how to apply it to business. As a result, there is a risk that they may fail to take responsibility for organisational and process changes required by CRM. The IT specialist in this study stated the following:

> *"Management forced the employees to use CRM and that supported its implementation hugely... Employees did not have a choice in using the CRM; it was part of their job duties"* (IT specialist, Bank)

As a result, the following hypothesis is offered:

> *H1: Employee perceptions of CRM benefits mediate the effect of adoption factors on an organisation's implementation of CRM.*

The multi-stage approach to understanding CRM adoption holds that employees' perception of CRM offerings mediates the influence of CRM adoption factors on CRM implementation within an organisation. Building on this point, it is suggested that the actual implementation of CRM within an organisation is a result of employees' positive attitude towards CRM.

CRM Implementation

At this stage, it is essential for businesses to integrate the three component parts of the CRM: analytical, operational, and collaborative, in order to achieve successful CRM implementation (Xu and Walton, 2005). Gefen and Ridings (2002) propose that integrating these three types of CRM tools is important in order to develop a cohesive whole CRM approach that creates an opportunity for improving customer relationships, and achieving the full potential of any one of the types. Operational CRM, also known as front-office CRM, is focused on automating business processes through a variety of applications, including automation of marketing, selling, segmentation, and product development. Analytical CRM, also known as back-office CRM, is focused on capturing, storing, and analysing customer data to develop values. Collaborative CRM is focused on communication as it covers interaction between an organisation and its multiple possible channels to boot responsiveness to customers. The analyses of participants' responses suggest the following major CRM features, given with no particular ranking, which were implemented in the two organisations:

- Personal customisation through customer database analysis.
- Developing products through customer involvement.
- Offering customer loyalty programs.
- Offering real-time customer services.
- Managing customer loyalty.
- Managing customer complaints.
- Developing member-only site in the organisation's website.
- Categorising/segmenting customers based on spending (lifetime value).
- Customising services depending on customers' categories/segments.
- Providing customers with information via email.
- Developing sales promotion strategies.
- Providing products and services in one place.
- Automating cross-sell and up-sell capability.

These CRM applications or features are consistent with those reviewed in the literature as discussed in Chapter two. In particular, this study follows Ko *et al.*'s (2008) suggested list of CRM technologies/strategies, as it is of the few studies which makes a distinction between CRM adoption at individual and organisational levels. Moreover, the list of technologies suggested by Ko *et al.* (ibid.) seems to integrate the

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three types of CRM tools (operational, analytical and collaborative), as discussed in Chapter two. Some respondents have indicated the following during the interviews:

> *"CRM refers to the importance of storing and updating customer data for later intelligent analysis to benefit from it correctly. We communicate with customers to update their data by sending them SMS posts along with their bank statements, or asking them to update their data by email. All of this is through the use of CRM to communicate with the clients, update their data, and provide them with a better service. In addition, we are dealing with government agencies to update each client's data, to know whether the client is dead or alive."* (Strategic planning manager, Bank)

> *"CRM stores information about every guest or potential guest and their personal preferences so when a guest requests a service the system displays all his/her history with the hotel. It facilitates the reservation process (check-in and check-out). Besides, it allows employees to check on clients' bills easily and quickly."* (Reservation supervisor, Hotel)

> *"CRM is linked to all functional units in the hotel. If a customer took a meal from a restaurant, we would charge the value of bill to the customer's account; reservations would be recorded under the room number. In cases where we wanted to know how many times the customer had used our services, this system would give us that information."* (IT manager, Hotel)

> *"The best thereof is communication between customers and staff. E.g., the customer will have an excess to book online, and such booking will reach us, at the same time, all divisions will be able to exchange information in order to serve the guest accordingly."* (Front office manager, Hotel)

> *"We implemented the first phase of the CRM project and intend soon to l move on to the second phase. So far, we have used CRM to manage our relationships with wealthy (VIP) clients. The approximate number of these customers is currently around 500. Thus, we would benefit more from the system if it was implemented in every branch and department of the bank. Doing this would allow us to make a better use of the system."* (Marketing manager, Bank)

Although some CRM features/strategies, discussed in the literature, were not mentioned explicitly or in detail by respondents, they were implied during the conversation, as those features were very obvious for most participants. The above extracts taken from the interviews suggest that CRM implementation seemed to be differentiated between the two organisations. The first organisation (Bank) demonstrated a low level of engagement with CRM, probably because CRM was at its infancy stage, and only implemented in one department dealing with the most

profitable customers of the Bank. On the other hand, the second organisation (Hotel) demonstrated an extensive use of CRM and a high level of engagement with its features.

4.5.3 Factors Affecting CRM Adoption

A) Strategic Plan

The analysis of interviews with various stakeholders from the two participating organisation revealed strategic planning as one of the important themes of CRM adoption. Strategic planning emerged as an important antecedent of CRM adoption. Interviewers repeatedly emphasised that CRM is influenced by different categories of strategic planning elements:

- Clear direction and objectives embracing CRM strategy.
- Covering CRM activities in the performance measurement system.
- Development and integration of a strategic set of activities.

The conversations with the respondents demonstrated that under each category there were subcategories associated with the main categories. A brief summary of the main categories and subcategories are illustrated in Table 4.2.

Table 4.2: Subcategories Associated with Main Categories of Strategic Planning

Main Categories	Subcategories
Clear direction and objectives embracing CRM strategy.	Clear vision, objectives relevant to customer-centric orientation, implementation plan linked to business strategy.
Covering CRM activities in the performance measurement system.	Approach of CRM is reflected in performance measurement system, customer knowledge, communication channels, customer loyalty, and customer value.
Development and integration of a strategic set of activities.	Top-down planning process, integration of business functions.

i) Clear Direction and Objectives Embracing CRM Strategy.

After analysing responses regarding the clear direction and objectives of CRM, most respondents stated that having clear objectives in their organisations influenced CRM adoption. These statements reinforce the earlier literature review in Chapter two that organisations need to have clear objectives and goals already in place in order to maintain focus and efficiency of CRM adoption (Osarenkhoe and Benni, 2007). Hence, in order to maximise employees' perceptions of CRM benefits, organisations need to define specific goals and objectives for improving customer service (Sigala, 2004). The following quotations from the interviews are representative of the concepts which surfaced:

> *"Like any other project in the bank, we have specified our goals we intend to reach by adopting CRM, and the phases of CRM implementation. This is because the bank will not invest in unclear threads or non- achievable objectives."* (Strategic planning manager, Bank)

> *"The system is provided to maximise our relationship with customers and large amounts of money were spent to serve this purpose."* (Front office manager, Hotel)

The conversations in the interviews also demonstrated that organisations need to foreground a customer-centric philosophy in order to make the most of CRM objectives and drivers. It can be seen from these interviews that organisations were displaying a customer-centric philosophy via their awareness of the key objectives of CRM. For instance, one respondent stated that:

> *"Our adoption of CRM comes from the reality of our needs to satisfy clients, and to compete with rival Banks for their custom, following best practices to providing better services. Our goal is to adopt new communication channels that are proven to be more effective than traditional channels; CRM reduces the cost of financial transactions conducted at the counter desk in the bank."* (Marketing manager, Bank)

> *"Improving relationship with clients is the core purpose of implementing the CRM system, which helps us to provide a better service in saving clients' time when they check-in, check-out or perform any transaction."* (Reservation supervisor, Hotel)

According to the literature, CRM adoption relies on the alignment of business strategy and implementation plans (Ocker and Mudambi, 2003). According to the findings of the interview, CRM becomes a business solution only when it is combined with a suitable business strategy and implementation plan. Organisations seek to make wise CRM investments especially given that CRM applications are rather expensive. One of the IT managers interviewed indicated:

> *"We articulated and detailed the business requirements document and sent it to different CRM suppliers, and then they sent us their proposals. We were directed to adopt those CRM projects which best serve and maximise relationships with customers."* (IT specialist, Bank)

Overall, the results from the interviews suggested that having clear direction and clear objectives embracing CRM strategy is essential for CRM adoption. These statements reinforce Brown and Vessey's (2003) suggestion that having clear CRM objectives enables strong support among senior management, in order to create an organisational environment that is conducive to effective implementation of CRM strategy across the

organisation. In conclusion, it is important to have clear CRM objectives as this enables people in business to perceive CRM as part of a customer-centric strategy: a clear idea of customer needs facilitates CRM implementation (Bührer and Müller, 2002). Therefore, the following is hypothesised:

> *H2: Having a direction and objectives that embrace a clear CRM strategy will have a positive effect on employee perceptions of CRM.*

Based on the above hypothesis, it is suggested that clear CRM direction and objectives are basic criteria for employees' perceiving and evaluating CRM as potentially beneficial for their organisation, since these criteria provide accountability for strategies geared toward customer focus. Alternatively, if management form sufficiently clear objectives of CRM, then the employees will adopt the same attitude in following CRM initiatives.

ii) Performance measures of CRM

In accordance with the literature, Payne (2006) suggested that in order to achieve CRM objectives, organisations need to focus on measuring whether the strategic aims of CRM have been delivered to an acceptable standard. After analysing the responses in regard to CRM activities in the organisations' performance measurement system, most of the respondents stated that CRM should be reflected in performance measures used in their organisation. Furthermore, their view was that performance measures should translate into business vision and further measurable axes.

Some managers indicated the following during the interviews:

> *"We have balanced scorecards which include four axes: financial aspects, clients, employees, and operations. One of the main axes in the balanced scorecards is concerned with client services. Therefore, managers' and employees' performance in all branches is evaluated on the basis of the level of service they provide for clients. Employees' performance evaluation reflects how effective they are in providing an excellent service level: whether by attracting customers, reducing the number of complaints from customers, or increasing customer satisfaction. The greatest priority for all employees is to satisfy clients; this has a huge impact on their potential end of year bonuses; about 40% of employee bonuses are based on client satisfaction."* (Strategic planning manager, Bank)

It was also found that in order for organisations to sustain improved business performance, obtaining customer knowledge had become a vital element. Similarly, it was found in support of Öztayşi *et al.* (2011) findings regarding performance measure and its influence on CRM adoption, that using customer knowledge was a key element of performance measurement supports.

> *"There is a questionnaire designed to obtain customer feedback about the room in which they stayed. The management always checks whether employees are effectively using customer knowledge created and shared by the system."* (IT manager, Hotel)

> *"Getting a closer look at guests and our knowledge about them enables us to serve them in a better way to match our services to their personal preferences... The effective use of the system is part of the general performance measures in our hotel."* (Reservation manager, Hotel)

According to Payne (2006), the performance measurement systems used by organisations are generally under-developed in measuring CRM performance and aiding its adoption. The following extracts from interviews reaffirm Payne's suggestion that performance measurement is an under-developed area with insufficient attention to CRM and its goals. They also suggest the need for strong management commitment to acceptable CRM performance measuring standards.

> *"Our performance measurement covers the CRM system, but CRM still does not have its own explicit separate scorecard. It is indirectly included when evaluating client satisfaction and the level of service, as a modern marketing approach...From my experience; CRM implementation needs time and commitment. This is mainly because CRM is a complex system that includes many aspects such as culture and strategy...This is why we need time to reach the maturity state and include CRM in our performance measurement."* (Marketing manager, Bank)

> *"CRM evaluation is supposed to take place. However, CRM implementation was adopted to suit the business requirements of the investment department. But because the investment department did not live up to expectations of growth, this department is no longer a top priority on the bank agenda, and the number of staff in the investment department has decreased. Because this was the only department using CRM, their diminished presence led to a lack of interest among management in assessing the performance of the CRM system. Nevertheless, if CRM were to be used in other departments, such as customer care, the management would most likely change their direction towards including CRM in their performance measurement."* (IT specialist, Bank)

Throughout the interview process, the results suggested that an appropriate performance measurement system would help to evaluate CRM weaknesses and strengths of performance but also aid in further understanding of CRM and its implementation process. This is supported by several studies suggesting that organisations focusing on the important of performance measurement are more likely to perceive the benefits of implemented innovation (Morgan, 2004; Sawang *et al.*, 2006). Furthermore, Morgan (2004) stated that developing a performance

measurement system that is flexible with employee attitudes is a real challenge for organisations adopting CRM. Based on the interview results and the literature, the following is hypothesised.

> *H3: appropriate CRM performance measurement mechanisms in an organisation will positively affects employee perceptions of CRM benefits.*

This suggests that organisations should focus on the importance of measuring CRM outcomes and actual performance against their strategic plans. By doing so, employees will be able to appreciate the potential achievements of CRM implementation.

iii) Integration of Strategic Sets of Activities Around CRM

As mentioned in Chapter two: strategic planning processes should integrate strategic sets of activities to allocate resources and manage challenges rising from CRM adoption (Bohling *et al.*, 2006). To enhance CRM benefits top management needs to support CRM by linking its systems to business needs and transferring its implementation to a wide spectrum of application (Sigala, 2004). Linking CRM strategy to business needs is one of the main themes of this factor. Thus, in order to maximise CRM benefits managers need to plan, support and integrate CRM with business needs and processes. As one senior manager stated:

> *"We prepare and explain to our staff why CRM is in the bank and serves their best interests. This is to motivate staff to work with the CRM system, because if employees were unaware of these benefits, they might be less motivated to handle the system. Therefore we prepare our employees psychologically and technically to do that."* (Strategic planning manager, Bank)

Taking a different perspective, from an employee using CRM in the same organisation:

> *"The communication between the management and departments, like IT, investment and marketing has affected employees' acceptance of CRM."* (Relationship manager, Bank)

On the other hand, integration of business functions to serve customers is another theme emerging from the interviews. Integrating business functions can produce significant benefits and foster the CRM adoption process. However, the integration should be executed carefully or employees' perceptions of CRM benefits would be distorted (Day, 2002). Because it takes longer to reorganise and integrate business functions than to plan changes, an over-lengthy reorganisation might tend to undermine the perceived benefits of CRM. The following quotations demonstrate different ideas that surfaced in the interviews.

Hotel (high engagement with CRM):

"There was cooperation between departments as it was 100% up to them to make the system successful. Our collaboration with departments was essential as each department had their own requirements that we, as IT people, were not aware of." (IT manager, Hotel)

Bank (low engagement with CRM):

"We didn't consider CRM as an integrated process, as we only used CRM on a small scale for limited features." (IT specialist, Bank)

"There is an interest in the application of CRM and in benefitting from its advantages. However so far we have not yet arrived at the stage of changing our plans accordingly in order to expedite CRM adoption... The CRM implementation needs time and commitment. This is mainly because CRM is a complex system that includes many aspects such as culture and strategy. We need time to reach the maturity state of CRM implementation" (Marketing manager, Bank)

Based on the interviews results and the literature, the following is hypothesised:

H4: Integration of strategic set of activities around CRM will have a positive effect on employee perceptions of CRM.

B) Customer-centric Orientation

As mentioned in Chapter two: organisations attempting CRM in the absence of customer-centric strategies routinely fail. Once strategies are focused on customer's values and relationships, decision makers in organisations can determine how best to execute the strategies and then technology can enable the process (Abbott *et al.*, 2001; Plakoyiannaki and Tzokas, 2002). Since CRM has evolved from organisational changes in customer-centric strategies, implementing it without re-engineering a customer-centric business model results in its failure (Chen and Popovich, 2003). Several previous studies have shown that a customer-centric approach involves various elements that also are represented in the philosophical basis of CRM (Bradshaw and Brash, 2001; Maklan *et al.*, 2007). Customer-centric orientation is a resourced and organised strategy which aims to satisfy profitable customers. It involves key elements that are also characteristic of CRM, including customer segmentation, acquisition, profitability analysis, satisfaction, and retention (Swift, 2000; Buttle, 2008).

Respondents in the interviews were asked whether they perceived that aligning strategy, technology and process around customers influenced the added value of CRM. The typical response to the question was a list of different customer-centric elements driving CRM adoption, such as segmentation, acquisition, satisfaction, and

retention. The following are examples of customer-centric strategies reported by respondents:

> *"In a service industry like hotel-management, we need to provide excellent services to customers. Hence, we strive to offer customer-centric services to our customers; services that match their needs. For this reason we use the system as it enhances our understanding of customers, their needs, profitability and satisfaction."* (Front office manager, Hotel)

> *"Serving customers is essential for our hotel and the adoption of the system has enabled that. The system has allowed us to define our segments and to analyse the most profitable ones. Since our focus is serving customers, all our customers are important, especially the profitable ones who have high ratings in the system."* (Reservation supervisor, Hotel)

Bank (low engagement with CRM):

> *"Focusing on customers and providing them with their needs are among the organisational culture values. Our main vision is to provide an excellent customer service; it is for this reason that we have applied CRM, in order to achieve this vision... We use a different program rather than CRM to help us segment and understand the most profitable and important clients... The intent is to warehouse customer data and make it accessible for analysis to enhance the understanding of client satisfaction and requirements. Effective CRM is to create a powerful new marketing and referral force for the bank"* (Strategic planning manager, Bank)

> *"A customer-centric approach is essential and we align all our resources to serve this approach. These resources include people, technology and process. We value the client as an asset that drives our strategy and working process in the bank.... CRM is a way to build a relationship with the clients. As a result of the availability of rich data about the clients, CRM affects client satisfaction, client loyalty, cross-selling and the quality level of customer care."* (Marketing manager, Bank)

As mentioned earlier, several studies have discussed the relationship between customer-centric orientation and CRM adoption. However, not many studies have explicitly focused on investigating the driving role of such a customer-centric strategy to create strong perceptions of CRM. The results indicate that the two organisations mentioned were at different stages of CRM implementation. However, it was seen from the interviews that both organisations were aligned around serving customers and hence perceived the benefits of CRM as a tool to enable customer-centric strategies. The first organisation (Bank) was customer-oriented and perceived the benefits of CRM although not yet in a position to reap its full benefits; for this it

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needed to reach a more mature stage of implementation. This is in contrast to the second organisation (Hotel), which was already using CRM as a means to enable customer-centric orientation. This suggests that customer-centric orientation helps to create strong and clear perception of CRM benefits regardless of the implementation stage of CRM within the organisation. In conclusion, customer-centric elements positively influence employee perception of CRM. Based on this, the following are hypothesised:

> *H5: Segmentation will have a positive effect on employee perceptions of CRM.*
>
> *H6: Profitability will have a positive effect on employee perceptions of CRM.*
>
> *H7: Acquisition will have a positive effect on employee perceptions of CRM.*
>
> *H8: Satisfaction will have a positive effect on employee perceptions of CRM.*
>
> *H9: Retention will have a positive effect on employee perceptions of CRM.*

The above hypotheses propose that employees appreciate the benefits of CRM if their organisations are already using traditional segmentation analysis, assessing customer lifetime value in managing high value customer expectations, continuously attempting to acquire new customers, emphasising customer satisfaction, and stressing customer retention. In other words, in organisations where strategies have already been developed to emphasise the importance of all the mentioned elements, also characteristics of customer-centric orientation, then employees will be more innovative and willing to accept CRM as a way of serving customers.

C) Internal Marketing

It was reviewed in the literature that several studies drew attention to the potential influence of internal marketing on CRM adoption (Christopher *et al.*, 1991; Ling-Yee, 2011). The interview questions in this study were thus related to sub-factors of internal marketing, including change management, communication, and rewarding CRM usage. The main aim of these questions was to identify the main factors that might influence employee perception of CRM. Under each sub-factor/main-category, some subcategories were identified by grouping similar themes associated with the main category.

The results from the interviews echoed a position taken in the literature that internal marketing is essential for adopting CRM. The interviewees stressed that internal marketing efforts in terms of change management, communication, and rewarding CRM usage should be used to promote CRM among frontline employees who are the organisation's interface with its customers. Table 4.3 provides selective representative comments from which the author identified main categories associated with sub-factors of internal marketing.

Table 4.3: Selected Representative Comments from the Respondents about Internal Marketing Elements

Sub-factors	Main categories	Comments
Change management	People involvement	*We prepare and explain to our staff why CRM is implemented in the bank to help them understand that it is in their best interests. This is to motivate them to work on the CRM system, because if the employee doesn't realise the benefits of the system he/she will not be encouraged to handle it.* (Strategic planning, Bank) *There are efforts to create a positive attitude to CRM among our employees. These are represented in training the employees to implement the system and internal marketing methods... The hospitality sector contains great competition...we have to support the employee in improving services by using CRM.* (Front office manager, Hotel)
	Training	*Our Customer-focused culture and the good training provided to employees promises successful adoption of CRM. In our bank we prepare employees to accept and work with the CRM system and they are also informed of how to properly deal with customers.* (Strategic planning, Bank)
Internal communication	Collaboration	*A cross-functional team, representing staff from all departments in the bank, was formed to sponsor the change process.* (Marketing manager, Bank)
	Communication system	*The communication between the management and departments like IT, investment and marketing affected employees' acceptance of CRM.* (IT specialist, Bank) *In addition, the continuous attention and communication carried on between IT people and each employee empowered employees' acceptance of the system.* (IT manager, Hotel) *Communication between employees played a vital role as people involved with the system will have certain experience in using it and they will share and exchange information between them. The communication is carried out through emails, maybe by phone, briefings, face-to-face, and through the system itself.* (Front office manager, Hotel)
Reward using CRM	Individuals performance measurement	*Using the system to improve customer service and avoid committing mistakes when dealing with customers is among the criteria used to determine the employee of the month. So employee use of the system is indirectly rewarded through the evaluation of customer service.* (Front office manager, Hotel)
		Employees' performance evaluation is reflected in how effective they are in providing an excellent level of service: whether by attracting customers, reducing the number of complaints from customers, or increasing customer satisfaction. The biggest priority for all employees is to satisfy clients and this has a huge impact on their potential end of year bonuses. (Strategic planning manager, Bank)
		I have a goal, to generate a certain amount of sales monthly. So, to reach my goal I use CRM, to help me manage my relationships with the customers and to show to my supervisor how many calls and meetings I have performed; thus, the confidence of my supervisor will increase accordingly and will give me a good appraisal, CRM will evidence this. (Relationship manager, Bank)

The interviews suggested two main themes for change management, namely employees' involvement and training. These two elements were found essential for promoting CRM for employees within an organisation. On one hand, involving employees with CRM initiatives promotes a clear understanding and appreciation of CRM benefits (Kale, 2004; Plakoyiannaki; 2005). On the other hand, training has received considerable attention among researchers and is often associated with change management (Schillewaert *et al.*, 2005). Preparing and training employees is fundamental at the early stages of CRM adoption in order to promote it as palatable and compatible with organisation goals (Zablah *et al.*, 2004).

From the interviews, two main themes were specified for internal communication, namely collaboration and communication systems. Ryals and Knox (2001) suggested that CRM adoption is a change process which requires collaboration within an organisation. Consequently, managers should focus on communicating the drivers of CRM since these elements would be key in shaping the perception of employees across the organisation (Ramdani *et al.*, 2009). This can be done by building a team orientation and bringing different units of the organisation closer (Raman *et al.*, 2006). Alternatively, Finnegan and Currie (2010) refer to communication as improving information sharing within and across the organisation to align the message within the organisation that deals with external communication with customers. Hence, intensive and high quality communication is instrumental in informing employees about the nature of CRM initiatives.

The last sub-factor of internal marketing investigated in this study relates to the measurement and reward of CRM usage within an organisation. Literature on the subject indicates that a reward system, in the context of CRM, is crucial in shaping employee behaviours (Ryals and Knox, 2001). Consistent with the preceding argument, Plakoyiannaki (2005) confirms that the right reward system facilitates CRM implementation by boosting employees' motivation towards CRM and reducing their resistance to change. Furthermore, the right reward system should acknowledge the contributions of individuals in sensing and responding to CRM initiatives.

Consistent with the preceding arguments, internal marketing elements are suggested to be of central importance in CRM adoption as each element represents cues that organisational members rely on in judging CRM benefits. Accordingly, the following are hypothesised:

> *H10: change management in an organisation will have a positive effect on employee perceptions of CRM.*

> *H11: Internal communication in an organisation will have a positive effect on employee perceptions of CRM.*

> *H12: Rewarding CRM usage will have a positive effect on employee perception of CRM.*

H10 proposes that if an organisation, in the process of incorporating CRM into its changing business strategy, involves and trains employees, then this process of change will contribute to improvements in employee perception of CRM. According to H11, collaboration and communication within organisations, to build employee understanding and motivation for CRM adoption as part of a new working environment, are vital for shaping positive employee perception of CRM. Alternatively, Hypothesis C12 indicates that rewarding employees for their effective use of CRM in providing excellent customer service, encourages them to work with CRM.

D) Culture and leadership

In accordance with the literature, the people (employees) element involving organisational culture and leadership elements is one of vital factors affecting CRM adoption (King and Burgess, 2007; Osarenkhoe and Bennani, 2007). Specifically, organisational culture and leadership shape the characteristics of people's perception of CRM and readiness for change (Minguzzi and Passaro, 2001). Thus in this study the interview questions were related to sub-factors of culture and leadership: resistance to change, supportive culture, and leadership. Under each sub-factor/main-category, some subcategories were identified by grouping similar themes associated with the main category.

The results from the interviews repeatedly emphasised the powerful impact of culture and leadership in an organisation. The interviewees stressed that culture and leadership in terms of resistance to change, supportive culture, and leadership do influence people's perception of CRM. As depicted in Table 4.4, selective representative comments are offered, from which the author identified main categories associated with sub-factors of culture and leadership.

Table 4.4: Selected Comments from The Respondents about Culture and Leadership

Sub-factors	Main categories	Comments
Resistance to change	Personal characteristics of management	*Although the management has supported this CRM approach, the level of support has varied at senior level, as some managers are innovative and like technology while others are nervous about new technology.* (Marketing manager, Bank)
		Employees do not fear the system as it is dedicated to serve them alongside the customers...There were no fears about losing jobs, but rather about making mistakes at the outset of implementation of the system. As management, we understood the case and we built in a margin for errors. (Front office manager, Hotel)
		Employee resistance to change depends on the management style used in promoting the change, how it might exploit staff potential or restructure the bank working process. It is essential that managers clearly and explicitly explain to staff that CRM would change their working process but wouldn't cause them to lose their jobs. (Strategic planning manager, Bank)
	Employees' resistance to change	*People were questioning its approach and benefits. There was no objection but people had questions about CRM and its benefits; this demonstrated unawareness of the CRM concept and its benefits.* (Marketing manager, Bank)
		At the beginning employees resisted the CRM system. Like any new system there was a fear of the system and their ability to use it, especially that CRM necessitated training. (IT specialist, Bank)
Supportive culture	Learning climate	*Proper training was provided to all employees and there were meetings between employees from the reception department to discuss their feedback on the system and its usage to provide a better customer service.* (Reservation supervisor, Hotel)
		The employees used to hold meetings in the presence of the director to communicate and discuss any issues around Opera. (IT manager, Hotel)
	Organisational climate	*The implementation of CRM is a decision from the top management and I believe that cultural values played a role, since the employee had no desire to use the system.* (Relationship manager, Bank)
Leadership	Management support	*The leadership is very important; the management manifests this role in taking responsibility for preparing employees for the new system in regard to all managerial operations relevant to the system. The top management assisted in providing technology applied in the hotel.* (IT manager, Hotel)
		The leadership support is important because CRM is an innovative approach and it needs a champion to positively change people's attitudes towards the adoption of CRM. And of course, the top management support is vital for CRM adoption as it was their decision to purchase this system. (Marketing manager, Bank)

Throughout the interview analysis, the challenge of employees' resistance to change was observed within the two organisations. Behavioural resistance to change manifested in people's unwillingness to adopt/utilise CRM tools (Zablah *et al.,* 2004). In accordance with the literature, Bull (2003) and other researchers suggested that resistance to change creates a high level of uncertainty, preventing organisational members from valuing the benefits of CRM. Personal characteristics of management and employee resistance to change were the main themes emerging from the interviews. First, accepting CRM in organisations can be confronted by people's resistance to change (Bohling *et al.*, 2006). Hence, a high level of top management commitment to facilitate the change and overcome resistance is vital to conquer this challenge. Second, CRM adoption can bring a resistance to change to the innovation itself and disagreement among different departments might result (Premkumar and Roberts 1999). Consequently, resistance to change may be articulated through the expression of negative beliefs about CRM (Piderit, 2000).

From the interviews, there seemed to be a wide agreement that supportive culture covers two main elements: learning climate and organisational climate. The learning climate is linked to long-term strategic orientation and refers to the degree to which an organisation develops new knowledge (Calantone *et al.*, 2002). Researchers emphasise the importance of learning climate in fostering CRM adoption (Goodhue *et al.*, 2002; Payne, 2006). Such learning may consist of changes in employees' knowledge and changes in attitudes toward CRM. Apparently, communication across an organisation in order to enhance shared individual and functional expertise is critical to promote employees' learning and hence satisfaction with CRM (Swift, 2001). It is observed from the interviews in this study that differences arose between the two organisations (Hotel and Bank) in terms of the emphasis placed on the role of communication in enhancing organisational learning. The hotel, adopting CRM at the maturity stage, seemed to grasp the concept of integrating knowledge, organisational learning and business process to benefit from CRM and deliver value to customers. Conversely, the lack of ability to achieve such integration was observed in the bank case.

For successful CRM adoption to occur, organisations are required to manage their organisational climate (Payne, 2006). However, several studies report that the chief impediment to CRM success is often a disruptive organisational climate and organisational culture (Clark and Smith, 2003; Chen *et al.*, 2009a). The organisational climate is constructed by its members through key elements of the organisation in terms of its systems and practices. As depicted in the Table 4.4, the interviews in this study confirmed that negative organisational climate and culture values in the first organisation, the bank, were hindering CRM adoption. This suggests that organisations need to attempt to manage their organisational climate in order to support delivery of effective CRM solutions.

The last sub-factor of organisational culture and leadership factor is leadership. Extant research shows that the role of the individuals taking leadership in the CRM adoption process may influence employee perceptions and commitment toward CRM (King and Burgess, 2007). A considerable debate is found in the literature concerning the capacity of management to take on leadership responsibilities in preparing organisational culture. Poor capacity may be due to management short-term orientation (Ryals and Knox, 2001), underestimation of responsibilities (Maklan *et al.*, 2007), or failing to see CRM as a holistic approach (Maklan *et al.*, 2007). However, scholars concur in emphasising the importance of top management support and commitment in sponsoring CRM initiatives as essential for changing employees' attitudes and preparing them for CRM adoption (Payne, 2006; Finnegan and Currie, 2010). The interviews in this study, as shown in Table 4.4, confirm such assertions.

Concluding that organisational culture and leadership are vital for improving perception of CRM in an organisation, this study suggests the following hypotheses:

> *H13: Resistance to change in an organisation will have a negative effect on employee perceptions of CRM.*

> *H14: Supportive culture in an organisation will have a positive effect on employee perceptions of CRM.*

> *H15: Leadership in an organisation will have a positive effect on employee perceptions of CRM.*

H13 implies that when management is facing problems with fitting CRM into the overall culture of the firm, then employees may question the value of CRM. H14 denotes that support from organisational members in helping employees to learn new ways of working with customers, and in aligning CRM practices with shared beliefs and values in the organisation, encourages positive employee perception and evaluation of CRM values. H15 refers to the importance of top management support and commitment to preparing employees for the adoption of CRM.

E) Project Management

As noted in the literature, CRM adoption demands a great deal of project management to ensure its credibility (Payne and Frow, 2006). The majority of interviewees normally expected CRM projects to be managed and monitored for changes in similar ways to a software project. The interview questions were associated to two main sub-factors of project management arising from the literature: project management techniques and project change control. For each sub-factor, some main categories were identified by grouping similar themes.

The results from the interviews suggested considering CRM as a set of activities which are expected to produce outcomes within a particular time period. This can be achieved by considering CRM as a software project for which specific techniques and

procedures are used to help with formulating priorities, management and monitoring stages. Table 4.5 represents selected comments from which the author identified main categories associated with sub-factors of project management.

Table 4.5: Selected Representative comments from the Respondents about Project Management

Sub-factors	Main categories	Comments
Project management techniques	Clear priorities	*The planning stages of the project started with building clear objectives of what we wanted to achieve at each stage in the project.* (Strategic planning, Bank)
		The implementation of CRM had different stages: training, installing, migration of data, evaluating and maintenance. (Front office manager, Hotel)
	Project schedule	*We used Microsoft project management software to design the timeline frame of the CRM project.* (IT specialist, Bank)
Managing changes in projects	Monitoring projects	*We updated the timeline frame and milestones status on an ad hoc basis to reflect the project progress and delays. We also conducted a risk management analysis for the project.* (IT specialist, Bank)
	Adjusting project plans	*Employees required some modifications on the system in order to customise the system to our context in the hotel.* (Reservation manager, Hotel)

Throughout the analysis of interviews scripts, the usage of project management methodologies was observed at the two organisations. The initialisation of CRM was organised according to project management techniques. In addition, milestones, business and technical specifications, and measured deliverables were set up. Similarly, Somers and Nelson (2001) found that achieving the right proper project scope and timetable in collaboration with all stakeholders is important in driving CRM credibility. Furthermore, doing so ensures that the actual picture regarding CRM objectives is clearly known to all concerned stakeholders. Hence, creating and managing appropriate plans, goals, and schedules is a necessity to the premise of CRM projects (Kostojohn and Johnson, 2011).

The second sub-factor of project management is control of project changes. In this study, the results in general supported the premise that understanding the function of change in CRM projects involves monitoring and adjusting for unexpected changes or risks. Because of the complexity of CRM and its involvement with different parties, continuous change of requirements is unavoidable. Wilson *et al.*, (2002) recognised the needs to monitor and control CRM projects in order to ensure flexibility and continuous improvement. The findings of this study suggest that the purpose of project control is to keep the project as close to the plan as possible, but still change its specification accordingly to user requirements.

In line with the interview results and relevant literature, it is proposed that the development of project management enhances employees' acceptance of CRM. Accordingly, this study suggests that organisations which enjoy more developed project management techniques and capacity to manage change in CRM projects will be more successful. Accordingly, the followings are hypothesised:

> *H16: Project management techniques in an organisation will have a positive effect on employee perceptions of CRM.*

> *H17: Managing changes in CRM projects will have a positive effect on employee perceptions of CRM.*

H16 states that the use of project management techniques to provide appropriate project schedules, and clear priorities for CRM implementation plans, plays a major role in addressing employees' perception of CRM. H17 claims that managing changes in CRM projects, through monitoring project progress and adjusting project plans, influences CRM perception amongst employees.

F) Innovation

In the realm of IT, researchers are concerned with CRM usage and implementation factors, suggesting that system use has a strong effect on employees' attitude and intention to use CRM (eg: Pai and Tu, 2011). Researchers of information technology have, thus far, applied a technology acceptance model (TAM) developed by Davis (1989), to investigate CRM acceptance. Within the TAM, there are two main constructs influencing people's intention to use CRM: these are perceived ease of use and perceived usefulness. Accordingly, in this study the interview questions were related to these two constructs as sub-factors of innovation. The main aim of these questions was to determine whether perceived ease of use and perceived usefulness influenced employee perception and intention to use CRM.

The results from the interviews confirmed the appropriateness of the TAM model to explain employees' behaviour towards CRM and indicate that the two sub-factors, perceived ease of use and usefulness, are important drivers to create engagement with the system. The findings are described in relation to key themes of each sub-factor resulting from the interviews, as summarised in Table 4.6.

Table 4.6: Selected Representative Comments from the Respondents About Innovation Characteristics

Sub-factors	Main categories	Comments
Perceived ease of use	Clear	*The system is easy and clear to use, even new staff can use it easily without much training.* (IT specialist, Bank)
		Its usage should be easy and clear to employees so that they can perform their work. This is important as it affects their interactions with clients, for instance, we do not want an employee to ask the same information from the client more than once. (Strategic planning, Bank)
	Ease	*The system is easy to use and this has encouraged employees to use it. Especially after training them to use the system.* (Front office manager, Hotel)
		It is very easy to use and user-friendly. Otherwise, employees wouldn't be happy to use it. (Reservation manager, Hotel)
Perceived usefulness	Performance	*It enables me to perform my job in the most effective way. Different departments are involved with different part of the system: as a reservation we use the system to display customer profiles in order to understand customers and their personal preferences. And the system is very effective for doing so.* (Reservation supervisor, Hotel)
	Useful	*Employees now think of CRM as a necessity to complete their job.* (Strategic planning manager, Bank)

The overwhelming majority of the respondents reported that innovation characteristics of ease of use and usefulness were major drivers to their use of CRM. However, one respondent reported that system ease of use was not that important; nevertheless usefulness was reported as the main reason for using CRM. This respondent was a marketing manager and stated the following:

> *"The system is clear and easy to use, but this is not the main reason for using it. I use it because I need to meet my job responsibilities and benefits of the system."* (Marketing manager, Bank)

The first sub-factor of innovation characteristics is perceived ease of use (PEOU). The majority of the respondents reported that PEOU means that CRM is easy and clear to use. In the literature, "easy" and "clear" are frequently the most salient indicators for measuring this construct (Venkatesh and Davis, 2000). Thus in the study respondents agreed that PEOU had an effect on the acceptance and use of the CRM system. They also indicated that they preferred simple and user-friendly systems which only require quick and basic training. This is compatible with Alshawi's *et al.* (2011) findings suggesting that PEOU directly affects employees' attitudes to CRM.

The second sub-factor of innovation characteristics is perceived usefulness (PU). All interviewees reported that CRM was useful and helped them to perform their jobs effectively. This is supported by the literature referring to PU as individual recognition of the advantages of using technology to perform jobs within

organisational contexts (Davis *et al.*, 1989). In this study all interviewees agreed that CRM is useful for customers' segmentation, acquisition, cross-selling, profitability analysis, satisfaction, and retention. Each case participant expressed that CRM was a great help in performing their jobs and they specifically valued CRM features that were relevant to their job responsibilities. Evidence appears to support such claims from studies that investigated the relationship between PU and user acceptance of CRM (Avlonitis and Panagopoulo, 2005; Alshawi *et al.*, 2011).

Drawing upon interviews and theoretical rationale, this study proposes that innovation characteristics (PEOU and PU) are associated with employee acceptance of CRM. Accordingly, the following are formally proposed:

> *H18: Perceived ease of use of CRM system will have a positive effect on employee perceptions of CRM.*

> *H19: Perceived usefulness of CRM system will have a positive effect on employee perceptions of CRM.*

G) Knowledge Management

A further new factor is related to the IT discipline, which can be summarised as knowledge management capabilities (KM). Although this factor was not considered by the author of this study before conducting interviews, it was one of the main issues arising from the interviews. In other words, respondents in all interviews raised concerns suggesting knowledge management capabilities as essential processes to establish an organisation's ability to benefit from CRM initiatives. Moreover it was found that these capabilities varied between the two organisations under investigation in this study.

The first organisation (Bank) reported that as CRM was in its infancy; its processes were not based on capabilities related to knowledge management. However, respondents from this organisation emphasised that KM is essential and as such, therefore needed for effective CRM. Dous *et al.* (2005) explained that some organisations may neglect KM in CRM due to the difficulty of realising immediate or short-term benefits of relative projects. On the other hand, the second organisation (Hotel) reported a high level of engagement with CRM initiatives. Respondents from the hotel seemed to view KM as a main sub-process of CRM, which enabled organisational learning and achievement of CRM goals. Although the organisations were at two different adoption levels, they both considered knowledge management KM as a fundamental requirement to reap the full benefits of CRM. The following are statements reaffirming such findings:

Responses from the first organisation; Bank A with low level engagement with CRM:

> *"We use CRM to manage our relationships with wealthy clients and the approximate number of these customers is currently around 500 customers.*

However, we would benefit more from the system if we implemented it in every branch and department of the bank. Doing this would allow us to use make a better use of the system." (Marketing manager, Bank)

"CRM is not applied in an integrated way so far; it is not implemented everywhere in the bank. We have already started to implement the first phase of the CRM project. But our plans and estimation of how it serves the Bank begins with the development of a data cleansing process: aiming to cleanse and update customer data." (Strategic planning manager, Bank)

Responses from the second organisation; Hotel B was highly engaged with CRM:

"This system should be available to and focused on helping our staff do their jobs effectively. The system is there to serve all parties of the Hotel in all aspects. It will serve employees; customers, guests, sales, and also serve communications, accounting and revenues. The Outlet, as an example, will be able to know the customer's name or the phone number from the smartcard linked to the system... This system is integral in terms of the processes of the hotel." (Front office manager, Hotel)

By considering that knowledge management development provides people with useful linkage between innovation and its benefits (Carneiro, 2000), we acknowledge that employee perception of CRM depends on KM evolution. The results from the interviews suggest including KM as one of the key drivers to CRM adoption. These results also suggest that KM splits into three groups of sub-factors: capturing knowledge, managing knowledge and transmitting knowledge. This confirms the discussion of Alavi and Leidner (2001) considering KM as the process of capturing, managing and transmitting knowledge through the organisation and across organisational boundaries. In order to assess business benefits of knowledge management, relevant capabilities must be taken into account. The capabilities prescribed in this research are primarily: capturing knowledge, managing knowledge, and transmitting knowledge.

Throughout the interview process, two main themes were determined for capturing knowledge, namely establishment of a knowledge repository system, and continuous update of knowledge. According to Croteau and Li (2003), storing and updating relevant knowledge for CRM initiatives calls for the deployment of KM. Although relevant literature differs between making knowledge about, for and from customers (Gebert *et al.*, 2003), it was observed in the interviews that organisations were more concerned with creating knowledge about customers. Collecting knowledge about customers is one of the oldest forms of KM that enables the application of CRM in organisations (Reichheld and Schefter, 2000). Besides knowledge about customers and past transactions encompasses present needs and future desires. Knowledge about customers can be captured directly through employees, and indirectly through business intelligence tools such as data mining or data warehouses. The following are

representative comments associated with the main themes of capturing knowledge sub-factor:

The first theme, establishment of knowledge repository system:

> *"We have assigned an integrated team in the bank to detect any lack of customers' data. For example, we need to know the customer's date of birth, who is responsible (in case the account holder is a child) of his/her account, who can withdraw money from his/her account...This refers to the importance of storing and updating customer data for later intelligent analysis to benefit from it correctly."* (Strategic planning, Bank)

> *"This system enables us to recognize some information about the clients, such as date of birth, preferences, smoker or non-smoker, does the customer suffer from allergy, does the customer prefer particular things in the room or not."* (Front office manager, Hotel)

The second theme, continuous update of knowledge:

> *"We are aiming to cleanse and update customer data. For example, updating the marital status for a client who was a bachelor and student twenty years ago, but is now a married businessman, or if he was a tenant and now a house owner. And therefore when we update customer data we can understand them more."* (Strategic planning, Bank)

> *"We communicate with customers to update their data by sending them SMS, sometimes forms are sent to their posts alongside with their bank statements, or asking them to update their data by email."* (Strategic planning, Bank)

The second sub-factor of KM is the process of managing customer knowledge. The overwhelming majority of respondents reported that utilising information from different functional units to address the needs of their customers was essential to realising benefits of CRM. This confirms Rigby *et al.* (2002) suggesting that the proper handling of customer data is essential for business to justify CRM initiatives. Hence, organisations should make use of relevant knowledge to make truly customer-centric marketing decisions. Respondents said the following about this aspect of knowledge management:

> *"A unified account number (ice number) is used to consolidate all client accounts into one account, even if a person holds more than one account. This is an important area where the CRM can help us to deal well with customers through the unified account."* (Strategic planning, Bank)

> *"CRM provides us with sufficient information about customers in order to achieve dual values for customers and the bank. It helps us ensure that we*

provide clients with the right services at the appropriate time and in the right place according to the nature and type of client." (Strategic planning, Bank)

The last sub-factor of KM is transmitting customer knowledge across an organisation. The results of the interviews stressed the important role of distributing relevant customer knowledge for CRM processes. In practice, customers interact with different people and departments at different levels. Essentially, a synergistic combination of knowledge sharing with CRM expands the latter from its technology-oriented approach, enabling it to include both technological and people orientations. Consistent with this notion, several studies have emphasised that CRM has evolved from designing suitable processes and technologies supporting coordinated information shared throughout all customer channels (Lee-Kelley *et al.*, 2003). There is an increased sense of urgency in the need of well-designed KM due to the fact that knowledge sharing is essential to serve customers (Garrido-Moreno and Padilla-Melendez, 2011). Knowledge sharing results in many benefits including cost avoidance, improved productivity, and sharing experience. However, this capability requires collaboration and mutual support among functional units for CRM deployment (Dong, 2012). The following quotes emphasise the role of knowledge sharing in this study:

> *"The rest of the phases should be applied, and the management should link the system integrally with the other branches/departments like retail. This integration will make the system more useful; will reduce time and routine work."* (Relationship manager, Bank)

> *"The system helps integrating our knowledge about customers with all branches over the world, as we all use a central online database which has information about all customers who have dealt with any branch of our company across the world."* (Reservation manager, Hotel)

> *"90% of the divisions have a relationship with the system, even the cleaning team. For example, it includes IT, accounting, operators, reservation, sales, and bills divisions. The system makes customer information available to all divisions at the hotel. Every division uses different features of the system as relevant to the nature of the job and type of interaction with clients. So, the system is very beneficial to everyone in the hotel."* (IT manager, Hotel)

Consequently, knowledge management capabilities (capture, manage, and transmit) are indispensable perquisites for employees to realise the benefits of CRM. On this basis, the following hypotheses:

> *H20: Capturing customer knowledge will have a positive effect on employee perceptions of CRM.*

> *H21: Managing customer knowledge will have a positive effect on employee perceptions of CRM.*

H22: Transmitting customer knowledge will have a positive effect on employee perceptions of CRM.

These hypotheses are concerned with the knowledge management capabilities within an organisation and their positive influence on employees' perception of CRM. H20 states that that organisational ability to collect and store knowledge about customers promotes CRM offerings to employees. H21 implies that organisational ability to manage customer knowledge will lead to better understanding of CRM amongst employees. H22 suggests that organisational capability to engage with the process of sharing knowledge helps employees to foresee reciprocation or even benefits of CRM.

4.6 Conceptual Framework

Figure 4.1 depicts the conceptual framework developed by integrating extant studies with the exploratory interviews conducted in this study. This proposed model was based upon an attempt to develop a holistic view of CRM adoption. Two main phases were used to achieve that purpose: i) multi-disciplinary review of CRM and its adoption, and ii) in-depth interviews with varied stakeholders. The factors in the conceptual framework originated from the literature were tested for relevance and refined, based on in-depth individual interviews with varied practitioners. As a result, these two sources helped to generate two adoption stages/factors and twenty one sub-factors as related to each concept in the conceptual framework, as shown in Figure 4.1.

Figure 4.1: Proposed Conceptual Framework 1
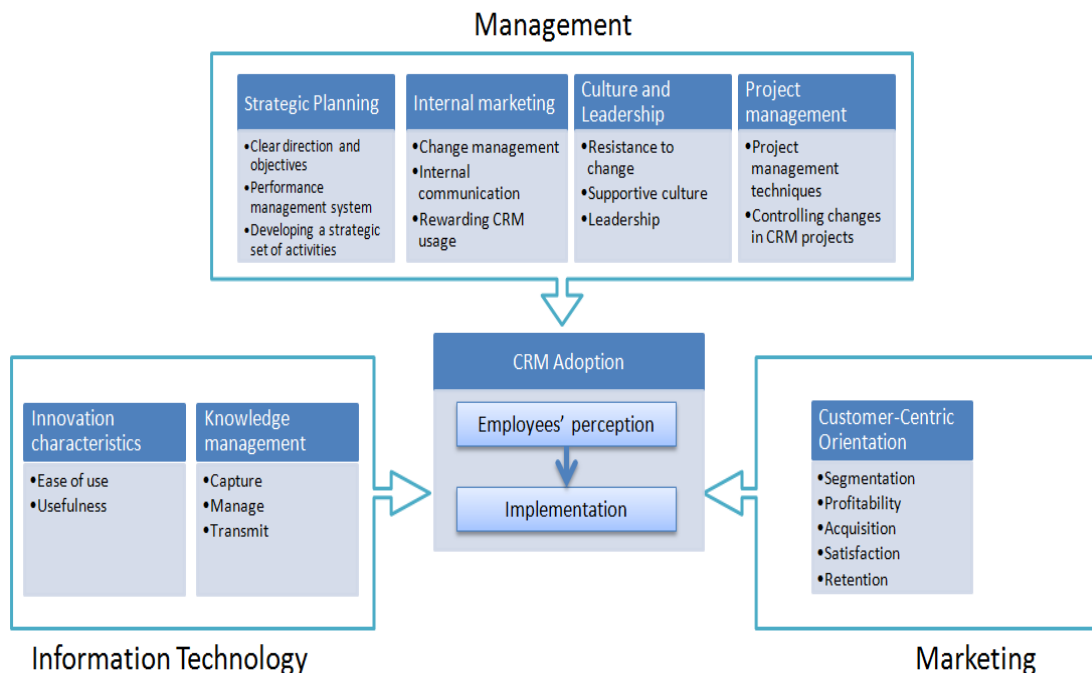
The conceptual framework originated twenty two hypotheses which will be tested in the empirical quantitative stage of the study, as shown in Table 4.7.

Table 4.7: A List of Hypotheses

Relative concept	Number	Hypotheses
Adoption	H1	Employees' perceptions of CRM benefits mediate the effect of adoption factors on an organisation's implementation of CRM.
Strategic planning	H2	Having a direction and objectives that embrace a clear CRM strategy will have a positive effect on employee perceptions of CRM.
	H3	Strategically covering CRM performance measurement mechanisms in an organisation will positively affects employee perceptions of CRM benefits.
	H4	Integration of strategic set of activities around CRM will have a positive effect on employee perception of CRM.
Customer-centric orientation	H5	Organisation's emphasis on segmentation analysis will have a positive effect on employee perceptions of CRM.
	H6	Organisation's emphasis on analysing customer profitability will have a positive effect on employee perceptions of CRM.
	H7	Organisation's emphasis on customer acquisition will have a positive effect on employee perceptions of CRM.
	H8	Organisation's emphasis on customer satisfaction will have a positive effect on employee perceptions of CRM.
	H9	Organisation's emphasis on customer retention will have a positive effect on employee perceptions of CRM.
Internal marketing	H10	Change management in an organisation will have a positive effect on employee perceptions of CRM.
	H11	Developing internal communication in an organisation will have a positive effect on employee perceptions of CRM.
	H12	Rewarding CRM usage will have a positive effect on employee perceptions of CRM.
Culture and leadership	H13	Resistance to change in an organisation will have a negative effect on employee perceptions of CRM.
	H14	Supportive culture in an organisation will have a positive effect on employee perceptions of CRM.
	H15	Leadership in an organisation will have a positive effect on employee perceptions of CRM.
Project management	H16	Project management techniques in an organisation will have a positive effect on employee perceptions of CRM.
	H17	Managing changes in CRM projects will have a positive effect on employee perceptions of CRM.
Technology acceptance model	H18	Perceived ease of use of CRM system will have a positive effect on employee perceptions of CRM.
	H19	Perceived usefulness of CRM system will have a positive effect on employee perceptions of CRM.
Knowledge management capabilities	H20	Capturing customer knowledge will have a positive effect on employee perceptions of CRM.
	H21	Managing customer knowledge will have a positive effect on employee perceptions of CRM.
	H22	Transmitting customer knowledge will have a positive effect on employee perception of CRM.

4.7 Summary

This chapter sets out to discuss the interviews from the qualitative study as inputs into generating a conceptual framework of factors, which were thought relevant in understanding the CRM adoption process. In-depth interviews with various stakeholders from two different organisations (Bank A and Hotel B) were employed to identify those factors. Nine practitioners from different functional units and at different organisational levels in Jordan were interviewed. Interviews were analysed by comparing data against the literature as well as comparing data in one case with other cases. For example, analysis of responses concerning knowledge management capability indicated that results were compatible with the finding of most prior studies of CRM adoption. However, significant differences between the two cases (the bank and the hotel) were observed. On one hand, the respondents from the Bank case study reported that although CRM was not based on capabilities related to knowledge management, they emphasised that KM was essential and therefore needed for effective CRM. On the other hand, respondents from the Hotel case study seemed to consider knowledge management capabilities as a main sub-process of CRM, which enabled organisational learning and achievement of CRM goals.

The interview results indicated that the views of interviewees were consistent with the reviewed literature of CRM and its adoption. Furthermore, the results suggested adding knowledge management capabilities as key drivers of CRM adoption. The combination of interview results and the reviewed literature were keys for the development of 22 hypotheses. As a result a conceptual framework depicting the 21 factors affecting employees' perception of CRM, and the employees' perception affecting CRM implementation was proposed, see Table 4.8. In the next stage of the study, this conceptual framework will be tested in the quantitative study.

Table 4.8: A List of Sub-Factors for each Factor in the Conceptual Framework 1

	Disciplines						
	Marketing	**Management**				**IT**	
Factors	Customer-centric orientation (Swift, 2000)	Strategic Planning (Meadows & Dibb, 2008)	Internal marketing (Christopher et al., 2002)	Culture and leadership (King & Burgess, 2007)	Project Management (Ocker& Mudambi, 2003)	Knowledge management (Massey et al., 2001)	Innovation (WU & WU, 2005)
Sub-Factors	customers' profitability	Clear direction embracing CRM strategy.	Change management	Resistant to change	Project Management Techniques	Capture	Ease of use
	Segmentation	Covering CRM in the performance measurement system	Communication	Supportive culture	Change control methods	Manage	Usefulness
	Acquisition	Developing a strategic set of activities for CRM adoption	Reward CRM usage	Leadership		Transmit	
	Satisfaction						
	Retention						

From the marketing point of view, the results from the interviews suggest that CRM should be considered as a concept that provides improved value to the customer. Hence, the essentials of customer-centric orientation of an organisation should be seen as coexisting with and facilitating the interest of employees in CRM, as an effective business approach. Table 4.8 illustrates this notion in which elements of a customer-centric approach are proposed to influence understanding of CRM values amongst employees. In particular, a customer-centric orientation places customer profitability, segmentation, acquisition, satisfaction, and retention at the centre of the CRM adoption process.

The general consensus from the management viewpoint is that organisational and communication issues are the most important elements in the emerging strategic business process associated with the adoption of CRM. Moreover, the adoption of CRM rests on the proper understanding on the part of both employees and management, including project management. Four main themes related to the management discipline are concluded from the interviews results: strategic planning, internal marketing, organisation culture and leadership, and project management.

In the realm of IT, the findings of the interviews point to two main themes in the conceptual framework: innovation characteristics and knowledge management capabilities. First, the innovation characteristics are features that explain system use behaviour, referring to the idea that employees must use CRM to achieve a company's goals. The results confirm prior research suggesting that the TAM is a useful model for predicting and explaining employees' behaviour in adopting CRM. This model is composed of two constructs: perceived usefulness and ease of use, which respondents confirmed as important determinants of their attitudes towards CRM. Second, the results demonstrate that knowledge management capabilities are essential for establishing an organisation's ability to benefit from CRM initiatives. Organisations need to capture, manage, and share customer knowledge so that employees can make sense of CRM.

The results of the qualitative study will be used to develop scale items of constructs in the conceptual model, as shown in Figure 4.1. The detailed stages of developing the research model and scale items will be discussed in the next chapter.

Chapter 5: Research Model and Scale Development

5.1 Introduction

Following on from the qualitative study, this chapter sets out to discuss the stages of developing the research model and scale items in this study. The results of the qualitative study were the main input into generating research models for further investigation. The detailed procedures for developing the research model and scale items will be elucidated in this chapter, including the procedures followed in order to produce and develop the research questionnaire.

5.2 Stages of Developing the Research Model

A widely used methodology of scale development procedure in marketing research, developed by Churchill (1979), includes eight consecutive steps to develop scale items including specification of domain, generation of items, collecting data, purifying measures, collecting data, assessing reliability and validity, and developing norms. Churchill's (1979) paradigm for developing a research instrument and its measures has provided the basis for constructing this research instrument and its measures. In addition, the author of this study has developed updates and improvements to Churchill's (1979) work, and sketched the research stages in accordance with this research context. The following flow chart (Figure 5.1) shows the stages of developing the research model, which is followed by a brief description of each stage.

Figure 5.1: Stages of Developing the Research Model
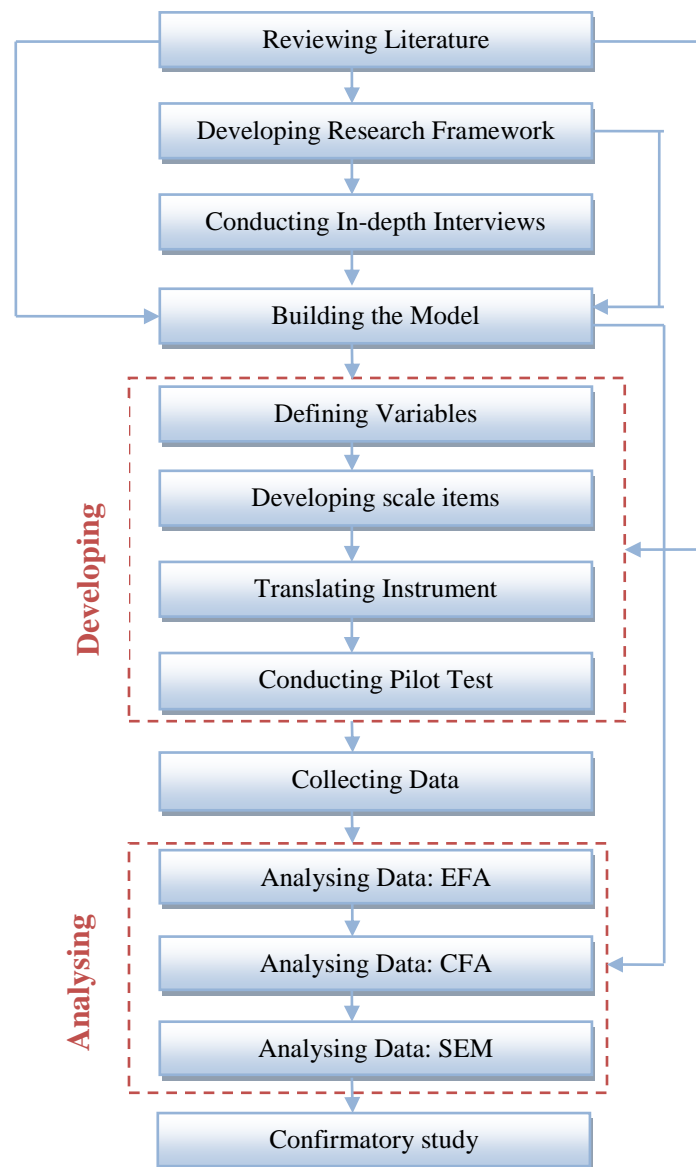
5.2.1 Reviewing the Literature

In order to investigate CRM adoption within organisations, a review of innovation adoption literature was conducted. Accordingly, this study adapts Ko *et al.*'s (2008) model to focus on a multi-stage hierarchal process of CRM adoption investigating employees' perception of CRM, and its implementation within an organisation. Since this research aims to develop a holistic conceptualisation of the major factors affecting organisations' adoption of CRM system, a multidisciplinary approach was advocated. The review of the literature, in Chapter two, demonstrates that the concept of CRM is a joint development between marketing, management and IT disciplines.

Marketing scholars view CRM as a concept that adds value to the customer; they are primarily concerned with the essentials of customer-centric and relationship

marketing as an effective business strategy, given that customer-centric orientation places the customer's knowledge, interaction, acquisition, value, satisfaction, and retention at the centre of the value creation process. Management researchers focus on organisational and communication issues surrounding the development and implementation of the business strategy, and the role of personnel in managing the adoption of the CRM. Overall, researchers from this area suggest that an organisation's strategic plan, internal marketing, organisation culture and leadership, as well as project management, have a strong influence on the organisation's successful adoption of CRM. IT researchers often focus on knowledge management initiatives, CRM usage and implementation factors (Wu and Wu, 2005). Furthermore, they indicate that system use has a strong effect on employees' adoption of CRM in organisations, referring to the idea that employees must use the CRM system to achieve their marketing goals. A number of studies have successfully adopted and extended the technology acceptance model (TAM) to examine the acceptance of new technologies in the CRM domain.

5.2.2 Developing the Research Framework

The multi-disciplinary review of the literature generated a number of constructs considered as influencing CRM adoption. The relationship between these constructs are conceptualised based on previous research, as outlined in the literature chapter. Consequently, a conceptual research framework was proposed based on incorporating key success factors that include the organisation's customer-centric orientation, strategic plan, internal marketing, organisation culture and leadership, project management, and innovation essentials.

5.2.3 In-depth Individual Interviews

The individual interviews aimed to explore the subjective perceptions and experiences of a variety of marketing managers, CIOs, and employees working with CRM. The developed conceptual framework from the CRM and CRM adoption literature was used as the basis of the interview design. Nine in-depth interviews with managers and employees at two different organisations in Jordan were conducted to achieve the required objectives. Participants in the study had more than two years experience in managing or using CRM systems and the participation was voluntary.

5.2.4 Building the Model

Based on prior related research and interviews conducted in the preliminary investigation, a model of the adoption factors of CRM was constructed. The in-depth interviews were used to ensure that the researcher took into considerations the main factors that might affect organisations' adoption of CRM in the research context.

Once theories have been posited, research hypotheses should be established. There are two forms of hypotheses, a) null and b) research. According to Kaplan (2004), researchers' use of the null hypothesis and Null Hypothesis Significant Testing (NHST) is criticised. The main criticisms are there are both overrated, and often cause

confusion. This is why he argues that researchers should go beyond the null ritual. For this reason, the author of this study simply opted to avoid or ignore the null hypothesis. However, it is important to consider that although no null hypothesis was used in this study, the potential for the statistical tools used (i.e. chi-square, p-value) should guide the careful and sensitive appreciation of the research findings.

The conceptual framework was based on a number of constructs which as unobservable (latent) variables could not be measured directly, but could be measured by variables identified as indicators. By reviewing extant research in the same context, the researcher identified relevant indicators that could be used to measure constructs.

5.2.5 Developing the Instrument

The process of developing the research instrument (questionnaire) in this study can be divided into four stages: i) defining variables, ii) developing scale items, iii) translating the instrument, and iv) conducting a pilot test. This research instrument used three types of questions: nominal scale, seven-point likert scale, and open-ended questions. The final version of the questionnaire is presented in the Appendix. After providing respondents with a general and simple definition of CRM system, the instrument was designed to include a four-part questionnaire. The first part, related to the CRM in the organisation, was used to collect basic information about the CRM system used and its implementation status (measured by 14 scale items). The second part related to the organisation's adoption of CRM. This part of the questionnaire was used to collect information regarding employee perceptions of the benefits of CRM benefits (measured by 9 scale items), and the sub-factors affecting CRM adoption (measured by 85 items). The third part related to organisational characteristics including industry, number of employees, turnover, ownership type, operation, and speed of response to changes in the external environment. The fourth part investigated the respondents' characteristics including gender, age, education level, job role, work experience, and use of technology.

I. Defining Variables

This research incorporated eight factors in the conceptual framework including: strategic planning, customer-centric orientation, culture and leadership, internal marketing, project management, knowledge management capability, innovation factors, and adoption. Each factor was introduced and re-examined in the literature review chapter. A brief definition of each factor is presented as following:

Adoption: the acceptance and continued use of a product, service, or idea (Sathye, 1999).

Strategic planning: a process of developing and implementing "a course of action or direction that an enterprise should take to achieve its objectives." (Cory, 1988:5).

Customer-centric orientation: a resourced and organised strategy which aims to segment, interact, satisfy, and build long term relationship with the customers (Wang and Qualls, 2007).

Culture and leadership: the dynamic process of constructing and managing organisational culture which involves the people element in the essence of leadership (Schein, 2004).

Internal marketing: any form of marketing that focuses on changing employees' attention to the internal activities, in order to successfully implement marketing plans (Ballantyne *et al.*, 2000).

Project management: a framework of practical professional capability to deliver a project in a set time frame, meeting a given mission by organising a dedicated project team, and effectively combining the most appropriate technical and managerial methods (Gentle, 2002).

Knowledge management: the process of capturing, managing and transmitting knowledge through the organisation and across the organisational boundary (Von Krogh *et al.*, 2000)

Innovation factors: individual (employees') beliefs of CRM uses; this study looks specifically at two major beliefs, namely perceived usefulness and perceived ease of use, which were suggested by Davis (1986) in his TAM model.

The in-depth interview results together with the factors found in the literature helped the researcher to generate twenty three sub-factors under each factor in the conceptual framework, as depicted in Table 5.1. These twenty four sub-factors are identified as the unobserved/latent variables of the study.

Table 5.1: A List of Observed Variables (indicators) for Each Unobserved (Latent variables)

Factors	Indicators
Adoption	AD1: Perception towards CRM
	AD2: Adoption
	AD3: Implementation
Strategic Planning	SP1: Clear direction and objectives that embrace CRM strategy.
	SP2: Covering CRM activities in the performance measurement system
	SP3: Development and integration of a strategic set of activities
Customer-centric orientation	CS1: Customers' profitability
	CS2: Segmentation
	CS3: Acquisition
	CS4: Customers' satisfaction
	CS5: Retention
Culture and leadership	CL1: Resistant to change
	CL2: Supportive organisational culture (team working and a cross-functional)
	CL3: Leadership
Internal marketing	IM1: Analyse and redesign organisation's process (Change management)
	IM2: Communication
	IM3: Reward CRM usage
Project management	PM1: Project Management Techniques
	PM2: Change control
Innovation	IN1:Ease of use
	IN2:Usefulness
Knowledge management	KM1: Capture
	KM2:Manage
	KM3:Transmit

II. Developing Scale Items

Following the exploratory phase, the construction and validation of the research instrument was commenced. According to Churchill (1979), there are a number of techniques for developing scale items in marketing research, including literature searches, experience surveys, critical incident analysis, and interviews. Moore and Benbasat (1991) contend that applying these techniques can facilitate the production of scale items with a relatively high degree of content validity. In this study, the literature review and in-depth interviews were used to identify the final set of observed variables (indicators) for each unobserved (latent variables). This would aid transforming academic theories in such a way as to help practitioners think about their related issues with CRM adoption. Consequently, the questionnaire was designed to include scales to measure all of the previously outlined (see Table 5.1) sub-factors as related to each factor in the conceptual model.

A number of instruments have been published for the purpose of empirically investigating factors affecting CRM adoption. However, relatively few of these studies have investigated the subject from varying contexts and disciplines, including marketing, management and IT discipline. Hence, a number of published instruments from separate studies across varying disciplines were consulted to generate scale

items for the sub-factors presented in Table 5.1. Existing scale items were combined and modified to create scale items for all of the sub-factors. In addition, all sub-factors were measured by using a seven-point likert scale (1- "Strongly Disagree" and 7- "Strongly Agree"). The following will demonstrate the questions measuring sub-factors within each relevant factor: adoption, strategic planning, customer-centric orientation, culture and leadership, internal marketing, project management, knowledge management capability, and innovation factors.

Adoption

In this study, three sub-factors were used to identify the CRM adoption status. Firstly the perception of CRM benefits (AD1- Perception) was measured by nine items, as shown in Table 5.2, based on Ko *et al.* (2008) and Sophonthummapharn (2008). Second was the adoption of CRM (AD2); although Ko *et al.* (2008) measured this sub-factor by asking the respondents to answer yes or no to indicate whether the organisation was using the CRM system, this study did not explicitly include a measure question in the questionnaire. This is due to the fact known by the researcher that all of the organisations participating in this study were already using the CRM system. Thirdly, the implementation sub-factor (AD3- Implementation) was measured by fourteen items adapted from Ko *et al.* (2008).

Table 5.2: Adoption Scale Items

Sub-Factors	Scale Items
AD1: Perception (Ko *et al.*, 2008; Sophonthummapharn, 2008)	• Gain competitive advantage.
	• Analyse customer requirements more efficiently.
	• Identify new selling opportunities.
	• Increase customer satisfaction.
	• Increase customer loyalty.
	• Increase customer retention rate.
	• Increase revenue and profitability.
	• Increase employee productivity.
	• Enhance customer relationships.
AD3: Implementation Ko *et al.* (2008)	• Developing customer database
	• Personal customisation through customer database analysis
	• Developing products through customer involvement
	• Offering customer loyalty programs
	• Offering real-time customer services
	• Managing customer loyalty
	• Managing customer complaints
	• Developing member-only site in your organisation's website
	• Categorising/segmenting customers based on spending (lifetime value)
	• Customising services depending on customers categories/segments
	• Providing customer with information via email
	• Developing sales promotion strategy
	• Providing products and services in one place
	• Automating cross-sell and up-sell capability

Strategic Planning

The following table (Table 5.3) shows three sub-factors within the strategic planning context including clear direction and objectives embracing CRM strategy (SP1), Covering CRM activities in the performance measurement system (SP2), and development and integration of a strategic set of activities (SP3). SP1 construct was measured by seven items based on a Meadows and Dibb (2008), Chang *et al.* (2010), and Rapp *et al.* (2010). SP2 had six scale items based on Stefanou *et al.* (2003), Meadows and Dibb (2008), and Trainor *et al.* (2011). Finally, SP3 had three items based on Salomann *et al.* (2005), Raman *et al.* (2006), Meadows and Dibb (2008), and Richard (2008). Each sub-factor was measured by a seven-point scale for each question as shown in the following table.

Table 5.3: Scale Items for the Strategic Planning Sub-factors

Sub-Factors	Scale Items
SP1 (Meadows and Dibb, 2008; Chang *et al.*, 2010; Rapp *et al.*, 2010).	• Our organisation has clear business vision and direction.
	• Our organisation has clear business goals related to customer acquisition, development, retention and reactivation.
	• The majority of our employees are aware of the organisation's vision.
	• Our approach to customers is an important part of the organisational vision.
	• In our organisation, CRM is an important strategic issue.
	• There is a set of clear priorities for CRM projects.
	• These CRM projects are consistent with our organisation's vision and statements.
SP2 Stefanou *et al.* (2003); Meadows and Dibb (2008); Trainor *et al.* (2011)	• We regularly measure the effectiveness and the success of CRM activities.
	• Our approach to CRM is reflected in our performance measures used throughout our organisation.
	• Acquiring customer knowledge (understanding customer and analysing customer information) is a key performance measure used throughout our organisation.
	• Promoting effective communication channels with customers is a key performance measure used throughout our organisation.
	• Customer loyalty is a key performance measure used throughout our organisation.
	• Customer value (customer equity and customer lifetime value) is a key performance measure used throughout our organisation.
SP3 (Salomann *et al.*, 2005; Raman *et al.*, 2006; Meadows and Dibb, 2008; Richard; 2008)	• There is a top-down planning process for linking CRM strategy to business needs.
	• All of our business functions (e.g. marketing/sales, manufacturing, research and development) are integrated in serving the needs of our target markets.
	• Our organisation allocated multi-functional teams that work on plans to achieve CRM objectives.

Customer-Centric Orientation

The customer-centric orientation factor included five sub-factors: customers' profitability (CS1), segmentation (CS2), acquisition (CS3), customers' satisfaction (CS4), and customers' retention (CS5). Each sub-factor was measured by a seven-point scale for each question as shown in the following table (Table 5.4).

Table 5.4: Scale Items for the Strategic Planning Sub-factors

Sub-Factors	Scale Items
CS1 (Reinartz *et al.*, 2004; Khan, 2008; Wu and Wu, 2005; Law, 2009)	• We continuously track customers' information in order to assess customers' lifetime value.
	• We use information technology to help us determine which of our current customers are of the highest value.
	• Our organisation systematically attempts to manage the expectations of high value customers.
CS2 (Reinartz *et al.*, 2004; Khan, 2008; Wu and Wu, 2005; Law, 2009)	• We use customer information to segment markets.
	• We segment customers based on their lifetime value (e.g., high, moderate, and low).
	• We are structured to optimally respond to groups of customers with different needs.
CS3 (Reinartz *et al.*, 2004; Khan, 2008; Wu and Wu, 2005; Meadows and Dibb, 2008; Law, 2009)	• We made appropriate attempts to attract prospects.
	• We have a continuous process in place for getting feedback to improve the acquisition process.
	• We differentiate our acquisition investments based on customer lifetime value.
	• We have technologies that allow for one-to-one communications with potential customers
CS4 (Richard, 2008; Rapp *et al.*, 2010)	• Our organisation strategy is driven by customer satisfaction.
	• We frequently and systematically measure customer satisfaction.
	• Our organisation responds quickly to negative customer satisfaction wherever it may occur in the organisation.
CS5 (Reinartz *et al.*, 2004; Meadows and Dibb, 2008; Law 2009)	• In our organisation sustaining relationship with customers is more important than customers' acquisition.
	• We actively stress customer loyalty or retention programmes.
	• We have systematic training procedures for helping employees deal differently with high- and-low value customers.

Culture and Leadership

The questions measuring the culture and leadership factors are presented in the following table (Table 5.5). There were three sub-factors: resistance to change (CL1), supportive organisational culture (team working and a cross-functional) (CL2), and leadership (CL3). Each sub-factor was measured by a seven-point scale for each question as shown in the following table.

Table 5.5: Scale Items for the Culture and Leadership Sub-Factors

Sub-Factors	Scale Items
CL1 (Law, 2009; Rapp *et al.*, 2010)	• The top management has full confidence in implementing change.
	• The introduction of CRM raised a conflict of interest among different functional units.
	• We have had very few problems fitting CRM within our organisation culture.
CL2 (Chen *et al.,* 2009b; Keramati *et al.*, 2009)	• Our organisation emphasises the need for innovation for development.
	• People in this organisation stress quick response to changing market conditions.
	• In general, our organisational culture has a flexibility to accept change readily.
	• Our organisational structure facilitates cross-functional cooperation and collaboration.
CL3 (Law ,2009; Meadows and Dibb, 2009; Rapp *et al.*, 2010)	• Top management provides full support to practicing CRM, in order to keep good relationship with customers.
	• In order to change for the better, senior management believes that good customer relationship is a necessity.
	• Top management constantly monitors our level of commitment and orientation to serving customers' needs.
	• Our top management formally promotes and encourages cross-functional teamwork.
	• CRM has a strong champion at the top of our organisation.

Internal Marketing

The questions measuring the internal marketing are presented in the following table (Table 5.6). There were three sub-factors: analyse and redesign organisation's process (Change management) (IM1), communication (IM2), and reward CRM usage (IM3). Each sub-factor was measured by a seven-point scale for each question as shown in the following table.

Table 5.6: Scale Items for the Internal Marketing Sub-Factors

Sub-Factors	Scale Items
IM1 (Avlonitis and Panagopoulos, 2005; Karakostas *et al.*, 2005; Law, 2009)	• Our organisation tries to help employees understand what is happening in the organisation.
	• Our organisation gives employees opportunities to be involved in the decision-making process.
	• Our organisation tries to help employees understand the dynamics of the market situation (competitors' pressure, customer satisfaction, and the new marketing approach which makes use of information technology).
	• The training that was provided by our organisation has helped me to understand management's expectations regarding CRM.
IM2 (Law ,2009; Meadows and Dibb ,2009; Pedron ,2009)	• Effective communication channels often support the implementation of CRM.
	• Staff training emphasises internal communication and cooperation across departments to build customer relationships.
	• Our organisation encourages the communication between different levels and functional units.
	• The development of communication systems (e.g. email, fax, mobile SMS, website, and social media) helps our organisation communicate better across different departments and with customers.
	• Communication in our organisation helps the employees to know the details of the CRM programme and the problems which may occur during the execution.
IM3 (Plakoyiannaki, 2005; Pedron, 2009)	• Our organisation's policy rewards the use of CRM.
	• In our organisation, employees who use CRM to provide excellent customer service are rewarded for their efforts.
	• Our performance measurement and rewards systems encourage employees to work with CRM system.

Project Management

The questions measuring the project management factor are presented in the following table (Table 5.7). There were three sub-factors: project management techniques (PM1) and change control (PM2). Each sub-factor was measured by a seven-point scale for each question as shown in the following table.

Table 5.7: Scale Items for the Project Management Sub-Factors

Sub-Factors	Scale Items
PM1 (Reinartz *et al.*, 2004; Rapp *et al.*,2010; Trainor *et al.*,2011)	• Our organisation is content with how our CRM project priorities are set.
	• In our organisation, there are appropriate project schedules, plans and clear strategy for CRM implementation.
	• It is difficult to train users on how to use the CRM system.
PM2 (Gefen and Ridings, 2002; Wilson *et al.*, 2002; Richard, 2008; Mckay, 2009)	• Our information technology (IT) function constantly monitors the performance of CRM functions.
	• In our organisation, users' ideas are given due attention in the CRM planning and implementation process.
	• Our IT function often meets changes in CRM requirements by users or due to business environment change.
	• Our IT function has the ability to adjust CRM project plans on an ad hoc basis.

Innovation

The questions measuring innovation sub-factors are presented in the following table (Table 5.8). There were two sub-factors: ease of use (IN1), and usefulness (IN2). Each sub-factor was measured by a seven-point scale for each question as shown in the following table.

Table 5.8: Scale Items for the Innovation Sub-Factors

Sub-Factors	Scale Items
IN1 (Davis, 1989; Richard, 2008; Baker, 2009; Ramdani *et al.*, 2009)	• My interaction with CRM is clear and understandable.
	• Our CRM system is easy to use.
	• It is easy to get our CRM to do what I want it to do.
IN2 (Davis, 1989; Wu and Wu, 2005; Richard, 2008)	• Our CRM enhances my effectiveness in my job.
	• Our CRM is useful to my job.
	• Implementing CRM increases the profitability of our organisation.

Knowledge Management

The questions measuring the knowledge management factor are presented in the following table (Table 5.9). There were three sub-factors: capture (KM1), manage (KM2), and transmit (KM3). These sub-factors were developed from the knowledge management process explained in the literature chapter. Each sub-factor was measured by a seven-point scale for each question as shown in the following table.

Table 5.9: Scale Items for the Knowledge Management Sub-Factors

Sub-Factors	Scale Items
KM1 (Jayachandran, 2004; Reinartz *et al.*, 2004; Sin *et al.*, 2005; Abdullateef *et al.*, 2010; Hung *et al.*, 2010)	• Our organisation invests in technology to capture and acquire real time customer information and feedback.
	• We use customer information to develop customer profiles.
	• Our organisation maintains a comprehensive database of our customers.
KM2 (Croteau & Li 2003; Hung *et al.*, 2010)	• Our organisation is able to provide fast customer response because of integrated customer knowledge across several functional areas.
	• Our organisation is able to provide fast decision-making due to customer knowledge availability and precision.
	• Our organisation can provide authentic customer information for quick and accurate customer interaction.
	• Our organisation can generally predict future customers' expectations.
KM3 (Richard , 2008; Law, 2009; Pedron, 2009)	• Individual customer information is available at every point of contact.
	• Information on customers is disseminated throughout the organisation.
	• In our organisation customer information is redirected to the right people.

III.   *Translating the Instrument and Conducting a Pilot Test*

This study was conducted in Jordan, and since Arabic is the main language spoken there, the empirical study was conducted in the Arabic language. The researcher had translated the questionnaire from English language into Arabic. The first draft of the Arabic questionnaire was reviewed by Muneer Abbad (Assistant Professor in Jordan), who is fluent in both languages, used to translating questionnaires from English to Arabic, and possessing in-depth knowledge of the subject area. After preparing the final version of the questionnaire, it was piloted with three participants employed at a hotel in Jordan. This was to ensure that the questions in the questionnaire worked as required with the kind of participants involved, especially given that the instrument was translated and delivered into a different language (Oppenheim, 1992). Based on the participants' feedback some questions were reworded, in order to deliver a more specific and clear meaning.

5.2.6 Collecting Data

Initially, relevant participants were accessed through personal contacts developed in Jordan, the researcher being resident there and through publicly available information

in the trade press. Therefore, each organisation's executive level and potential participants were asked to read and approve the participant information sheet before conducting a self-administered questionnaire which was distributed to motivate respondents, and give the chance to clarify doubts and increase the response rate. In order to assure participants of their anonymity, a covering letter was sent to tackle this issue and the questionnaire did not ask the participants to provide any individual information. The participants were asked to return the filled questionnaires to the researcher, who did not know the participants but who was present when the participants filled in the questionnaires.

The survey of this study started with providing a definition of CRM, and then asked the participants to fill out four sections. The first section gave brief information about CRM in the organisation, and asked for the participants' perception towards it. The second section included questions asking for a description of the organisation's implementation of CRM strategies. The third section was designed to measure the variables tested in this study. Finally, the fourth section included questions regarding the demographics of participants. The English version of the survey is available in Appendix 1.

5.2.7 Analysing Data

After completing the prior stage of the research, the main statistical techniques used in the analysis were:

1. Exploratory Factor Analysis (EFA) used as the initial step in identifying the latent factors in the questionnaires.
2. Confirmatory Factor Analysis (CFA) applied to the hypothesised measurement models.
3. Structural Equation Modelling (SEM) applied to the structural model to evaluate any relationships between factors that could lead to a better understanding of organisation's adoption of CRM.
4. Analysis of Variances (ANOVA) utilised to determine demographic differences (gender, education, age, work experience, technology experience, and CRM experience) of the factors of the study.

5.2.8 Confirmatory Study

Statistical tools such as confirmatory factor analysis (as implemented by SEM tools) and the SEM are repeatedly employed by researchers to measure the validity and reliability of research instrument measures (Martínez-López *et al.*, 2012). These statistical tools are generally useful for confirmatory investigations which aim to test existing theoretical models. Nevertheless, since the nature of this study, particularly the overall aim of the research, was to develop a new model, it was not envisaged as a confirmatory investigation study. The confirmatory study in this research was conducted mainly to test the research model. Since this research conceptual model was developed initially using an exploratory study, its generalisability could then be established with a confirmatory study which also employed qualitative methods. In

particular, a confirmatory study employing interviews with stakeholders dealing with CRM would aid evaluating whether the empirically investigated conceptual model did cover the main factors affecting organisations' adoption of CRM.

5.3 Summary

In this chapter, the stages used to develop the research model and scale items in this study were examined. The combination of interview results and reviewed literature led to the design of a survey instrument used in this study. The data then will be analysed using a variety of appropriate statistical techniques, such as exploratory factor analysis (EFA) and Structural Equation Modelling (SEM). The data analysis and findings of the collected data will be represented in the following chapter.

Chapter 6: Data Analysis and Findings

6.1 Introduction

Having outlined the research philosophy adopted to develop and test the conceptual framework of this study, this chapter presents the results of the quantitative research and tests hypotheses developed in Chapter four. To recap, the main research question of this study is to investigate factors which lead organisations to adopt CRM. In this chapter, factors affecting CRM adoption are analysed amongst organisations across four industries in Jordan.

Following the introduction, the characteristics of the sample are discussed. This is followed by a section discussing different statistical techniques which could be used to serve the research question. The fourth section describes the analysis strategy used in this study. Exploratory Factor Analysis (EFA) is first used to summarise the scale items, then the two-stage structural model is presented to evaluate the proposed model. The first stage of the measurement model employs Confirmatory Factor Analysis (CFA) to confirm or reject the proposed model. Reliability and validity of items in the measurement model were examined during the CFA stage. The second stage involves using SEM on structural models to evaluate the hypothesised relationships that predict CRM adoption. Finally, the impact of organisation characteristics differences of factors affecting CRM adoption are examined using ANOVA techniques.

6.2 Characteristics of the Sample

6.2.1 The Characteristics of Organisations

In this section, a descriptive analysis of the sample is provided, starting with the outline of the general characteristics of organisations involved in this study, including firm size, age, turnover and industry. This descriptive analysis of the sample aims to present a brief description of the ten organisations participating in this study. The number of organisations in Jordan covered by this study totalled ten, across four industries (banking and finance, telecommunication, hospitality, and automotive). This description of the sample is useful in order to examine whether the collected information is representative in this study.

The data were collected via personally administered questionnaires between June and November 2011. Of the 400 questionnaires distributed, 322 were returned giving a response rate of 80%. After screening and reviewing the questionnaires, 21 responses were found to be invalid due to a large number of missing variables, thus excluded from the study. This left a total number of 301 fully completed responses that were valid for final analysis, that is, for a valid response rate of 75%. This response rate is on a par with previous social science studies which deems the quality of data acceptable. To ensure the response rate, the author personally contacted the key

personnel (senior managers) in a number of organisations to negotiate access in order to collect questionnaires from their staff. Upon agreement from the key personnel and before an appointment was set, the author explained her criteria for selecting respondents, and a list of names was provided to the author of those who were working with CRM and who would be interested in participating in this study. The descriptive statistics of the responding organisations are shown in Table 6.1.

Table 6.1: Organisations' Characteristics Information (n=301)

Variable	No of respondents	Percent (%)
Industry		
Banking and Finance	99	32.8
Telecommunication	83	27.4
Hotel	81	26.9
Automotive	38	12.6
Number of employees		
25 or less	7	2.3
26-50	8	2.7
51-100	12	4.0
101-155	3	1.0
151-200	13	4.3
More than 201	258	85.7
Turnover		
Less than 25m	86	28.6
26m-50m	52	17.3
51m-100m	33	11.0
101m-155m	6	2.0
151m-200m	19	6.3
More than 201m	86	28.6
Ownership type		
Sole proprietorship	20	6.6
Partnership	128	42.5
Joint venture	117	38.9
Subsidiary	10	3.3
Associate company	2	.7
Corporation	6	2.0
Other	18	6.0
Operation of the organization		
Regional	108	35.9
International	193	64.1
Speed of response to change		
Slow	11	3.7
Fair	120	39.9
Fast	170	56.5

As can be seen from Table 6.1, the sample included ten organisations from different industries. Most of the organisations were in the banking and finance industry (32%), telecommunication (27%) and hotels (26%). There were also some participants from

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the automotive industry (12%). In short, the sample was biased towards banking and finance, telecommunication and hotels industries, which represented 87 % of the total, with fewer representatives from the automotive industry.

Results indicate that the majority of the organisations had more than 200 employees, which makes this study biased to organisations with more than 200 employees. Variance in firm size by turnover can be seen in Table 6.1. This shows that 33% of the organisations had a high turnover (over 201 million dinars) and 28% of the organisations had a considerably lower turnover (less than 25 million dinars). For the portion of business ownership type, a little less than half (42%) of the organisations were owned by partnership and a considerable number of the organisations (38%) were owned by joint ventures. A large number of organisations operate internationally (64%) and a considerable number of organisations operate regionally (35%). More than half of the respondents (56%) stated that their organisations have a fast response to changes to the external environment. Other organisations were classified to have a fair (39%) or slow (3%) response to changes.

6.2.2 Demographics of the Respondents

Demography of the 301 sample respondents are explained here. This section consists of questions relating to demographic and basic information of the participants in the survey. They are classified into different key features: age, gender, education level, job role, work experience, technology experience and CRM experience. A summary of the demographic data is shown in Table 6.2.

Table 6.2: Respondents' Demographic Information (n=301)

Variable	No of respondents	Percent %
Gender		
Male	201	66.8
Female	100	33.2
Age		
Less than 20 years	4	1.3
20-30 years	183	60.8
30-40 years	95	31.6
More than 40 years	19	6.3
Education level		
High school	7	2.3
Vocational/ Diploma	28	9.3
Bachelor	217	72.1
Master	40	13.3
Doctorate	4	1.3
Other	5	1.7
Job role		
Top management	28	9.3
Middle management	86	28.6
Operational management	82	27.2
Employee	105	34.9
Work experience		
Less than 1 year	11	3.7
1-2 years	39	13
2-3 years	65	21.6
3-5 years	56	18.6
5-7 years	50	16.6
7 years or above	80	26.6
Technology experience		
1-2 years	29	9.6
2-3 years	50	16.6
3-5 years	59	19.6
5-7 years	42	14
7 years and above	121	40.2
CRM experience		
Less than 1 year	66	21.9
1-2 years	89	29.6
2-3 years	61	20.3
3-5 years	45	15
5-7 years	20	20
7 years and above	20	6.6

The results from the sample show that 66.8% and 32.2% of respondents were male and female, respectively. The majority of respondents were between 20 and 30 years old (60.8%), and mostly tertiary educated as 72.1% had a bachelor degree. Participants were classified as employees (34.9%), operational management (27.2%), middle management (28.6%) and top management (9.3%). Having this variety of stakeholders serves the research purpose of developing a comprehensive understanding of the success factors associated with CRM. As for other demographic data (see Table 6.2), it was found that 85% of participants had more than 2 years of work experience, and 40.2% of participants had more than 7 years of technology experience. Reviewing the participants experience with CRM, it seems that participants had different level of experience, as shown in Table 6.2.

6.3 Statistical Techniques

There are three types which make up the field of statistics: descriptive, inferential and relational statistics (Schumacker and Lomax, 1996). Firstly, descriptive statistics provide the analyst with a means to present a summary and description of the sample main features (Hair *et al.,* 2006). Descriptive statistics are concerned with two types: measures of central tendency (mean) and measures of dispersion (standard deviation and variance). Their purposes are to describe the basic statistical features of the data, and look at their normality.

Secondly, inferential statistics are derived from the application of inductive reasoning which moves from specific facts to general but provisional conclusion. Inferential statistics allow researchers to reason tentative conclusions they wish to draw from the population sample (Cooper and Schindler, 2003). According to Zikmund (2003), inferential statistics provide researchers with a means to draw inferences and make judgment about the sample. Researchers use this type of statistics to draw inference about the sample (Diamantopoulos and Schlegelmilch, 2000). Inferential statistics are mainly used to answer cause-and-effect questions and investigate differences among groups. Cooper and Schindler (2003) summarise the variety of tests to choose from for the inferential statistic: chi-square test, Pearson's correlation coefficient, post-hoc test, one-way analysis of variance, and t-test. There are two main types of inferential statistics: estimation of population values (non-parametric) and testing statistical hypotheses (parametric) (Steinberg, 2008; Tullis and Albert, 2008). Non-parametric tests, such as chi-square test, are applied to nominal data which are described as data that have no order. Alternatively, parametric tests, such as t-test and ANOVA, are applied to data which have a certain value attached to each item (eg: likert-scale responses).

In this research both types of inferential statistics are used. Firstly, the Confirmatory Factor Analysis (CFA) used in this research produces tentative conclusions about the research sample (chi-square test of significance and Pearson's correlation coefficient). Secondly, the t-test and ANOVA analyses used in this research examine difference between varied groups within the sample.

Finally, relational statistics fall into three categories: univariate, bivariat and multivariate analysis (Babbie, 2007). Univariate analysis is the study of a single variable and its attributes of the applicable unit of analysis. Bivariate analysis is testing a relationship or causality between two variables. On the other hand, multivariate analysis involves observation and analysis between more than three or more variables at a time (Babbie, 2007). Using this technique, relationships and statistical dependences between these variables are taken into account. This consideration of statistical dependence distinguishes multivariate analysis from corresponding univariate. Exploratory Factor Analysis (EFA) and structure equation modelling (SEM) are techniques of multivariate analysis used in this research.

Multivariate analysis techniques are common in the social sciences as it enables the analysis of large datasets using complex models (Babbie, 2007). According to Sharma (1996:5), multivariate statistics are "methods for data sets with more than one independent and/or more than one dependant variable". Additionally, they examine differences in observations with respect to two or more variables simultaneously. Multiple regressions, multiple correlations and variances and covariance analysis are among the most used multivariate analysis.

If the numbers of variables increase, the chance of multivariate relationships between variables will increase. Factor analysis is concerned with analysing interrelationships among a large number of variables by explaining these variables in terms of their common underlying dimensions (factors) (Hair *et al.*, 2006). Both exploratory and confirmatory factor analyses are special forms of factor analysis. Choosing the right form of factor analysis should be based on the purpose of the research (Hair *et al.*, 2006). EFA is mainly used to explore data in order to determine the number or the nature of factors when the researcher does not have prior sufficient evidence to form hypotheses about the number of factors underlying the data (Conway and Huffcut, 2003). Hence, EFA is frequently used for theory-generating as opposed to theory-testing using CFA (Stevens, 1996). On the other hand, CFA is used to test prespecified relationships, and to determine the ability of a predetermined factor model to fit an observed set of data.

6.4 Data Analysis Strategy

To address the research problem, two statistical analysis softwares were employed in this study: the Statistical Package for the Social Sciences (SPSS) version 19 and AMOS 19: Structural Equation Modelling (SEM). SPSS is used to perform an Exploratory Factor Analysis (EFA) and provide descriptive analysis of the sample such means and standard deviations. Figure 6.1 shows the main steps and statistical techniques used in the analysis. In the next section, the first step EFA is explained in more details.

Figure 6.1: The Main Steps and Techniques Used in the Quantitative Data Analysis


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┌─────────────────────────────────┐
│   Validity of Measures 1: EFA   │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│   Validity of Measures 2: CFA   │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│      Reliability of Measures    │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│    Testing the Research Model   │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│    Testing Group Difference:    │
│              ANOVA              │
└─────────────────────────────────┘
```
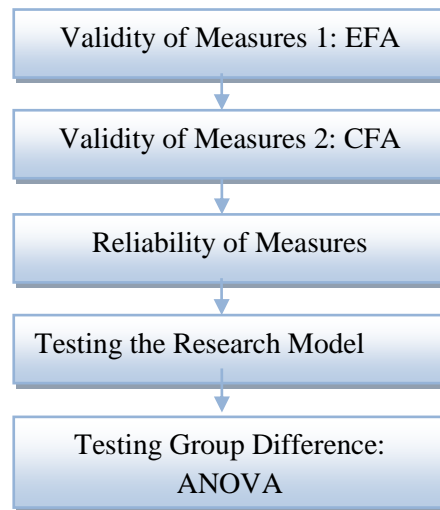
As can be seen from Figure 6.1, Exploratory Factor Analysis (EFA) was first undertaken to identify construct validity of the scales as suggested in the conceptual model. EFA also helps to understand the structure of factors affecting CRM adoption by exploring if the items can be grouped under the factors proposed in the conceptual model.

After EFA analysis, Confirmatory Factor Analysis (CFA) using SEM was used to test the measurement model. SEM was employed using the two-step model-building approach recommended by Anderson and Gerbing (1988): the assessment of the measurement model and assessment of the structural model. Firstly, the measurement model aimed to develop the underlying measures by specifying the relationships among observed (measured) variables underlying the unobserved (latent) variables. In the measurement model step, the entire set of items was subjected to CFA in order to verify and examine the underlying constructs, as well as to provide evidence of dimensionality, scale reliability and validity. In investigating reliability, the internal consistency of multi-item scales, used in this study, was assessed using Cronbach's alpha and CFA. The measurement models also provided an assessment of convergent and discriminant validity (or construct validity) (Churchill, 1979). Once the scale had been developed to have adequate measurement properties, the proposed structural model was revised and assessed using SEM.

Following SEM the research hypotheses were tested in step two (the assessment of the structural model). Finally, a series of Analysis of Variances (ANOVA) were conducted to determine some general characteristics of the respondent companies' differences as to the factors of the study.

6.5 Exploratory Factor Analysis

Factor analysis is a series of procedures which attempts to identify and explain the correlations among variables and to exploring dimension of the scales. Using factor analysis, the relationship among a large set of variables is examined and the underlying structure of factors is examined based on correlation between observed variables. Factor analysis is also used to identify smaller sets of salient variables from a larger set to be used in subsequent multivariate analysis with minimum loss of information (Malhotra, 2007).

The main types of factor analysis are Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). According to Hair *et al.* (2006:162), EFA is "a highly useful and powerful multivariate statistical technique for effectively extracting information from large bodies of interrelated data". In EFA approaches, researchers seek ultimately to find a model which fits the data and has theoretical support. In this study, EFA was used as an initial step to find out whether the underlying factors of the items were those suggested in the conceptual model and whether new items in the survey were grouped to the same extent as proposed. In the EFA analysis, there were generally five main steps: defining the objective of EFA, designing EFA, determining the assumptions of EFA, estimating EFA, and interpreting EFA.

a) Defining the Objective

The primary objectives of EFA, which are data summarisation or data reduction, should be identified as the first step. The difference between the objective of data summarisation and data reduction depends upon the ultimate research question. In summarising the data, the ultimate research question is to better understand the interrelationships among the variables. Summarising data is concerned with investigating the underling correrational pattern shared by the variables to develop theoretical models. It provides the researcher with a clear understanding of the underlying variables or factors, and allows the researcher to represent the data with a fewer but representative number of variables. Hence, factor loadings representing the correlation coefficient between variables (rows) and factors (columns) are all that is required for the data summarisation analysis. While data reduction simplifies data structure by revealing a smaller number of underlying factors, it helps to reduce the data to fewer variables, which represent the underlying factors, by deriving an empirical value or factor score for each factor and then substituting this value for the original values.

In this research, the data summarisation was considered to be the main objective of EFA in order to determine the interrelationships among variables in the proposed model. The use of EFA as a data summarisation technique would serve the study as large number of variables could cause the study to become rather complicated. Moreover, some of the variables might have had more than one aspect, each of which would need to be distinguished and analysed carefully because one variable might correlate with an independent or dependant variable whereas another may not

(Monette *et al.*, 2008). For situations such as these, EFA was used as a first step to summarise and group the number of variables uses in the proposed model. EFA attempts to group intercorrelated variables into more general underlying variables. Thus, EFA offers not only the ability of gaining a clear view of the data but also the possibility of using the output in succeeding analysis (Field, 2000). Subsequently, CFA is used to confirm or reject the possibility that the indicators would sort themselves into corresponding factors in the proposed models.

b) Designing EFA

When designing EFA the correlations matrix between the variables must be calculated. Additionally, the design of the study in terms of the type and number of variables, and the sample size should be carefully considered. In this study, SPSS 19 was used to generate the correlations matrix among variables. Furthermore, emphasis was placed on metric variables (interval data), and the number of observed variables (3-7) were integrated to measure unobserved variables (factors) in the proposed model.

c) Determining EFA Assumptions

The next step in EFA analysis process is determining the assumptions of EFA analysis. According to Hair *et al.* (2006), the critical assumptions underlying EFA are conceptual more than statistical. Since statistical techniques have no means of determining appropriateness of EFA other than correlations among variables, it is the researcher's responsibility to ensure that observed patterns are conceptually valid and appropriate to study with EFA. Conceptual assumptions predict variables and the strengths of associations between them are based on theoretical justifications. In this study, the list of variables and their relationships were developed to reflect the conceptual assumptions adopted by the researcher, as discussed in Chapter four.

From a statistical point of view, since the objective of EFA is to identify interrelated sets of variables, the multiconllinearity degree is one of the main statistical assumptions. Multicollinearity exists when a strong correlations is detected between two or more variables in the analysis (Hair *et al.*, 2006). Before performing EFA, the suitability of data for factor analysis should be assessed first. The correlation matrix should be examined to detect the presence of any substantial number of correlations greater than 0.3, in order for factor analysis to be appropriate (Tabachnick and Fidell, 2001). On the other hand, partial correlations analysis can objectively reflect the correlation among variables. A partial correlation coefficient measures the correlations between two variables without the influence of other variables. Factor correlations should be small (less than .7) to indicate that factor analysis is appropriate, and variables can be explained by the variable loading on the factor. Partial correlation coefficients can be determined using the anti-image correlations in the SPSS, which contain the negatives of partial correlations coefficient.

The Bartlett's test of Sphericity is another method of determining the appropriateness of factor, in that it examines the entire correlation matrix. A statistically significant Bartlett's test of Sphericity suggests that the correlations matrix has significant correlations among at least some of the variables. Bartlett's test is a chi-square test used to examine the hypothesis that the variables are uncorrelated in the populations. A large value of chi-square test and small value of significant ($p < 0$), should favour the rejection of the null hypothesis. In turn, this would indicate that the variables are correlated among themselves and factor analysis is appropriate.

d) Estimating EFA

The next step involves determining the number of factors to include in the final model. There are two main methods for extracting factors to represent the structure of variables in the analysis: common factors analysis and component factor analysis. The decision on which method to use depends on the objective of the factor analysis with some knowledge about the relationships between variables (Hair *et al.*, 2006). While common factor analysis is concerned with identifying the underlying factors which reflect what the variables share in common, component factor analysis or principal component analysis (PCA) is interested in summarising the original variables to a smaller set of independent variables which best represent the interrelations among variables.

In this study, PCA was performed to ascertain the underlying structure of data. The PCA analysis was essential at this stage as it served analyse the structure of the correlations among variables based on a common set of underlying dimensions. The total variance in the data was used to determine the minimum number of factors affecting CRM adoption which would account for maximum variance of data.

Deciding the number of factors to extract or retain was one of the most important decisions after factor extraction. Optimally, the researcher would retain a small set of variables and still adequately represent the entire set of variables. According to Hair *et al.* (2006), there are no current statistical techniques that provide researchers with the most accurate methods to determine the number of factors to retain. However, some stopping criteria are currently utilised to help researchers decide on the number of factors to retain. The numbers of factors, in this study, were empirically identified using a combination of eigenvalues criteria and Scree plot test. Following Kaiser Criteria led to components with eigenvalues (latent root criterion) of greater than one being retained. The Scree test criterion plots the eigenvalues of the factors against the number of factors in their order of extraction. The result is an L-shaped graph used to evaluate the cut-off point. The number of factors retained using Scree test criteria is based on the point at which the curve first begins to flatten out (Tabachnick and Fidell, 2001).

e) Interpreting EFA

To assist the process of factor interpretation, there are three fundamental processes: i) estimate the factor matrix, ii) factor rotations, and iii) factor interpretation and respecification. In the first step, to estimate the factor matrix, the initial unrotated factor structure matrix is computed, containing the factor loadings for each variable on each factor. Factor loadings are the weights and correlations between each variable and the factor. Factor loadings allow an interpretation of the role of each variable in defining each factor.

The next step, factor rotation, involves employing a rotation method to simplify the factor structure. Rotation of factors often improves the interpretation of data by reducing some of the ambiguities accompanying unrotated factor solutions. Varimax is the most popular rotation method by far (Hair *et al.*, 2006). The objective of varimax method is to derive a factor structure in which each factor has a small number of large loadings and a large number of small loadings. This simplifies the interpretation because each given variable should have a high loading on one factor and each factor represents only a small number of variables.

Finally, the researcher seeks to determine the factor loadings for each variable in order to assess the variable's role and contribution in determining the factor structure. During this evaluation process the researcher may need to respecify the factor model due to: i) the deletion of variables from the analysis, ii) specifying different rotation methods, iii) the need to extract a different number of factors, or the researcher may desire to change the extraction method. In this study, the researcher needed to respecify the factor model owing to the deletion of some factors from the analysis. Respecification of a factor model is accomplished by beginning the process of interpretation once again (Hair *et al.*, 2010).

6.5.1 Findings of the Exploratory Factor Analysis (EFA): Factors affecting CRM adoption

Factor analysis is used to explore data whose underlying structure is unknown. However, a basic assumption of factor analysis is that the observed patterns are conceptually valid and appropriate to study with factor analysis (Hair *et al.*, 2010). This is mainly because the factor analysis technique has no means of determining the appropriateness of data other than the correlation among variables.

Sample size and the correlations of the data are important consideration in planning factor analysis studies (Sekaran, 2003). In addition, sample size has always been a major issue in using SEM and factor analysis because small samples increase the chance of yields with unreliable results. The traditional rule suggests estimating the sample size, based on the number of variables in the research. The total number of variables in this study was 23 (21 adoption factors and 2 adoption variables). Hair *et al.* (2010) recommend 15-20 cases per variable for generalisability purposes. However, some studies recommend 5-10 cases per each item to be factored up to a

total of 300 (Kass and Tinsley, 1979). As a general rule of thumb for determining sample size, 300 cases are deemed to represent a good sample size for factor analysis (Tabuchinck and Fidell, 2001). Moreover, Anderson and Gerbing (1988) suggest a minimum sample size of 200. In this study, the sample used for factor analysis was 301 cases. Therefore, the sample size was deemed comfortable.

Further analysis of determining the appropriateness of factor analysis examines the entire correlation matrix. Bartlett's Test of Sphericity is a statistical test for the presence of correlations among variables, and gives one overall measure. It provides a statistical probability that determine whether the variables are uncorrelated in the population. A large value of $\chi 2$ favours the rejection of the null hypothesis which assumes that all of the observed variables being analysed are uncorrelated with each other (Malhotra, 2007). In other words, it examines whether the population correlation matrix has significant correlations among at least some of the variables. With respect to the Bartlett's test, very small values ($p<0.05$) indicate a high probability of significant relationships between variables, while higher values indicate that the data will not be appropriate for factor analysis. Researchers often reject the null hypothesis and prove its improbability when the p-value is less than 0.05 (Kaplan, 2004). In this study, the results of Bartlett's test applied to the factors affecting CRM adoption, were significant with $\chi^2= 10279.6$ and $p<0.05$ (see Table 6.3). Thus, the null hypothesis was rejected and factor analysis was deemed an appropriate method for data analysis in this study.

Table 6.3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.927
Bartlett's Test of Sphericity	Approx. Chi-Square	10279.647
	Df	1485
	Sig.	.000

The Kaiser-Meyer-Olkin (KMO) measure is another sampling adequacy test for factor analysis. This measure calculates the squared correlation among variables to the squared partial correlation among variables. The KMO value ranges from 0 to 1, a value of 0 indicating that factor analysis would not be appropriate and a value of 1 indicating that the factor analysis would be potentially valid. Tabachnick and Fiddle (2001) recommend a KMO= 0.6 to be the main acceptable value. In this study, the KMO was used to check for partial correlations among factors with a value of 0.927 (Table 6.3) which is close to 1: so, this suggests the existence of correlations among variables was small and factor analysis would be an appropriate method for data analysis.

In addition, the SPSS software package provides the anti-image correlation matrix which is a matrix of negative partial correlations among variables. The anti-image correlation matrix is shown in appendix 5.4. The diagonal holds the values of the

KMO measure of sampling adequacy for each variable, while the off-diagonal values are the negative partial correlations among variables. The majority of these correlations are very small, while the diagonal correlations are all more than 0.5. Therefore, based on anti-image matrix the factor analysis was found to be an appropriate technique for reducing and summarising the number of items in this study.

In this study, factors affecting CRM adoption were proposed (Figure 6.2). Overall, twenty one factors were proposed as factors that might affect organisations' adoption of CRM. EFA was used as the first step of the analysis in order to examine whether the underlying factors of items were those suggested in the conceptual model. Furthermore, this study incorporated a large number of items in the survey and some of these items were newly developed items. Hence, EFA was considered as a useful tool to assess whether factors differed from each other, besides exploring whether items were statistically grouped to the same extent as what had been proposed in the research conceptual framework. This can be assessed through Principal Component Analysis (PCA) using VARIMAX rotation.

The condition of selecting a factor is based on Raubenheimer's (2004) suggestion, which is that an item is said to load on a factor if the factor loading is greater than 0.5, which is higher that the generally accepted level of 0.4. This decision is justified as items with smaller factor loading fail to load significantly on any factor, which in turn is likely to reduce its significance (Ramsey, 2005). Using the 0.5 factor loading criterion, the rotated pattern matrix was examined for items that did not seem to load on a factor with other items from the same 1-7 scale. Items that cross-loaded on more than one factor were examined and deleted to produce more interpretable factors. With exploratory analysis, altogether 25 items with smaller or cross loadings were deleted, resulting in 55 scale items to measure factors affecting CRM adoption, as shown in Appendix 5.3. After deleting items with smaller loadings, a respecification of the factor model was accomplished by running the process of interpretation a second time. Hence, a subsequent factor analysis was carried out on the 55 items. Use of principle component analysis (PCA), using varimax rotation, resulted in a twelve factors model. The results of the PCA for each of the factors are given in Table 6.4.

Factor No.	1	2	3	4	5	6	7	8	9	10	11	12
1Clear direction and objectives that embrace CRM strategy (CLRD)												
Clear business vision and direction.	.67											
Clear business goals related to customer acquisition, retention and reactivation.	.70											
The majority of employees are aware of the organisation's vision.	.56											
Our approach to customers is an important part of the organisational vision.	.70											
2 Covering CRM activities in the performance measurement system (PMS)												
There is a set of clear priorities for CRM projects.		.67										
CRM projects are consistent with the organisation's vision and statements.		.71										
Measuring the effectiveness and the success of CRM activities.		.64										
CRM is reflected in our performance measures used throughout our organisation.		.60										
3 Customer segmentation based on profitability analysis (SEGM)												
IT determines which of our current customers are of the highest value.			.67									
Managing the expectations of high value customers.			.67									
Customer information is used to segment markets.			.70									
Segmenting customers based on their lifetime value (high, moderate and low).			.74									
4 Customer satisfaction (CS)												
Business strategy is driven by customer satisfaction.				.59								
Frequently and systematically measure customer satisfaction.				.72								
Responding quickly to negative customer satisfaction.				.72								
Sustaining relationship with customers is more important than customers' acquisition.				.60								
5 Change management (CM)												
Stressing customer loyalty or retention programmes.					.54							
Training employees to deal differently with high- and-low value customers.					.54							
Top management has full confidence in change.					.63							
The introduction of CRM raised a conflict of interest among different functional units.					.72							
Fitting CRM within our organisation culture raised very few problems.					.58							
6 Supportive organisational culture (SUPP_CULT)												
Our organisation emphasises the need for innovation for development.						.60						
People stress quick response to changing market conditions.						.66						
Organisational culture has a flexibility to accept change readily.						.62						
7 Internal communication (COMM)												

Factor No.	1	2	3	4	5	6	7	8	9	10	11	12
Staff training emphasises internal communication and cooperation to build customer relationships.							.68					
Encouraging the communication between different functional units.							.63					
The development of communication helps our organisation communicate better across different departments and with customers.							.64					
8 Rewarding CRM usage (RCRMU)												
The organisation's policy rewards the use of CRM.								.73				
Rewarding employees who use CRM to provide excellent customer service.								.84				
Rewards systems encourage employees to work with CRM system.								.82				
9 Change control (CHNGC)												
Users' ideas are given due attention in the CRM planning and implementation process.									.62			
Meeting changes in CRM requirements by users or due to business environment change.									.58			
The ability to adjust CRM project plans on an ad hoc basis.									.63			
10 Perceived ease of use (PEOU)												
Interaction with CRM is clear and understandable.										.67		
CRM system is easy to use.										.77		
It is easy to get our CRM to do what I want it to do.										.67		
We invest in IT to capture real time customer information.										.60		
11 Customer knowledge management (CKM)												
Maintaining a comprehensive database of our customers.											.59	
Providing fast customer response because of integrated customer knowledge across functional areas.											.65	
Providing fast decision-making due to customer knowledge availability and precision.											.76	
Providing customer information for quick and accurate customer interaction.											.68	
12 Knowledge management: transmit (KMT)												
Individual customer information is available at every point of contact.												.75
Information on customers is disseminated throughout the organisation.												.79
Customer information is redirected to the right people.												.60
%variance explained	5.83	4.69	5.95	5.85	6.51	3.86	6.06	6.08	4.74	7.13	6.09	3.97
Eigenvalues	1.42	1.19	1.53	1.48	2.40	1.02	1.61	1.93	1.30	19.51	2.24	1.07

KMO=.927 **Bartlett's test=1485 (0.000)**

These results show the loadings of individual items that exceeded 0.5 (Raubenheimer, 2004). Items loaded at less than 0.5 would be deleted from the next step of the analysis as they failed to load significantly on any factor. Although loading of 0.5 or 0.60 were not considered high, they would be kept in order to satisfy Nunnally's (1978) threshold of acceptable loadings, and because they were are able to fall reasonably within the parameters of the presumed factor.

Overall, this analysis resulted in a factor model consisting of 12 factors made up of 44 items (observed variables). Some of these factors (6 out of 12) were very close to the proposed constructs described in theory or in the literature review of the study. These factors are clear direction, supportive organisational culture, internal communication, rewarding CRM usage, change control, and transmitting customer knowledge. The other 6 factors were not identical to the proposed constructs in Chapter four. However, this was to be expected as the items in this research were newly developed and integrated into one instrument. Most importantly, the researcher was able to name those factors after reviewing the literature, as will be discussed in the following sub-section.

The criterion of eigenvalue greater than 1 and/or Scree plot of eignevalues were used to determine the optimal number of factors that could be extracted from the data. Figure 6.2 shows the Scree plot test for all factors affecting CRM adoption.

Figure 6.2: Scree Plot Test for All Factors Affecting CRM Adoption
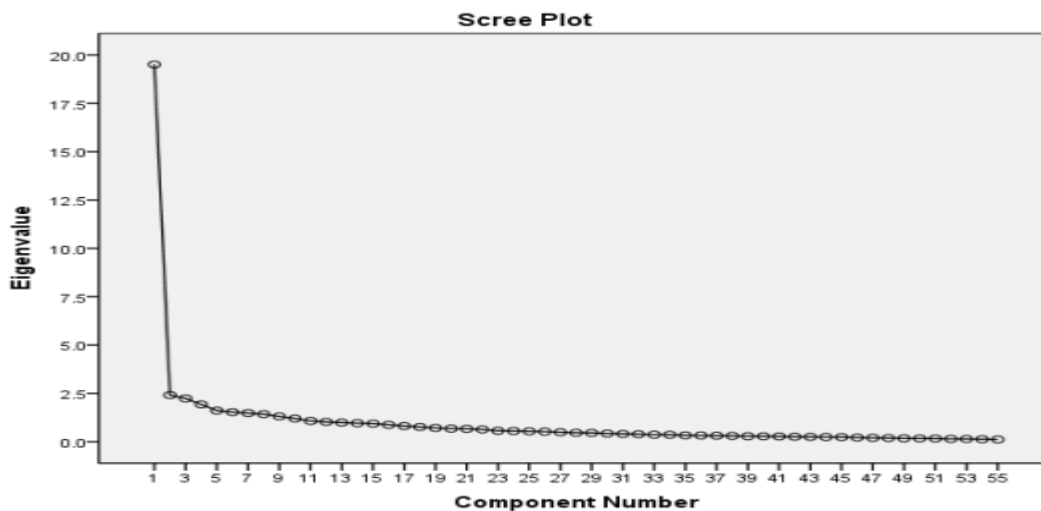
Eigenvalues (see Table 6.4) and Scree plot test (see Figure 6.2) revealed the same result, that is that 12 factors could be constructed from the data. The Scree plot showed that the shape of the curve changed direction and became horizontal at point 12. According to Hair *et al.* (2010), all factors above the elbow in the plot should be retained as they are the main factors contributing to the explanation of variance in the data set.

6.5.2 Factors Resulting from EFA

Cumulatively, the 12 factors explained 67% of the variance of the quantitative data, which is deemed sufficient to represent the data (Pet *et al.*, 2003). Expanding on the information in Table 6.4, twelve complementary yet distinctive factors were found to affect organisations' adoption of CRM.

Factor 1 is titled 'clear direction and objectives' (CLRD). This factor accounted for 5.83% of the total variance and consisted of four items with loading s ranging from .56 to .70. The items contained in this factor describe the role of a strong and clear strategy as a perquisite to focus CRM solution on business objectives.

Factor 2 is titled 'performance measurement system' (PMS). This factor accounted for 4.96% of the total variance and consisted of four items with loading s ranging from .60 to .71. The items contained in this factor describe covering CRM activities in the performance measurement system.

Factor 3 is titled 'segmentation analysis' (SEGM). The EFA grouped the scale items of two proposed factors from the conceptual framework: customer segmentation and customers' profitability analysis, into one factor. This factor has support from existing theories of customers' segmentation and profitability. This factor accounted for 5.95% of the total variance and consisted of four items with loadings ranging from .67 to .74. The items contained in this factor describe segmentation strategies based on customer lifetime value and profitability profiles.

Factor 4 is titled 'customer satisfaction' (CS). This factor accounted for 5.85% of the total variance and consisted of four items with loading s ranging from .59 to .72. The items contained in this factor describe the extent to which a business strategy is driven by customer satisfaction. In other words, those items represented the extent to which firms persistently pursue customer satisfaction.

Factor 5 is titled 'change management' (CM). The EFA grouped scale items from two proposed factors in the conceptual framework: change management and customers' retention. Existing literature supports this claim which suggests that accepting new changes is essential for customers' retention orientation in an organisation. This factor accounted for 6.51% of the total variance and consisted of five items with loadings ranging from .54 to .72. The items contained in this factor describe the role of organisations' alignment of employees' behaviour towards CRM and customer retention strategy.

Factor 6 is titled 'supportive culture' (SUPP_CULT). This factor accounted for 3.86% of the total variance and consisted of three items with loading s ranging from .60 to .66. The items contained in this factor describe an organisational culture that supports the innovation adoption process. More precisely, supportive culture entails quick response to changes and flexibility to accept changes readily.

Factor 7 is titled 'internal communication' (COMM). This factor accounted for 6.06 of the total variance and consisted of three items with loadings ranging from .63 to .68. The items contained in this factor describe the role of communication and interaction within organisations, which support a cross-functional integration between people from different department across an organisation.

Factor 8 is titled 'Rewarding CRM usage' (RCRMU). This factor accounted for 6.08 of the total variance and consisted of three items with loadings ranging from .73 to .84. The items contained in this factor describe the alignment of rewards and measures to shape the behaviour of employees towards CRM.

Factor 9 is titled 'change control' (CHNGC). This factor accounted for 4.74% of the total variance and consisted of three items with loading s ranging from .58 to .63. The items contained in this factor indicate that the project management team needs to monitor and control CRM implementation, in order to ensure flexibility and adjustments to unexpected changes.

Factor 10 is titled 'perceived ease of use' (PEOU). This factor accounted for 7.13% of the total variance and consisted of four items with loadings ranging from .60 to .77. The items contained in this factor describe the issue of technology ease of use. In short, it explains the user expectations of using CRM as being effort-free.

Factor 11 is titled 'customer knowledge management' (CKM). The EFA grouped the two proposed knowledge management capabilities: capture and manage from the conceptual framework into one factor. A review of the literature shows that this result has a theoretical underpinning as some prior studies measures all knowledge management capabilities as a one factor. This factor accounted for 6.09% of the total variance and consisted of four items with loadings ranging from .59 to .76. The items contained in this factor describe the capabilities of knowledge management to acquire and manage customer information.

Factor 12 is titled 'transmitting customer knowledge (KMT). This factor accounted for 3.97% of the total variance and consisted of three items with loading s ranging from .60 to .79. The items contained in this factor describe knowledge dissemination within an organisation throughout all customer channels where it can be reused most effectively.

Figure 6.3: Proposed Model Resulting from EFA
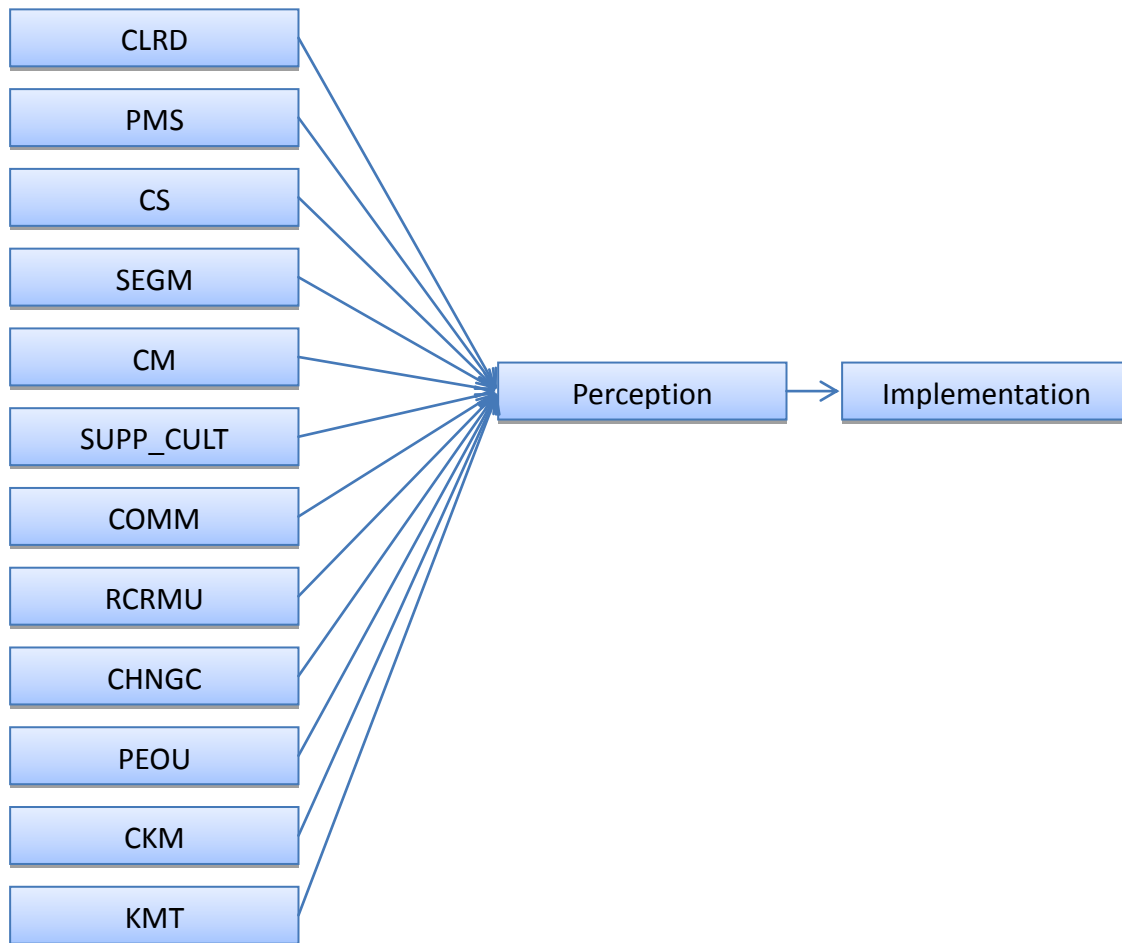
As a result, twelve factors in Model 2 were extracted with an indication that these factors differed from each other. The twelve factors are shown in Figure 6.3 and will be used for further analysis. In the light of the EFA, the hypotheses of the study were modified to accommodate the underlying structure of identified factors, as shown in Table 6.5. Such use of EFA to modify and generate hypotheses is justified by Conway and Huffcutt (2003) who evaluated EFA practices in organisational settings and suggested that EFA can be integrally involved in the development and testing of hypotheses. This argument is further strengthened by Costello and Osborne (2005) who reviewed EFA best practices and recommended that EFA should be employed as an error-prone procedure during initial stages of a research for explicating theory and generating testable hypotheses. The following Table depicts the modified final research hypotheses with reference to EFA results.

Table 6.5: Proposed Hypotheses Resulting from EFA

No.	Hypothesis
H1	Employees' perceptions of CRM benefits mediate the effect of adoption factors on an organisation's implementation of CRM.
H2	Having a direction and objectives that embrace a clear CRM strategy will have a positive effect on employee perceptions of CRM.
H3	Strategically covering CRM activities in the performance measurement system will have a positive effect on employee perceptions of CRM.
H4	Organisation's emphasis on traditional segmentation will have a positive effect on employee perceptions of CRM.
H5	Organisation's emphasis on satisfaction will have a positive effect on employee perceptions of CRM.
H6	Change management in an organisation will have a positive effect on employee perceptions of CRM.
H7	Rewarding CRM usage will have a positive effect on employee perceptions of CRM.
H8	Internal communication in an organisation will have a positive effect on employee perceptions of CRM.
H9	Supportive culture in an organisation will have a positive effect on employee perceptions of CRM.
H10	Managing changes in CRM projects will have a positive effect on employee perceptions of CRM.
H11	Perceived ease of use of CRM system will have a positive effect on employee perceptions of CRM.
H12	Managing customer knowledge will have a positive effect on employee perceptions of CRM.
H13	Transmitting customer knowledge will have a positive effect on employee perceptions of CRM.

EFA was performed before arriving at final items and scales in order to provide preliminary evidence on the unidimensionality of the factors in the initial model depicted in Figure 4.1 (21 factors and 22 hypotheses). The EFA led to a 12 factor model (see Figure 6.3). In other words, the EFA results suggested that there was a high correlation between some proposed factors. On the other hand, several items failed to load significantly on a factor. The refinement and modification of hypothesised factor structure necessitated the modification of the research hypotheses (22 hypotheses before EFA); The EFA led to a modification of the structure of the conceptual framework and hence the research hypotheses. The number of hypotheses retained after EFA was 13 hypotheses, as shown in Table 6.5. This was a result of discharging 9 factors from further analysis.

Lee and Hooley (2005) have cautioned marketing scholars from naive and sometimes over reliance on EFA. They stated that it is part of scholars' remit to analyse the link between theoretical foundations and analysis techniques involved in their studies. They further explain that EFA is an effective approach of developing scale items when not viewed as a rigorous rule, but instead as a starting point for more thoughtful

analysis. Building from this, a deeper examination of the links between the EFA results, theoretical foundations, and techniques used in this study was conducted. A careful examination of EFA results showed that there was a significant overlap between the individual items contained in each factor. This can be mainly explained by the prevailing theoretical overlap between the main disciplines and factors in the initial conceptual model. For example, EFA revealed the scale items of both of segmentation and profitability analysis factors as interrelated. As such it could be argued that they should be used to measure one factor rather than two. In the marketing literature, segmentation is a concept which is highly interrelated with customer profitability analysis. In conclusion, the restructure of the factors reflects the existing overlap between them in the conceptual framework. Hence, the number of factors in the conceptual model was reduced from 21 to 12.

6.6 Confirmatory Factor Analysis (CFA)

By using EFA, the underlying structure of the large set of variables in this study was explored. In this section, Confirmatory Factor Analysis (CFA) within the structured equation modelling (SEM) approach was used to assist in the confirmation and validation of the unidimensionality of factors extracted from EFA analysis. In other words, CFA refers to the procedure of testing the hypotheses of the links between observed variable and their underlying indicators.

The ultimate goal of this study seeks to develop a model that is both substantively meaningful and statistically well-fitting the data and prior theories. Holmes-Smith (2006:15) suggests that "the researcher should guard against making changes solely based on data-driven grounds in an attempt to get a model that fits the data better". Consequently, the evaluation of the hypothesised measurement model is not only based on statistical principals but also on theoretical underpinnings (Anderson and Gerbing, 1988; Hair *et al.*, 2006). Hence, if the measurement model of this study is not consistent with priori specified measurement models, then it should be respecified and reanalysed. The measurement model is also evaluated using four criteria as suggested by Bollen (1998): each latent variable has at least two indicators: the factors are correlated, each indicator is linked to one latent variable, and measurement errors are uncorrected.

6.6.1 Goodness-of-fit Measures

The issue of how the model which best represents the data reflects underlying theory, is known as model fit. Goodness-of-fit measures are a series of indices which identify whether the model fits the data or not. In this study, corresponding observed variables are loaded on the proposed factors when conducting the CFA, in order to find out whether the goodness-of-fit measures are acceptable. SEM, using AMOS 19, provides several indices of goodness-of-fit but there is neither agreement among scholars as to which indices should be reported nor as to the cut-offs of various indices. Most scholars recommend evaluating the models by reporting more than one of these indicators (Bentler and Wu, 2002; Hair *et al.*, 2006). Kline (1998) suggests that

researchers need to report at least four indices, such as chi-square, GFI, NFI, or CFI, NNFI and SRMR to assess how well the specified model accounts for data. Hair *et al.* (2006) propose the use of at least three indices, one from each of the categories of model fit: absolute, incremental and parsimonious.

Table 6.6: Recommended Goodness-of-fit Measures

Category	Model Goodness-Fit Indexes	Recommended Value
Absolute	Chi-square	
	Goodness-of-fit index (GFI)	≥ 0.90
	Root mean square error of approximation (RMSEA)	≤ 0.08
Incremental	Comparative fit index (CFI)	≥ 0.90
Parsimonious	NC or Chi-square/df	≤ 3.00

This study adopts the most commonly used measures in the marketing area, which reflect the three categories. As shown in Table 6.6, the first category of absolute values includes chi-square (χ^2), GFI and RMSEA; the incremental category includes CFI; and the parsimonious includes NC (χ^2 to degree-of-freedom). In this study, all of these indices were used to measure the proposed model fit.

a) Absolute Fit Indices

Absolute fit indices directly assess how well the proposed theory fits the sample data and demonstrate which proposed model has the most superior fit (McDonald and Ho, 2002). The chi-square is a commonly used measure of overall fit (Bollen, 1989). It tests whether the sample variance and covariance matrix (S) are significantly different to the model implied variance and covariance matrix (Σ). In other word, it calculates the difference between the probability that the difference between the model and the observed data is due to chance. If the probability (P) is greater than .05 (predetermined significance level), the model is rejected. Although this type of statistical index is most commonly used to evaluate the model fit, it has been criticised for being too sensitive to large samples, usually above 200 (Bagozzi and Yi, 1988; Jöreskog and Sörbom, 1996). Thus, it is rarely used solely to accept or reject a model. In fact, marketing researchers substantiate the value of chi-square with other model fit indices (Bove and Johnson, 2006 as cited in Shammout, 2007).

The second measure of the absolute fit indices, used in this study, is the Goodness-of-Fit index (GFI). This measure was created by Jöreskog and Sörbom (1981) to calculate the proportion of variance and covariance together explained by the model (Tabachnick and Fidell, 2001). The GFI shows how closely the model comes to replicate the observed covariance matrix (Diamantopoulos and Siguaw, 2000). Its value ranges from 0 (indicating poor fit) to 1 (indicating a perfect fit), where a recommended cut-off point is 0.9 (Miles and Shevlin, 1998; Hair *et al.*, 2006). A large sample pushes this index up (Bollen, 1990). Researchers should be aware that this

index is also sensitive to large samples; a large sample pushes this index up (Bollen, 1990). According to Sharma *et al.* (2005), the GFI index has become less popular in recent times, hence should not be used by current researchers.

The third used measure of absolute fit indices is the Root Mean Square Error of Approximation (RMSEA). This measure represents how well the model fits the population's covariance matrix (Bryne, 1998). It corrects the tendency of chi-square statistic to reject any specified model with a sufficiently large sample size and discrepancy per degree of freedom. According to Diamantopoulos and Siguaw (2000:85) this measure is "one of the most informative fit indices" due to its sensitivity to the number of parameters in the model. A value between 0.03 and 0.08 is a commonly acceptable value for this measure (Hair *et al.*, 2006).

b) Incremental Fit Indices

Incremental fit indices are also known as comparative (Miles ad Shevlin, 2007) and relative fit indices (McDonald and Ho, 2002). This category of indices compares a proposed model with a null model, where the null model assumes that all observed variables are uncorrelated. One of the most popular incremental measures is Normed-Fit index (NFI) which assesses the proportion of how well the model fits to some alternative null model. A major drawback to this measure is its sensitivity to large sample size, underestimating fit for samples less than 200 (Hair *et al.*, 2006). In order to overcome this shortcoming, a Comparative Fit Index (CFI) has been introduced, by Bentler (1990), which is an improved version of the NFI. It takes into account sample size to perform well even when the sample size is small (Tabachnick and Fidell, 2001). Recently, this measure has been used widely used among researchers due to its being one of the measures least affected by sample size (Fan *et al.*, 1999; Hair *et al.*, 2010). Values for this measure range between 0 and 1 with values greater than 0.9 indicating good fit to the data.

c) Parsimonious Fit Indices

This category of indices evaluates the number of estimated parameters required to achieve a specific model fit level (Schumaker and Lomax, 1996). The Normed Chi-square (NC= χ^2/df) is the main commonly used parsimonious fit index to evaluate the goodness of the model (Hair *et al.*, 2006). This measure has the benefit of reducing the sensitivity of $\chi2$ to the sample size. A range of acceptable values for this measure has been suggested, ranging from less than 2 (Tabachnick and Fidell, 2001), to less than 3 (Hair *et al.*, 2006). In this study this measure is used in conjunction with the other measures mentioned earlier, as a basis for evaluating the goodness of the model. Table 6.6 summarises the recommended minimum values for all the goodness-of-fit measures that were used in this study.

5.6.2 Evaluation the Fit of the Model

Confirmatory Factor Analysis (CFA) is performed on the proposed initial model, resulting from the Exploratory Factor Analysis (EFA). As discussed in the previous

section, Chi-Square, GFI, RMSEA, CFI, and χ^2/df are the measures used in this study to determine the initial model goodness-of-fit. As shown in Table 6.7, most of these measures seemed problematic for the initial model. Hence, the initial measurement model needed to be respecified and tested again in an attempt to provide a fit measurement model which would be used in the next of structural model. Revisions of the measurement model were made as discussed in more detail as follows.

An evaluation of the measurement model is obtained by an inspection of the standardised residuals and modification indices (Hair *et al.*, 2006; Holmes-Smith *et al.*, 2006). The standardised residual refers to the residual divided by its standard deviation, where the residual is the difference between observed covariance terms and estimated covariance terms. On the other hand, modification indices refer to the calculation of the relationships in the model that are not estimated. These indices represent the reduction in the overall model chi-square, and hence the improvement in fit, if the relationship were specified in the model. Modifications on the measurement model should be made one at a time as a single change might affect other parts of the solution (Segars, 1997). Residuals greater than 3 can be useful for determining the source of misfit, whereas large modification indices, greater than the suggested value of 3.84 (Bagozzi and Yi, 1988; Hair *et al.*, 2006), show that chi-square could be reduced when the relationship is specified in the model.

Table 6.7: CFA Statistics of Model Fit

Model Goodness-Fit Indexes	Recommended Value	Initial Model	Revised Model
Chi-square		4336.850	1397
Degree of freedom		2065	811
Chi-square/df	≤ 3.00	3.567	1.742
Goodness-of-fit index (GFI)	≥ 0.90	.669	.829
Adjusted goodness-of-fit index (AGFI)	≥ 0.80	.666	.791
Comparative fit index (CFI)	≥ 0.90	.809	.913
Root mean square error of approximation (RMSEA)	≤ 0.08	.061	.049

Note: N = 301,   * p< 0.05

Based on an examination of the goodness-of-fit model variables, modification indices, and largest standardised residuals, 23 items in this study were deleted from the original 67 measurement items (see Table 6.8).

Table 6.8: Measurement/Observed Variables Left After the Modification Indices

Factors	Variables Description
Clear direction (CLRD)	Clear business goals related to customer acquisition, development, retention and reactivation.
	The majority of the employees are aware of the organisation's vision.
	Approaching customers as an important part of the organisational vision.
Performance management System (PMS)	There is a set of clear priorities for e-CRM projects.
	These e-CRM projects are consistent with the organisation's vision and statements.
	Regularly measuring the effectiveness and the success of e-CRM activities.
Segmentation (SEGM)	Using customer information to segment markets.
	Segmenting customers based on their lifetime value (e.g., high, moderate, and low).
Customer Satisfaction (CS)	Organisation strategy is driven by customer satisfaction.
	Frequently and systematically measuring customer satisfaction.
	Responding quickly to negative customer satisfaction wherever it may occur in the organisation.
Change management (CM)	Training procedures for helping employees deal differently with high- and-low value customers.
	Top management's full confidence in implementing change.
	The introduction of e-CRM raised a conflict of interest among functional units.
Supportive culture (SUPP_CULT)	Emphasising the need for innovation for development.
	People in the organisation stress quick response to changing market conditions.
	The organisational culture has a flexibility to accept change readily.
Communication (COMM)	Staff training emphasises internal communication and cooperation across departments to build customer relationships.
	Communication between different levels and functional units.
	The development of communication systems helps to communicate better across different departments and with customers.
Rewarding CRM usage (RCRMU)	Organisation policy which rewards the use of e-CRM.
	Rewarding employees who use e-CRM to provide excellent customer service.
	The reward systems encourage employees to work with e-CRM system.
Change control (CHNGC)	Giving users' ideas due attention in the e-CRM planning and implementation process.
	Meeting changes in e-CRM requirements by users or due to business environment change.
	The IT function has the ability to adjust e-CRM project plans on an ad hoc basis.
Perceived Ease of Use (PEOU)	Users' interaction with e-CRM is clear and understandable.
	CRM system is easy to use.
	It is easy to get the e-CRM to do what users want it to do.
Customer knowledge management (CKM)	Providing fast customer response because of integrated customer knowledge across several functional areas.
	Providing fast decision-making due to customer knowledge availability and precision.
	Providing authentic customer information for quick and accurate customer interaction.
Knowledge Management: Transmit (KMT)	Individual customer information is available at every point of contact.
	Information on customers is disseminated throughout the organisation.
	Customer information is redirected to the right people.
Perception	Increase customer satisfaction.
	Increase customer retention rate.
	Increase revenue and profitability.
	Enhance customer relationships.
Implementation	Offering customer loyalty programs
	Managing customer loyalty
	Developing member-only site in your organisation's website
	Categorising/segmenting customers based on spending (lifetime value)
	Providing products and services in one place

The model was consequently re-evaluated after each item was dropped. Since the resulting revised model is consistent with the theoretical underpinnings of the study, the item deletions in this study appeared to be appropriate. Overall, the results of CFA are very close to the proposed constructs described in the conceptual model and theory of previous research. Furthermore, Table 6.7 shows that the revised measurement model provided adequate fit to the data. Most measures such as: RMSEA, CFI, and χ^2/df showed acceptable results. However, the GFI value (0.829) seemed problematic, as it fell below the recommended vale (0.9). While recognising the limitation to the measurement model as reported here, the combination of the good acceptable results from at least one absolute index (RMSEA) and incremental index (CFI), besides the χ^2/df acceptable value, could be argued as providing sufficient unique information to serve as a satisfactory basis for a revised measurement model on which to proceed.

6.7 Validity and Reliability of the Measures

After deriving the best-fitting measurement model, a study model and related instruments can be tested and assessed for validity and reliability (Anderson and Gerbing, 1988; Hair *et al.*, 2006). Validity and reliability are two separate yet related concepts (Bollen, 1989). While validity is concerned with the accuracy of measuring the research instrument measures, reliability is concerned with stability of the instrument measures (Sekaran, 2003). In other words, an instrument is valid if it succeeds in measuring what it was supposed to measure and reliable if it is consistent and stable. Given that validity and reliability tests were used to ensure the quality of the findings and conclusions of this study, both validity and reliability are discussed below. The two types of commonly used validity and reliability tests for measurement scales include convergent validity and discriminate validity tests, which are employed in this study.

Convergent validity assesses the extent to which two measures of the same construct are correlated. A set of indicators presumed to measure the same construct (concept) show convergent validity if their correlations are at least moderate in magnitude. Therefore, indicators with high loadings on the same factor indicate that the scale is measuring its intended construct (Kline, 1998; Hair *et al.*, 2006). According to Fronell and Larcker (1981), there are three dimensions to be considered when assessing convergent validity test: item reliability (measuring standardised factor loading), construct (composite) reliability and average variance extracted (AVE).

Firstly, item reliability refers to the degree of variance explained by the construct rather than by error. It is also known as squared correlations (R^2) which represents the correlation coefficients between the indicator and the latent variable (construct). R^2 can be obtained by squaring the standardised factor loading provided by AMOS. It is suggested that R^2 greater than 0.50 provide evidence of acceptable reliability, and an item value less than 0.50 can be only acceptable if it provides a theoretical meaning (Lu *et al.*, 2007). Secondly, construct reliability is measured by determining the extent

to which the measurement of the set of indicators of a construct is consistent (Holmes-Smith *et al.*, 2006). For the measurement model, a value of higher than 0.70 is considered evidence of constructs validity. The construct reliability is similar to Cronbach's alpha, a measure of a reflective construct's construct reliability, yet it includes the actual factor loading, whereas Cronbach's alpha uses equal weighting. Finally, the average variance extracted estimate (AVE) is a more conservative measure of the shared variance in a set of measures than construct reliability. It is the average squared factor loading for items loading on a construct and is a summary indicator of convergence. According to Fornell and Lacker (1981), the AVE should be equal or greater than 0.50 to suggest adequate convergence and hence considered acceptable. These two measures must be calculated for each construct as AMOS does not provide these two measures directly (Hair *et al.*, 2006). The three measures of convergent validity test are shown in Table 6.9.

Table 6.9: Convergent Validity test results

Factor	Variables	Standardised Loading (>.7)	Reliability (R^2) (>.5)	Error Variance (1- R^2)	AVE (>.5)	Composite Reliability (>.7)	Cronbach's Alpha(>.7)
CLRD	CLRD1	.71	.51	.48	.53	.77	.77
	CLRD2	.70	.49	.50			
	CLRD3	.77	.59	.40			
PMS	PMS1	.85	.73	.26	.68	.86	.86
	PMS2	.87	.76	.23			
	PMS3	.74	.55	.44			
SEGM	SEGM1	.84	.71	.28	.63	.75	.75
	SEGM2	.71	.51	.48			
CS	CS1	.74	.55	.44	.52	.77	.76
	CS2	.74	.55	.44			
	CS3	.69	.48	.52			
CM	CM1	.76	.58	.41	.62	.83	.83
	CM2	.85	.73	.26			
	CM3	.75	.57	.42			
SUPP	SUPP1	.74	.55	.44	.62	.83	.82
	SUPP2	.83	.69	.30			
	SUPP3	.78	.61	.38			
COMM	COMM1	.76	.58	.41	.58	.80	.80
	COMM2	.76	.58	.41			
	COMM3	.76	.57	.42			
RCRMU	RCRMU1	.73	.54	.45	.65	.85	.85
	RCRMU2	.87	.75	.24			
	RCRMU3	.82	.67	.32			
CHNGC	CHNGC1	.73	.53	.46	.56	.79	.79
	CHNGC2	.80	.65	.34			
	CHNGC3	.70	.49	.50			
PEOU	PEOU1	.79	.63	.36	.68	.86	.86
	PEOU2	.87	.77	.22			
	PEOU3	.80	.64	.35			
CKM	CKM1	.79	.63	.36	.58	.80	.81
	CKM2	.77	.60	.39			
	CKM3	.72	.51	.48			
KMT	KMT1	.80	.65	.34	.51	.76	.75
	KMT2	.67	.44	.55			
	KMT3	.66	.44	.55			
Perception	PER1	.69	.48	.52	.55	.83	.83
	PER2	.74	.55	.45			
	PER3	.75	.56	.44			
	PER4	.78	.62	.38			
Implementation	IMP1	.72	.51	.49	.55	.77	.77
	IMP2	.75	.56	.44			
	IMP3	.74	.54	.46			
	IMP4	.80	.64	.36			
	IMP5	.73	.53	.47			

As indicated in Table 6.9, these measures identified values which exceeded the suggested levels of acceptance (i.e., R^2, 0.70 for construct reliability, 0.50 for AVE, and 0.70 for construct reliability). However, some measures values seemed problematic. In particular some values of item reliability were a little below the 0.50 threshold (.44). While recognising that there are some limitations to the convergent tests as reported here, the combination of the good results was deemed to be a satisfactory basis on which to proceed. Hence, all the above results indicate evidence

of strong convergent validity for the constructs of the constructs of the measurement model. Furthermore, these results indicate that the instrument used could be considered as reliably and internally consistent.

Table 6.10: Factor Correlations Matrix

	CLRD	PMS	SEGM	CS	CM	SIPP	COM	RCRMU	CHNGC	PEOU	CKM	KMT	PER	IMP
CLRD	1.00													
PMS	0.67	1.00												
SEGM	0.43	0.45	1.00											
CS	0.58	0.49	0.51	1.00										
CM	0.67	0.66	0.45	0.46	1.00									
SUPP	0.60	0.50	0.54	0.60	0.62	1.00								
COMM	0.63	0.64	0.44	0.60	0.62	0.59	1.00							
RCRMU	0.44	0.45	0.30	0.30	0.47	0.39	0.43	1.00						
CHNGC	0.55	0.50	0.53	0.54	0.51	0.65	0.55	0.51	1.00					
PEOU	0.59	0.55	0.52	0.49	0.56	0.58	0.58	0.30	0.64	1.00				
CKM	0.59	0.53	0.40	0.58	0.61	0.66	0.61	0.42	0.67	0.55	1.00			
KMT	0.52	0.45	0.46	0.45	0.45	0.56	0.48	0.32	0.53	0.56	0.48	1.00		
PER	0.66	0.64	0.37	0.61	0.56	0.48	0.61	0.41	0.46	0.46	0.60	0.45	1.00	
IMP	0.60	0.53	0.41	0.51	0.45	0.50	0.52	0.49	0.53	0.46	0.46	0.39	0.53	1.00

As for discriminant validity, it demonstrates the extent to which a construct is truly distinct from other constructs. This test is based on assessing the correlation among indicators, where a summated scale is correlated with a similar, but distinct construct. The matrix of factor correlations is useful for this assessment. The correlation should be low, reporting that the summated scale is sufficiently different from other similar constructs. According to Kline (2005), an estimated correlation greater than 0.85 indicates that the two factors are highly correlated. As indicated in Table 6.10, estimated factor correlation coefficients, ranging from 0.29 to 0.65, suggest that the 12 factors identified were correlated yet distinct. On the basis of this, strong evidence of discriminant validity was found for the measurement model.

Hair *et al.* (2006) also present another method for assessing discriminant validity of two or more factors: comparing the AVE for each factor with the squared correlations estimates. If the AVE for each factor is greater than the interconstruct squared correlations, discriminate validity is supported. This method is demonstrated in Table 6.11.

Table 6.11: AVE and Squared Correlations

	AVE	CLRD	PMS	SEGM	CS	CM	SUPP	COMM	RCRMU	CHNGC	PEOU	CKM	KMT	PER	IMP
CLRD	.53	1.00													
PMS	.68	0.45	1.00												
SEGM	.63	0.19	0.20	1.00											
CS	.52	0.33	0.24	0.26	1.00										
CM	.62	0.45	0.43	0.20	0.22	1.00									
SUPP	.62	0.36	0.25	0.30	0.36	0.38	1.00								
COMM	.58	0.39	0.41	0.19	0.36	0.38	0.35	1.00							
RCRMU	.65	0.19	0.20	0.09	0.09	0.22	0.15	0.18	1.00						
CHNGC	.56	0.30	0.25	0.28	0.29	0.26	0.43	0.30	0.26	1.00					
PEOU	.68	0.35	0.30	0.27	0.24	0.31	0.33	0.33	0.09	0.41	1.00				
CKM	.58	0.34	0.28	0.16	0.33	0.37	0.44	0.37	0.18	0.45	0.30	1.00			
KMT	.51	0.27	0.20	0.21	0.20	0.20	0.31	0.23	0.10	0.28	0.31	0.23	1.00		
PER	.55	0.43	0.40	0.13	0.37	0.32	0.23	0.37	0.16	0.22	0.21	0.36	0.20	1.00	
IMP	.55	0.36	0.28	0.16	0.26	0.20	0.25	0.27	0.24	0.28	0.21	0.22	0.16	0.28	1.00

Note: AVE must be greater than squared correlation

As indicated in Table 6.11, AVE estimates are greater than the corresponding interconstruct squared correlations. Therefore, the discriminant validity between factors in the measurement can be demonstrated.

According to Briggs and Cheek (1986 as cited in Bollen and Lennox, 1991), the inter-item correlations for a measurement item provide information about whether the item is unidimensional or not. Correlation coefficients greater than 0.30 for the sample size of 301 used in the analysis are statistically significant at the 0.01 level (Robinson *et al.*, 1991). Homogeneity of the scale items is assessed by inspecting the inter-item correlations, shown in appendix 5.4. The inspection of the inter-item correlation matrix revealed that all inter-item correlation values all exceeded 0.30 and hence were significant. The data obtained via the measurement model scale items suggest the items associated with a particular factor correlated more highly with each other than with items associated with other factors in the measurement model. Hence, it can be concluded that the measurement items demonstrated good measures of the factors in the model.

In summary, the validity and reliability of the measurement scale was established prior to testing the underlying hypotheses of the research. This is essential as a valid instrument provides conclusions which aid in generalising the results of the study. For this purpose, two types of validity and reliability tests are evaluated: convergent and discriminate tests. The results indicate evidence of strong convergent and discriminant validity of the measurement. And since all the results of the Confirmatory Factor Analysis (CFA) demonstrated that the good-model-fit of the measurement model is acceptable, the revised measurement model (see Figure 6.4) would be incorporated into the analysis of Structural Equation Modelling (SEM).

Figure 6.4: Revised Measurement Model

Chi-square = 1397   AGFI= .791

Df= 811   CFI= .913

GFI= .829   RMSEA= .049
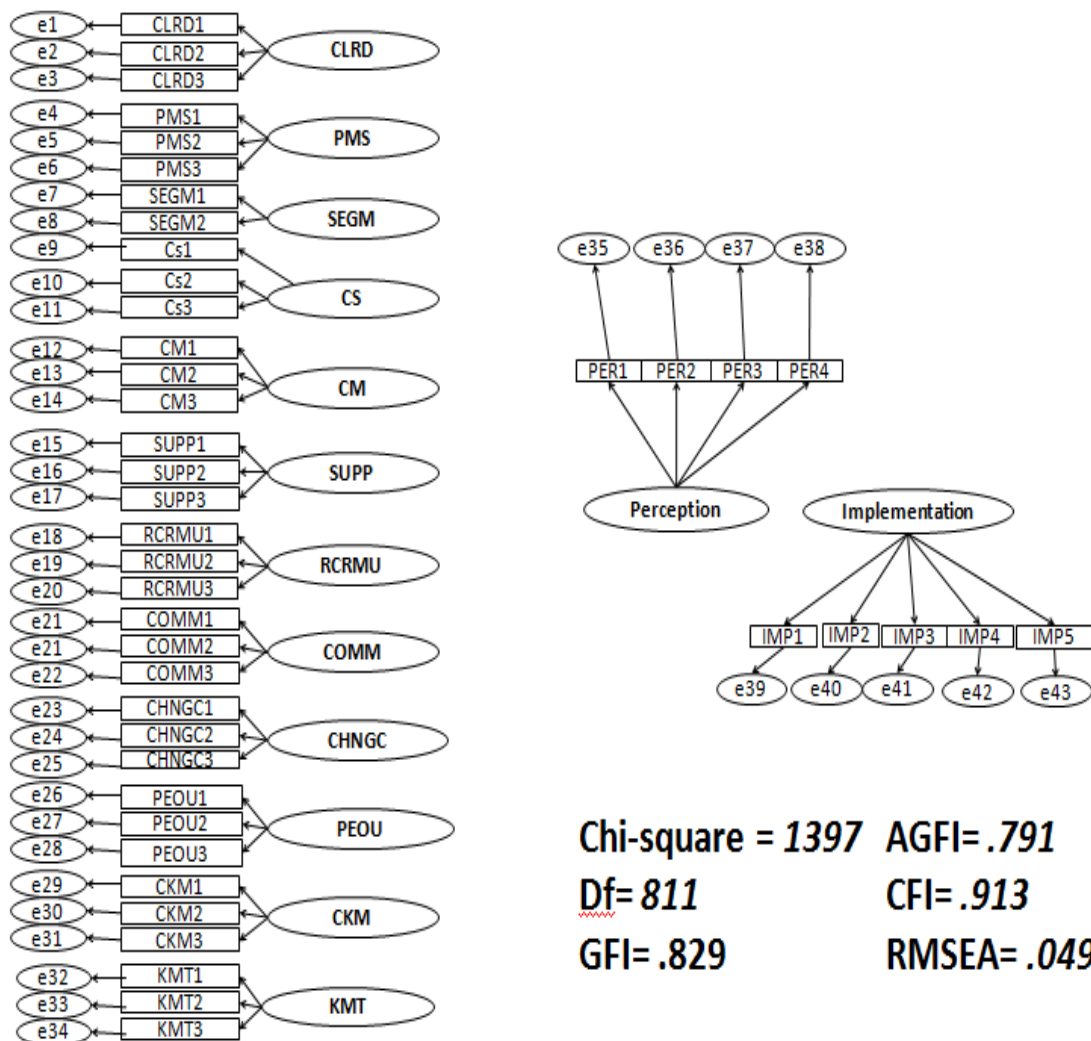
6.8 Testing of the Research Model: Structural Equation Modelling (SEM)

Once the measurement model was accepted, the proposed structural model to be tested was specified by including the constructs in the measurement model. Prior to performing a path analysis for the structural model which assigned relationships from one construct to another based on the proposed conceptual model, a preliminary data analysis was conducted. This included reporting the frequencies, means and standard deviations each of the factors affecting CRM adoption. Then, a path analysis for the structural model was performed as a second stage of SEM. The purpose of structural model was to evaluate the underlying relationships between constructs in the proposed model in order to answer the research question: what are the factors affecting CRM adoption within organisations? Finally, a summary of the hypotheses and support for those hypotheses was prepared for report discussion.

6.8.1 Factor Means and Standard Deviations

SPSS version 19 was used to calculate the factors means and standard deviations. The overall means and standard deviations for the fourteen constructs (including adoption constructs) in the structural model are presented in Table 6.12.

Table 6.12: Factor Means and Standard Deviations

Factor	Mean (M)	Standard Deviation (SD)
Perception	5.83	1.10
Customer satisfaction (CS)	5.80	1.15
Communication (COMM)	5.68	1.19
Supportive culture (SUPP)	5.58	1.21
Customer knowledge management (CKM)	5.57	1.15
Clear direction (CLRD)	5.56	1.14
Change control (CHNGC)	5.55	1.15
Perceived ease of use (PEOU)	5.55	1.23
Change management (CM)	5.55	1.26
Knowledge management capabilities: transmit (KMT)	5.55	1.28
Segmentation (SEGM)	5.52	1.28
Rewarding CRM usage (RCRMU)	5.47	1.35
Performance management system (PMS)	5.39	1.23
Implementation	5.35	1.39

The factor means ranged from 5.35 to 5.83 indicating "somewhat agree" level. Employee perceptions of CRM had the highest agreement level (Mean=5.83). On the other hand, the implementation of CRM strategies had the lowest agreement level (Mean=5.35).

6.8.2 Analysis of Structural Model

SEM is a comprehensive statistical technique which tests hypotheses about direct or indirect relationships among dependent and independent variables. As mentioned earlier, this study adopted the two-stage approach to conducting the analysis using SEM techniques; measurement model and structural model. CFA provides evidence of the measurement model validity based on the goodness-of-fit measure and quantitative measures of constructs reliability and validity (convergent and discriminant validity tests). However, CFA is limited in its ability to evaluate relationships between constructs in the hypothesised model. Hence, a structural model was formed from a measurement model by adding estimated path of relationships among constructs. The structural model was tested and presented as the second and main stage of the data analysis. According to Hair *et al.* (2010: 608), the structural model is a "set of one or more dependence relationships liking the hypothesised model's constructs".

The model fit measures for the structural model should be similar to those obtained from the CFA model. The major advantage of SEM is the ability to incorporate error in measurement into the structural model. In the study a path analysis for the structural model was conducted to evaluate the underlying hypotheses of this study that predicts factors affecting CRM adoption. Building upon the revised measurement model, these hypotheses were represented in thirteen causal paths which propose that the twelve adoption factors would have a positive effect on organisations' implementation of CRM via a positive mediating effect of employee perceptions of CRM benefits. Thus, as shown in Figure 6.5, the hypothesised model (full mediation model) proposed effects of CRM adoption factors on organisations' implementation of CRM are fully mediated by employee perceptions of CRM benefits. In order to examine the mediating impact of employee perception on organisations' implementation of CRM, this study adopted an alternative competing model (partial mediation model), as discussed later.

Prior to evaluating the model fit, the loading estimates in the two competing structural models (see Table 6.13) were examined to find out whether they had changed substantially from the CFA model. This will provide further support for the model's validity by assessing the constructs' stability among the measured items (Hair *et al.*, 2006).

Table 6.13: Loading Estimates for CFA and SEM

Factor	Variables (Scale item)	CFA standardised loading	Full mediation model	Difference	Partial mediation model	Difference
CLRD	CLRD1	.71	.72	.01	.71	.00
	CLRD2	.70	.69	.01	.70	.00
	CLRD3	.77	.76	.01	.77	.00
PMS	PMS1	.85	.85	.00	.85	.00
	PMS2	.87	.87	.00	.87	.00
	PMS3	.74	.74	.00	.74	.00
SEGM	SEGM1	.84	.84	.00	.84	.00
	SEGM2	.71	.71	.00	.71	.00
CS	CS1	.74	.74	.00	.74	.00
	CS2	.74	.74	.00	.74	.00
	CS3	.69	.69	.00	.69	.00
CM	CM1	.76	.76	.00	.76	.00
	CM2	.85	.85	.00	.85	.00
	CM3	.75	.75	.00	.75	.00
SUPP	SUPP1	.74	.78	.04	.74	.00
	SUPP2	.83	.83	.00	.83	.00
	SUPP3	.78	.75	.03	.78	.00
COMM	COMM1	.76	.76	.00	.76	.00
	COMM2	.76	.76	.00	.76	.00
	COMM3	.76	.76	.00	.76	.00
RCRMU	RCRMU1	.73	.73	.00	.73	.00
	RCRMU2	.87	.86	.01	.87	.00
	RCRMU3	.82	.82	.00	.82	.00
CHNGC	CHNGC1	.73	.73	.00	.73	.00
	CHNGC2	.80	.81	.01	.80	.00
	CHNGC3	.70	.70	.00	.70	.00
PEOU	PEOU1	.79	.79	.00	.79	.00
	PEOU2	.87	.88	.01	.87	.00
	PEOU3	.80	.80	.00	.80	.00
CKM	CKM1	.79	.79	.00	.79	.00
	CKM2	.77	.78	.01	.77	.00
	CKM3	.72	.72	.00	.72	.00
KMT	KMT1	.80	.80	.00	.80	.00
	KMT2	.67	.67	.00	.67	.00
	KMT3	.66	.66	.00	.66	.00
PER	PER1	.69	.69	.00	.69	.00
	PER2	.74	.73	.01	.74	.00
	PER3	.75	.74	.01	.75	.00
	PER4	.78	.77	.01	.78	.00
IMP	IMP1	.72	.73	.01	.72	.00
	IMP2	.75	.76	.01	.75	.00
	IMP3	.74	.74	.00	.74	.00
	IMP4	.80	.80	.00	.80	.00
	IMP5	.73	.73	.00	.73	.00

Examining the loading estimates revealed that they were virtually unchanged from the CFA, maximum change being 0.04. This indicates acceptable parameter stability among the measured items and the lack of interpretational confounding issues, which further supports the model's validity.

- **Full Mediation Model (Hypothesised Model)**

The hypothesised model (full mediation model), as depicted in Figure 6.5, positions employee perception of CRM benefits between the twelve CRM adoption factors and organisations' implementation of CRM. The effects of CRM adoption factors on organisations' implementation of CRM are fully mediated by employee perception of CRM benefits. After running SEM, goodness-of-fit tests were examined in order to determine whether the model should be accepted or rejected. The common tests were summarised earlier in this chapter. A model is said to fit the observed data if the common goodness of fit tests including Chi-square/df, GFI, CFI and RMSEA are in the acceptable ranges. In this study, these indices were integrated into the structural model as disaggregated. The meanings of these indices were explained earlier in this chapter.

Figure 6.5: Full Mediation Model (Model 1)
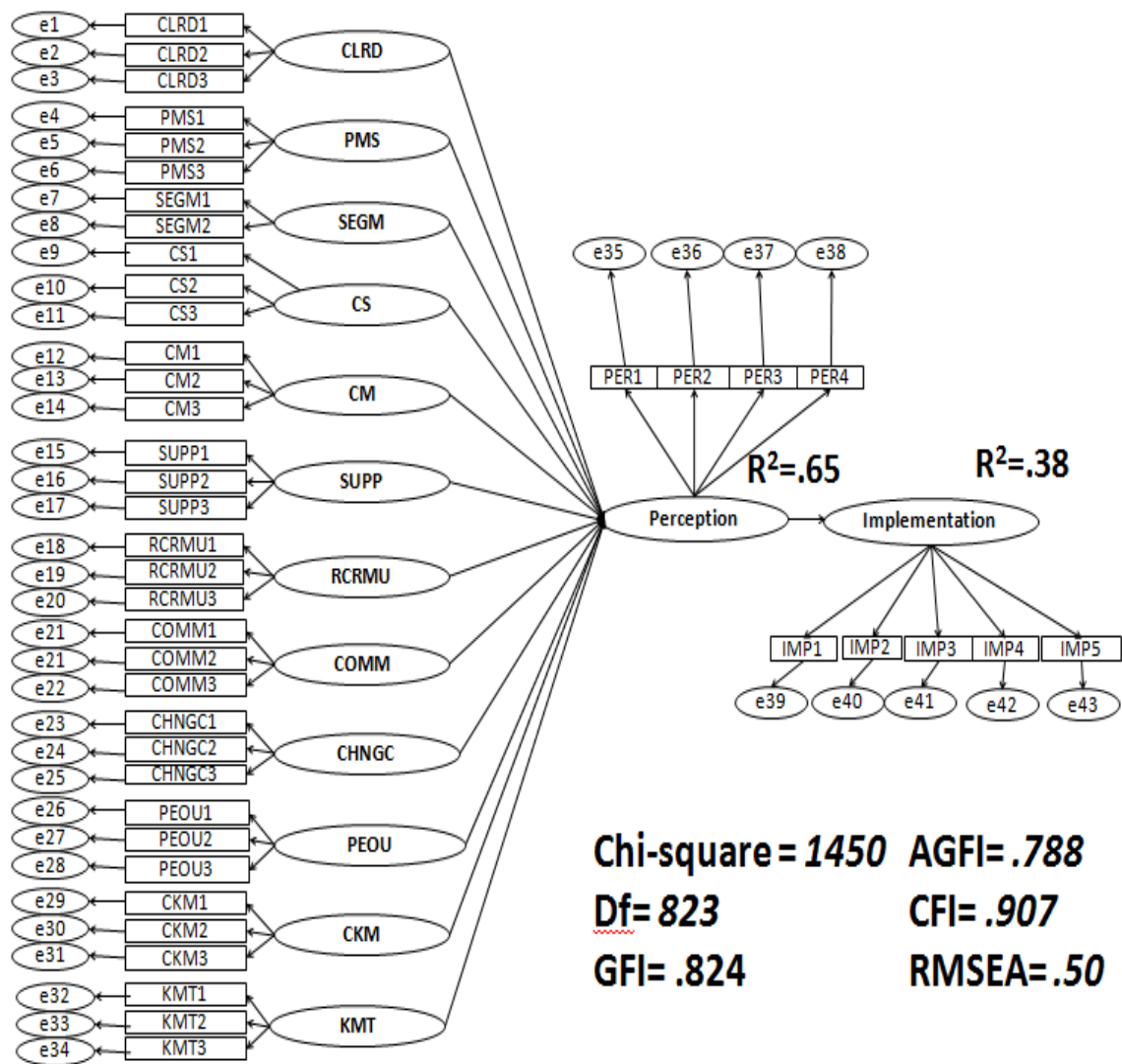
As presented in Figure 6.5, the full mediation model exhibits an acceptable level of fit to the data (Chi-square/df=1.742, GFI=.824, CFI=.907 and RMSEA=.050). The relatively low value of GFI (below the recommend value of .9) reflects the large number of paths in the model. Nevertheless this was not seen a basis for rejecting the model as the other measures showed acceptable results.

The difference in fit between the hypothesised structural model and the CFA model (e.g. the χ^2 increased to 1450 from 1397 resulting in $\Delta \chi^2 = 53$) suggests that model fit can be improved by estimating other structural paths. Although, several diagnostic measures are available for researchers to indicate a potential respecification and improvement of the model and its fit indices, model respecifaction should have a theoretical and empirical support (Hair *et al.*, 2006). Several diagnostic measures including standardised residuals, modification indices (MI) and model fit indices were therefore also examined to assess whether there were potential weaknesses in the model or some ways to improve it. These diagnostic measures were examined and modifications were made one a time as a single modification might affect other parts

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in the model. Subsequently, the standardised residuals and modification indices were analysed, resulting in potential covariance between CLRD and IMP, RCRMU and IMP, and CHNGC and IMP (see Figure 6.6).

Figure 6.6: Partial Mediation Model A (Model 2)
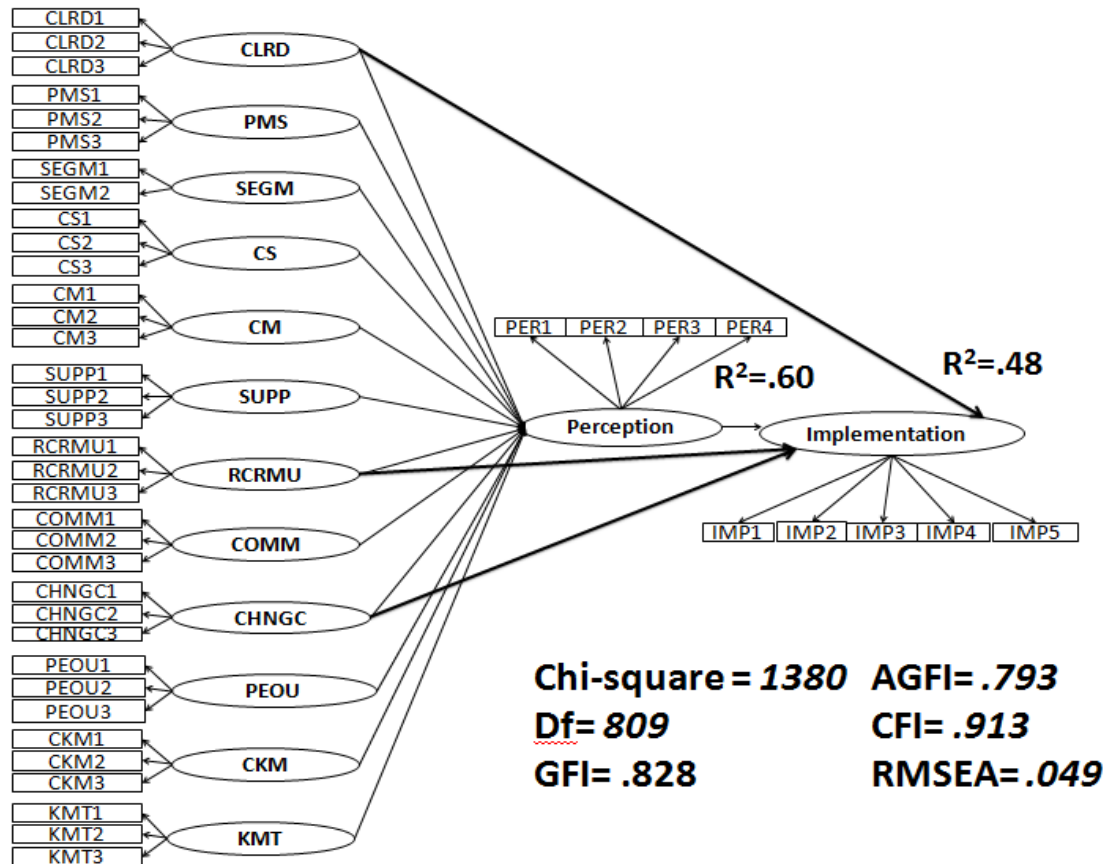
Note: Model 2 is a result of using several diagnosis measures on Model 1

Thus, potential causal links were drawn between these three adoption factors and CRM implementation, as shown in Figure 6.6 with bold lines. Accordingly, respecification of the model, adding three significant paths have provided a better model fit to the data (chi-square/df=1.705, GFI=.828, CFI=.913 and RMSEA=.049).

- **Partial Mediation Model**

As mentioned earlier, this study adopted an alternative competing model (partial mediation model) to examine the direct and indirect effects of the twelve adoption factors on organisations' implementation of CRM, as depicted in Figure 6.7

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Figure 6.7: Partial Mediation Model B (Model 3)
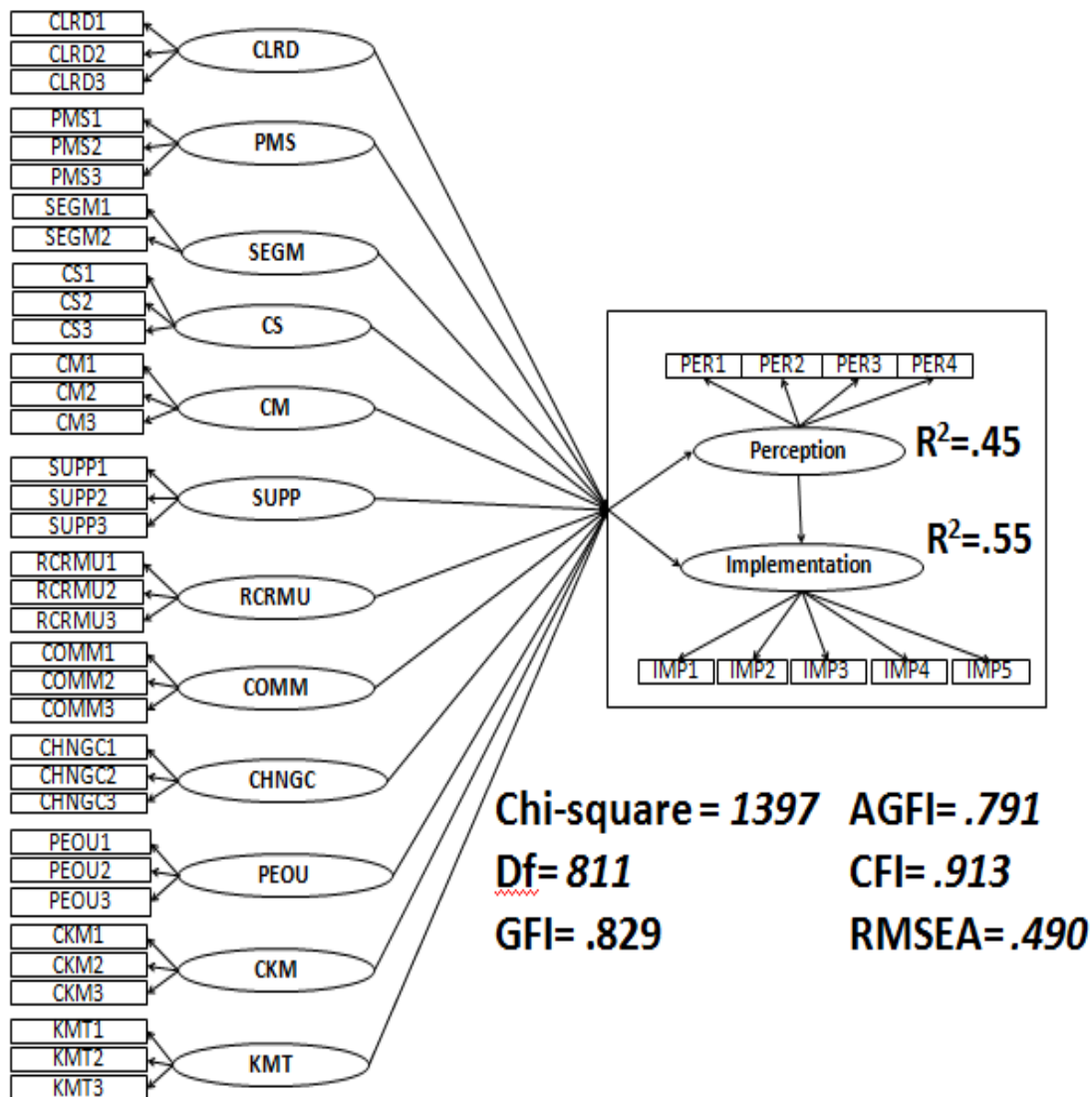
As for the full mediation model, the diagnostic measures were used as a clue for suggesting any model respecification by removing non-significant paths to possibly provide a better model fit to the data. However, no significant modifications were found for this model. Finally, the estimation results indicate that the partial mediation model B (Model 3) also provides acceptable level of fit (Chi-square/df=1.722, GFI= .829, CFI=.913 and RMSEA=.490).

6.8.3 The Final Model

All structural models (Model 1, Model 2 and Model 3) were found to fit the data adequately and meet the accepted standards for overall model fit. As the first two models are nested with the last one, the difference in model fit between the three models was examined, as shown in Table 6.14.

Table 6.14: SEM Statistics of Modes Fit

Model Goodness Fit Indexes	Recommended Value	Model 1	Model 2	Model 3
Chi-square(χ^2)	-	1450	1380	1397
Degree of Freedom (Df)	-	823	809	811
χ^2/Df	≤ 3.00	1.742	1.705	1.722
AGFI	≥ 0.80	.788	.793	.791
CFI	≥ 0.90	.907	913	.913
RSMEA	≤ 0.08	.050	.490	.490

This would aid the appraisal as to whether employee perception of CRM benefits fully mediated or partially mediated the effect of the twelve adoption factors on organisations' implementation of CRM. As shown in Table 6.14, the goodness-of-fit measure for Model 2 performed reasonably well and better than the other two models. The resulting $\Delta \chi^2$, between Model 2 and Model 3, is 17 with 2 degree of freedom (p<.001). This suggests that the Model 2 provided the best fit for the data rather than Model 1 or Model 3.

The main aim of SEM in this study was to test the underlying hypotheses in order to answer the research question outlined in Chapter one: what are the factors affecting CRM adoption within organisations? The underlying hypotheses of this study were represented in 13 paths, as outlined in Table 6.15. These hypotheses are directional in nature and aim to determine the relationships among the underlying constructs in the structural model.

Table 6.15: Results of SEM Analyses for Model 2 and Model 3

Hypothesis No	Relationship	Model 2				Model 3			
		Path estimate	Standard error	t-value	P-value	Path estimate	Standard error	t-value	P-value
H1	PER ➞ IMP	.22	.11	1.86	**.03***	.15	.14	1.09	.13
H2	CLRD ➞ PER	.19	.09	2.10	**.01***	.20	.09	2.18	**.01***
H3	PMS ➞ PER	.19	.07	2.50	**.00***	.18	.07	2.49	**.00***
H4	SEGM ➞ PER	.25	.09	2.83	**.00***	.25	.09	2.81	**.00***
H5	CS ➞ PER	-.03	.06	-.51	.30	-.03	.06	-.52	.30
H6	COMM ➞ PER	.08	.08	1.05	.14	.08	.08	1.04	.15
H7	RCRMU ➞ PER	.04	.04	.86	.19	.04	.04	.86	.19
H8	CM ➞ PER	.03	.07	.43	.33	.03	.07	.43	.33
H9	SUPP ➞ PER	-.10	.08	-1.30	.09	-.11	.08	-1.32	.09
H10	CHNGC ➞ PER	-.08	.10	-.77	.22	-.07	.10	-.74	.22
H11	PEOU ➞ PER	-.03	.06	-.48	.31	-.03	.06	-.50	.30
H12	CKM ➞ PER	.20	.09	2.18	**.01***	.20	.09	2.18	**.01***
H13	KMT ➞ PER	.07	.07	.97	.16	.07	.07	.97	.16
	CLRD ➞ IMP	.36	.11	3.10	**.00***	.30	.14	2.15	**.01***
	RCRMU ➞ IMP	.16	.06	2.61	**.00***	.19	.07	2.79	**.00***
	CHNGC ➞ IMP	.24	.10	2.35	**.01***	.15	.15	1.03	.15
	PMS ➞ IMP					.10	.11	.95	.17
	SEGM ➞ IMP					.14	.13	1.05	.14
	CS ➞ IMP					.03	.09	.43	.33
	CM ➞ IMP					-.13	.11	-1.14	.12
	SUPP ➞ IMP					.08	.12	.70	.24
	COMM ➞ IMP					.05	.11	.47	.31
	PEOU ➞ IMP					.03	.10	.35	.36
	CKM ➞ IMP					-.09	.14	-.64	.26
	KMT ➞ IMP					-.04	.10	-.41	.33

Note: Significant relation in bold
  * p<.05, ** p<.10 (one-tailed test)

The results reveal that the significant factors were similar in both models. The two models highlight the clear direction and objectives that embrace CRM strategy (CLRD), covering CRM activities in the performance measurement system (PMS), customer segmentation (SEGM), and knowledge management: manage (CKM) affects the people's perception of CRM benefits positively (PER). They also suggest that CLRD and rewarding CRM usage have a positive influence on organisations implementation of CRM (IMP). Although the significant factors are similar in both models, the construct-perception appears to fit well as a partial mediator in Model 2. In addition, the positive effects of the change control of CRM projects (CHNGC) construct is only highlighted in Model 2. Consequently, Model 2 was adopted in this study as it seemed to fit more with the theoretical underpinnings of this study.

The results of SEM results are outlined in Table 6.15. The path coefficient estimates were examined to test the underlying hypotheses. Path coefficients are essential to SEM analysis, as they are used to build and generate the estimated covariance matrix

for the model (Tabachnick and Fidell, 2001). In the AMOS output, the critical ratio (C.R.) is the t-value, which represents the variance estimate divided by its standard error (S.E).

While two-tailed tests should be used for non-directional research hypotheses, the one-tailed test is more appropriate for testing directional research hypotheses (Churchill and Iacobucci, 2002). According to Cho and Abe (2010), a two-tailed test conducts a more conservative rigorous test but researchers should recognise that substituting two-tailed tests for one-tailed tests results in a lack of logical consistency and may lead to inaccurate conclusions. Hence, the research hypotheses for this study are directional, and one-tailed significance levels are reported. In order to achieve a rigorous test results when testing the directional hypotheses, a rigid level of significance within one-tailed testing is used (p<.05). The AMOS output provides the two-tailed p value, but it is enough to halve this value to calculate the one-tailed p value. The one-tailed testing suggests that path values are statistically significant when the significance level (p-value) is less than .05 and the t-value (critical ratio) is greater than 1.65 or smaller than -1.65 (Bryne, 2001). For example, the first hypothesised path between CLRD and PER, in Model 2, (see Table 6.15) indicates a significance level of .018 and a t-value of 2.105 which exceeds the suggested threshold values. This means the loading estimates of CLRD in the prediction of PER at the p<.05 level is significantly greater than zero (.196).

The results demonstrated the following structural equations with non-standardised regression estimates:

$PER = .196\ CLRD + .191\ PMS + .257\ SEGM + .206\ CKM$
$\qquad R^2 = .60 \qquad\qquad Error\ variance = .40$

$IMP = .220\ PER + .362\ CLRD + .168\ RCRMU + .248\ CHNGC$
$\qquad R^2 = .48 \qquad\qquad Error\ variance = .52$

In the prior structural equations, the loading estimates in each equation of the model are the path values. The larger the factor loading estimate or coefficient the stronger is the relationship between the exogenous variable and the endogenous variable. The error variance represents unsystematic variance due to a random measurement error or unreliability, whereas $1-R^2$ (R^2 is the coefficient of determination) estimates the error variance of the unique variance (Hair *et al.*, 2006). The error variance for the first equation, as an example, is 0.40 which exhibits the proportion variance in perception of CRM benefits that is unexplained by CLRD, PMS, SEGM and CKM factors.

Figure 6.8 depicts the final model of this study. The underlying constructs in the structural model are classified into two categories: exogenous constructs and endogenous constructs. The exogenous constructs are: clear direction and objectives, performance measurement system, customer segmentation, customer satisfaction, change management, supportive culture, internal communication, rewarding CRM usage, controlling changes in CRM projects, perceived ease of use, knowledge

management, and knowledge transmit. On the other hand, endogenous constructs are: employee perceptions of CRM benefit and the organisations' implementation of CRM.

Figure 6.8: Final Model
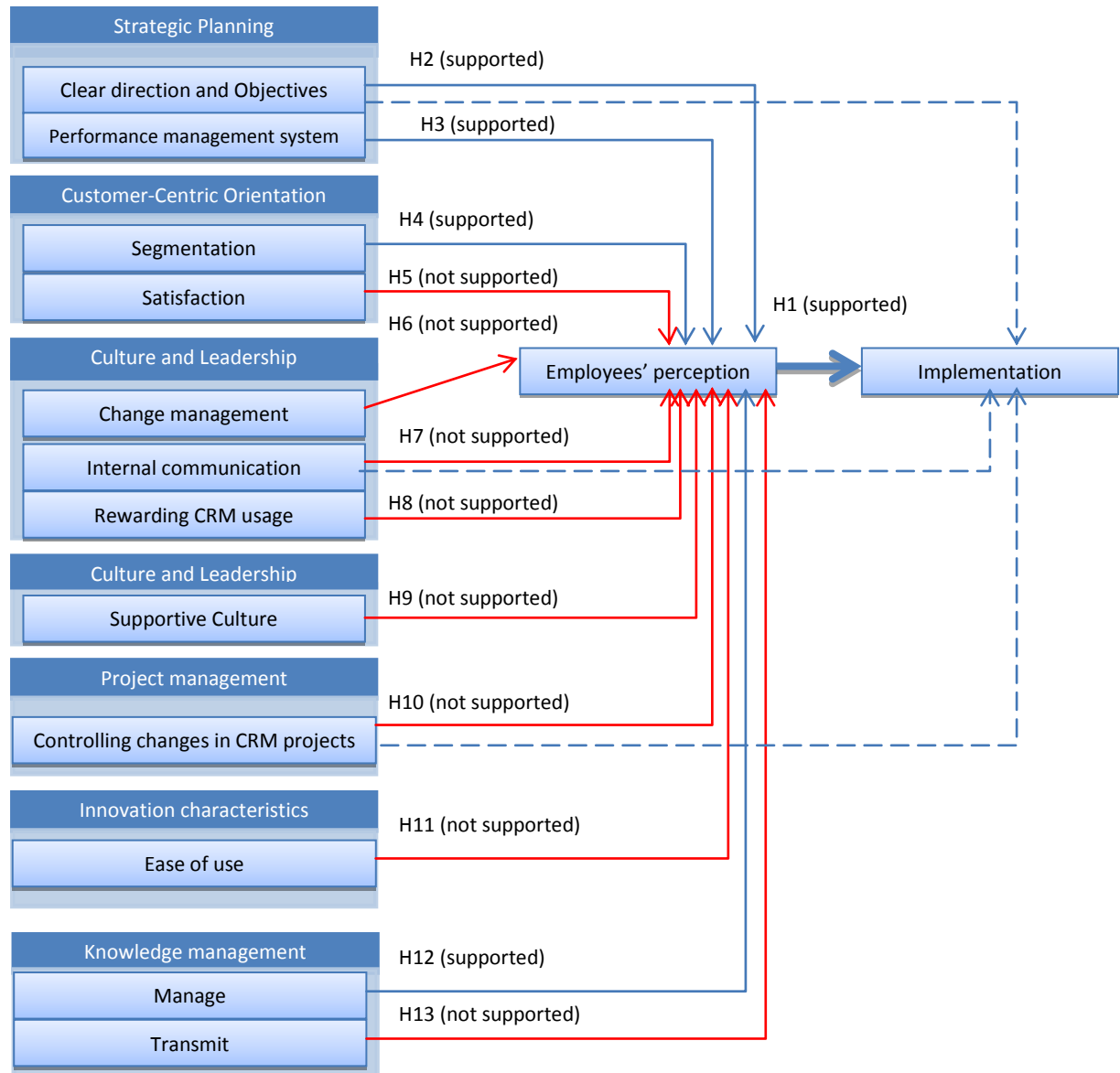
Following the final research mode, as shown in Figure 6.8, it is suggested that only 5 hypotheses out of 13 were supported. Moreover, employees' perception of CRM appeared to be influenced by: clear direction and objectives of CRM, performance management system embedding CRM, and segmentation, and customer knowledge management. As can be seen from the model, the effects of some adoption factors on CRM implementation appeared to be mediated by employees' perception of CRM. As shown in Figure 6.8, the model posits (as indicated by the dashed lines) that clear direction of CRM, rewarding CRM usage, and controlling changes in CRM projects had direct impact on CRM implementation within an organisation.

A structural model with mediating impact can provide direct and indirect effects. Direct effect represents the path coefficient of an exogenous variable effect on an endogenous variable. Indirect effect is the effect of a particular construct on a second construct (endogenous) through its effect on a third mediating construct (endogenous). Hence, an indirect effect is a sequence of two or more direct effects between constructs. It is calculated by the product of direct paths coefficients which form the direct path being assessed. If a model has relationships which involve a sequence of relationships, the total effect of a variable on an endogenous variable is defined as the sum of direct and indirect effects. The direct, indirect and total effect implied by the final model of this study is outlined in Table 6.16.

Table 6.16: Standardised Effects for Model 2

Factor	Determinant	Direct Effect	Indirect Effect	Total Effect
Perception ($R^2 = 0.60$)	CLRD	**.196**	-	**.196**
	PMS	**.191**	-	**.191**
	SEGM	**.257**	-	**.257**
	CKM	**.206**	-	**.206**
Implementation ($R^2 = 0.48$)	PER	**.220**	-	**.495**
	CLRD	**.362**	.079	**.441**
	RCRMU	**.168**	-	**.168**
	CHNGC	**.248**	-	**.248**
	PMS	-	.042	.042
	SEGM	-	.056	.056
	CKM	-	.045	.045

Note: Effects of size greater than 0.1 in bold

In order to address the issue of interpreting the magnitude of the effect, Cohen's (1988) suggestions about effect size interpretation of correlations in behavioural science were used. Cohen labelled an effect size as small if a path coefficient is less than 0.1, value around 0.30 is a medium effect, and value around as a large one. As shown in Table 6.16, there were small effects of PMS, SEGM and CKM on the organisations' implementation of CRM; all indirect effects were less than 0.01. In addition CLRD, PMS, SEGM had a medium effect on employee perceptions of CRM benefits. And employee perceptions had a large effect (.495) on the implementation of CRM. Clear direction and objectives also has a large impact on the implementation construct with a total effect of 0.441. However, rewarding CRM usage and change control of CRM projects had medium effects on the implementation construct.

6.9 Hypotheses Testing

In total, thirteen hypothesised relationships were examined (see Table 6.17). The implications of the research results are further discussed in Chapter seven. In addition to the specified findings associated with the research hypotheses, two significant results emerged.

Table 6.17: A Summary of Hypotheses

No.	Hypothesis	Result
H1	Employees' perceptions of CRM benefits mediate the effect of adoption factors on an organisation's implementation of CRM.	**SUPPORTED**
H2	Having a direction and objectives that embrace a clear CRM strategy will have a positive effect on employee perceptions of CRM.	**SUPPORTED**
H3	Strategically covering CRM activities in the performance measurement system will have a positive effect on employee perceptions of CRM.	**SUPPORTED**
H4	Organisation's emphasis on traditional segmentation will have a positive effect on employee perceptions of CRM.	**SUPPORTED**
H5	Organisation's emphasis on satisfaction will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H6	Change management in an organisation will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H7	Rewarding CRM usage will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H8	Internal communication in an organisation will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H9	Supportive culture in an organisation will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H10	Managing changes in CRM projects will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H11	Perceived ease of use of CRM system will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED
H12	Managing customer knowledge will have a positive effect on employee perceptions of CRM.	**SUPPORTED**
H13	Transmitting customer knowledge will have a positive effect on employee perceptions of CRM.	NOT SUPPORTED

The results suggested that four factors were important drivers of employees' perception of CRM: i) having a clear objective of CRM influences, ii) strategically measuring CRM performance, iii) traditional segmentation analysis, and iv) knowledge management. Moreover, three factors were statistically related to the implementation of CRM within organisations: i) clear direction of CRM, ii) rewarding usage, and iii) managing project changes. The results indicate that different factors have different influence on each stage in the adoption process. Nevertheless, employee perceptions of CRM appear to be an important mediator of the adoption factors on the implementation of CRM within an organisation.

The acceptance of H1 leads us to assert that, rather than simply implementing CRM technologies, organisations must strengthen employee perceptions of CRM initiatives. The overall evidence supports H2 and H3, which suggests that an organisation should provide clear direction and objectives for CRM, and a means for evaluating its performance, in order to set up desired perception of CRM amongst employees. Hence, careful planning and evaluating of CRM are needed in order to support CRM

adoption and motivate its acceptance. The results support H4, which leads us to affirm the effects of traditional segmentation analysis on employee perception of CRM. Such findings are reasonable, since segmentation is strongly linked with analysing customer information to help organisations understand customer needs and respond to those needs appropriately. The results reject H5:H11 and H13, which calls both researchers and practitioners to address gaps between what is known from prior research and actual organisational implementation of such knowledge with the intention to attain a desired future state. For example, this study demonstrates paradoxes in controlling changes in CRM projects. Management of studied organisations were seen to conduct sensible project management efforts to promote CRM, but employees still did not value CRM offerings. Finally, by accepting H12 the results support the notion that managing customer knowledge will lead to better understanding of CRM and eventually more innovativeness in an organisation. A more extensive explanation/discussion and implications are addressed in more detail in Chapter seven.

6.9.1 Effects of the Adoption Factors on Employee Perception

As discussed earlier, the twelve hypotheses H1:H12 explain the relationships between the exogenous variables (adoption factors) and endogenous variable employee perception of CRM. As outlined in Table 6.17, four of these twelve hypotheses supported/accepted (H2, H3, H4 and H12) were found significant. These hypotheses suggest that clear direction and objectives, performance management system, customer segmentation, and knowledge management capabilities had positive significant impact on employee perceptions (ß=.196, ß=.191, ß=.257 and ß=.206, respectively, p<.05). In addition, the t-values (1.867 and 2.833) exceeded the recommended threshold of the one-tailed test at 1.65 with significant levels less than .05. All the other hypotheses (H5:H10 and H13) were not supported and hence rejected.

6.9.2 Effects of Employee Perceptions on CRM Implementation

This study results support H1, which suggests that employee perceptions of CRM have a positive relationship with organisations' implementation of CRM (ß=.495, t-value= 1.883, P=.032). This findings confirms that employees' attitude towards CRM has a strong influence on the implementation of CRM.

H1 states that employee perceptions of CRM mediate the effect of the twelve adoption factors on organisations' implementation of CRM. As shown from the results of Model 2 and Model 3 in Table 6.15, both clear direction and rewarding CRM usage influence an organisation's implementation stage positively. On the other hand, Model 2 shows that change control of CRM projects have a positive influence on the implementation of CRM (ß=.248, t-value= 2.356, P=.018). Since, Model 2 provides a better model and lower value of chi-square, the effect of changes in control of CRM projects on CRM implementation is considered significant. Consequently, the results confirm that employee perceptions mediate CRM implementation. It also

shows that clear direction, rewarding usage and change control have positive effects on CRM implementation.

6.10 The Impact of Organisational Characteristics on Adoption (ANOVA)

ANOVA is a statistical technique often used by researchers to examine group differences in means for only one construct. Multivariate Analysis of Variance (MANOVA) is identical to ANOVA into assessing group differences, only the comparison are considered for multiple metric constructs simultaneously. A series of Analysis of Variances (ANOVA) is used to examine whether any difference in response to the research constructs could be contributed to organisations' characteristics (industry, firm's age, firm's turnover, ownership type, operation of the organisation, and speed of response to change). Conducting ANOVA analysis to investigate the effect of organisational size (i.e. number of staff) on all the factors is not appropriate for the sample of this study. This is mainly because most participants (258 out f 301) reported that their organisations have more than 200 employees.

Industry

The effects of the industry type on CLRD, PMS, SEGM, RCRMU, CHNGC, CKM, PER and IMP were examined using ANOVA. As represented in Table 6.18, most participants were from the banking and financial industry (n=100). Participants from telecommunication, hotels and automotive industries were 82, 81, and 38 respectively. Table 6.18 shows that the automotive industry had higher mean scores than all the other industries. However, this could be biased due the fact that only 38 out of 301 participants represented this industry.

Table 6.18: Industry Descriptive Statistics and One-Way ANOVA Results

Factor	Banking (n=100)		Telecommunication (n=82)		Hotels (n=81)		Automotive (n=38)		F Test	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F Ratio	F Sig
CLRD	5.7	.89	5.3	1.1	5.4	.84	5.8	.78	5.0	.002*
PMS	5.6	.97	5.1	1.3	5.2	.99	5.5	.88	4.4	.004*
SEGM	5.9	.85	5.6	1.1	5.6	.86	6.2	.76	4.4	.004*
RCRMU	5.4	1.2	5.4	1.3	5.4	.96	5.5	1.2	.06	.979
CHNGC	5.5	1.0	5.6	1.0	5.4	.88	5.67	.96	1.0	.383
CKM	5.6	1.0	5.5	1.0	5.4	.91	5.8	.85	1.5	.194
PER	5.9	.95	5.7	.96	5.6	.84	6.2	.57	4.9	.002*
IMP	5.6	.81	5.2	1.0	5.4	.77	5.8	.70	5.1	.002*

Note: * p<.05, ** p<.10

Using a significance level of 0.05, significance industry type differences were found for clear direction, performance management system, perception of CRM, and implementation of CRM. This indicates that participants' ratings of these factors were different between the four industries investigated in this study.

Age of Firm

The effects of the age of the firm upon CLRD, PMS, SEGM, RCRMU, CHNGC, CKM, PER and IMP are examined using ANOVA. The analysis counts for two main firm age categories: 1) less than 20 years, 2) more than 20 years. As represented in Table 6.19, category (1) with 177 respondents and category (2) with 124 respondents.

Table 6.19: Age Descriptive Statistics and One-Way ANOVA Results

Factor	Less than 20 years (n=177)		More than 20 years (n=124)		F Test	
	Mean	SD	Mean	SD	T-score	P value
CLRD	5.8	.89	5.6	.88	1.6	.014*
PMS	5.3	1.0	5.3	1.0	1.9	.001*
SEGM	5.6	.93	5.8	1.0	.93	.590
RCRMU	5.3	.99	5.4	1.1	.92	.617
CHNGC	5.6	.88	5.3	1.1	1.0	.323
CKM	5.7	.83	5.3	1.0	1.2	.162
PER	5.7	.74	5.6	.90	1.7	.007*
IMP	5.4	.85	5.2	.93	1.9	.001*

Note: * p<.05, ** p<.10

As shown in Table 6.19, organisations which had been in the business for less than 20 years had higher mean scores than organisations which had been in the business for more than 20 years, except for rewarding CRM usage and customers segmentation. Using a significance of 0.05, significant differences in age of firm were found for clear direction and performance management system factors.

Organisational size–turnover

ANOVA has been used to determine differences in firm turnover (regional or international) differences on CLRD, PMS, SEGM, RCRMU, CHNGC, CKM, PER and IMP. Operations of the organisation in the questionnaire were: category (1) regional, and category (2) international.

Table 6.20: Firm's Turnover Descriptive Statistics and One-Way ANOVA Results

Factor	Less than 100m JD (n=174)		More than100m JD (n=127)		F Test	
	Mean	SD	Mean	SD	T-score	P-value
CLRD	5.6	.90	5.47	.83	2.0	.076**
PMS	5.4	1.0	5.25	.83	.79	.555
SEGM	5.8	.83	5.62	.82	2.1	.061**
RCRMU	5.6	1.1	5.11	1.2	2.4	.037*
CHNGC	5.6	.88	5.52	.88	1.1	.326
CKM	5.6	.86	5.46	.85	1.1	.342
PER	5.9	.78	5.77	.84	1.5	.173
IMP	5.6	.84	5.35	.71	2.0	.069**

Note: * p<.05, ** p<.10

As represented in Table 6.20, using a significance of 0.05, there was a significant difference of the factor of firm turnover in results relating to rewarding CRM usage. On the other hand, a significance level of 0.10 indicated a significant difference of the factor of the firm turnover in results relating to clear direction, customers' segmentation, and implementation of CRM.

Operation of the Organisation

ANOVA was used to determine differences related to operation of the organisation (regional or international) on CLRD, PMS, SEGM, RCRMU, CHNGC, CKM, PER and IMP, as shown in Table 6.21. Operations of the organisation in the questionnaire were: category (1) regional, and category (2) international.

Table 6.21: Operation Descriptive Statistics and One-Way ANOVA Results

Factor	Regional (n=108)		International (n=193)		F Test	
	Mean	SD	Mean	SD	T-test	P value
CLRD	5.5	1.0	5.6	.92	.74	.389
PMS	5.3	1.0	5.4	1.1	.29	.587
SEGM	5.8	.98	5.7	.94	.36	.545
RCRMU	5.5	1.1	5.4	1.2	.11	.730
CHNGC	5.4	1.1	5.5	.88	.69	.406
CKM	5.4	1.0	5.6	.91	3.7	.054**
PER	5.8	1.0	5.8	.84	.44	.508
IMP	5.4	.87	5.5	.88	1.2	.262

Note: * $p<.05$, ** $p<.10$

Using a significance of 0.05, there were found to be no significant effects of the organisation's operation on all factors. On the other hand, a significance level of 0.10 indicated significant differences related to organisations' operation level on knowledge management capabilities.

Speed of Response to Change

In considering the merits of adopting CRM as a response to change within the business environment, organisations' ability to quickly and smoothly respond to changes was further investigated. The organisation's speeds of response to change in the questionnaire were: (1) slow, (2) fair, and (3) fast. As shown in Table 6.22, organisations with a fast response to change had higher scores than the other categories. Using a significance level of 0.05, significant speed of response to change differences were found for all constructs in the model.

Table 6.22: Speed of Response to Change Descriptive Statistics and One-Way ANOVA Results

Factor	Slow (n=11)		Fair (n=120)		Fast (n=170)		F Test	
	Mean	SD	Mean	SD	Mean	SD	F Ratio	F Sig
CLRD	4.6	1.0	5.3	1.0	5.8	.81	15.6	.000*
PMS	4.7	1.0	5.1	1.1	5.6	.98	8.2	.000*
SEGM	5.3	1.3	5.6	.93	5.9	.93	3.0	.050*
RCRMU	4.6	.96	5.2	1.2	5.6	1.1	8.9	.000*
CHNGC	4.7	1.2	5.4	1.0	5.6	.89	6.3	.002*
CKM	4.6	1.0	5.4	.96	5.7	.95	8.3	.000*
PER	5.1	1.5	5.6	.91	5.8	.90	6.8	.001*
IMP	4.7	1.0	5.2	.91	5.6	.78	12.6	.000*

Note: * $p<.05$, ** $p<.10$

6.11 Summary

Twenty two hypotheses developed from the conceptual model in Chapter four were tested in this chapter. The characteristics of organisations taking part in this study, believed to be representative of the industries in Jordan, were examined. Furthermore, demographic characteristics of the respondents were described. The data analysis in this chapter started with Exploratory Factor Analysis (EFA), then confirmatory factor analysis, and finally Structural Equation Modelling (SEM) techniques. EFA using varimax rotation was performed as a data summarisation technique to ascertain the underlying structure of the data. As a result of EFA, twelve factors out of the twenty one, proposed in the conceptual model in Chapter four, were retained.

The fit of the measurement model (proposed model resulting from EFA) was assessed using CFA. These assessments have taken into account the overall goodness-of-fit measures in addition to examining standardised residual and modification indices. After determining the best-fitting measurement model (revised measurement model), convergent and discriminant validity tests of the constructs in the revised measurement model were assessed.

Once the measurement model was accepted, the proposed structural model to be tested was specified by including the constructs in the measurement model. Then, the proposed structural model was assessed including fourteen paths among the constructs in the model. Fourteen hypotheses were developed from these and presented with appropriately justified structural paths. The structural paths proposed that twelve adoption factors affect employee perceptions of CRM. In addition, employee perceptions of CRM are thought to mediate the relationships between the twelve adoption factors and organisations' implementation of CRM. In order to examine the direct effect of adoption factors on organisations' implementation of CRM, a competing model (partial mediation model) analysis was also performed.

Then diagnostic measures were used to indicate potential respecifications and improvements of both structural models and their overall fit indices. Results showed that both respecified models met the accepted standards for overall model fit. However, the respecified model, Model 2, provided the best model fit and hence was adopted as the final model of the study. This model accepted five hypotheses of structural paths between constructs. Furthermore, included eight constructs: clear direction, performance management system, segmentation, knowledge management capabilities-manage, rewarding CRM usage, change control, perception and implementation, in the final model.

Finally, a series of analyses of variances (ANOVA) was employed to determine organisations' characteristics (industry, turnover, etc), and differences in the eight constructs in the final model (clear direction, performance management system, segmentation, knowledge management capabilities-manage, rewarding CRM usage, change control, perception and implementation).

In the next chapter, the results of the empirical investigation of this thesis are discussed, in which the following research question is explored:

What are the factors affecting organisations adoption of CRM?

Chapter 7: Discussion

7.1 Introduction

Organisations adopting CRM find it challenging and often report a high failure rate. This study aims to present a holistic view of factors affecting CRM adoption, and to analyse how such factors, identified by empirical research, may influence the rate of success. The main aim of this chapter is to present the empirical results of the study, outlined in Chapter six, and to understand the role of such factors in the adoption process. The acceptance/rejection of research hypotheses are discussed in accordance with prior research. In addition, possible explanations of the CRM adoption process are discussed and potential suggestions made. The results of the study are discussed in relation to three main disciplines, marketing, management and IT, and how each contributes to CRM literature and practices. Following from this, the influence of each factor is discussed in further detail as it is seen to affect CRM adoption.

The present chapter consists of five sections: the first discusses the conceptual model development process, the second, and third respond to all of the constructs in the model, the fourth presents a general discussion of the findings, and the fifth constitutes the conclusion.

7.2 Model Development

In this study, a holistic conceptualisation of the major factors affecting organisational adoption of CRM systems was developed in order to gain a more comprehensive understanding of CRM and the associated factors affecting its adoption. It was posited that this would help organisations to avoid a narrow view of CRM and to realise its full benefits. Accordingly, this study was based on ten companies across four different industries in Jordan: Banking, Telecommunications, Hospitality and Automotive. This diverse population of industries was seen as likely to present a diversity of potential challenges to CRM adoption, and to inform conclusions which would be generalisable across industries. In order to develop a holistic view of CRM, a tunnel vision relating to marketing, management and information technology disciplines was highlighted in this study.

The following sub-sections summarise and provide a brief description of stages used to develop the research framework.

a) Literature Review and Exploratory Study

As a result of the literature review and the exploratory study in this research, the present study came to examine the association between 7 potential issues/factors in CRM adoption. These issues were represented as customer-centric orientation, strategic planning, internal marketing, organisation culture and leadership, project management, innovation characteristics, and knowledge management capabilities. Similar to other multilevel models in the literature, the conceptual model of this study

suggested that each of the primary factors influencing CRM adoption has distinct sub-factors. Accordingly, 21 sub-factors were suggested as providing the structure of the conceptual model (see Table 7.1) and serving as a basis for developing an appropriate survey to test and validate the conceptual model.

Table 7.1: A List of Sub-Factors for each Factor in the Proposed Conceptual Framework 1

	Disciplines						
	Marketing	Management				IT	
Factors	Customer-centric orientation (Swift, 2000)	Strategic Planning (Meadows & Dibb, 2008)	Internal marketing (Christopher et al., 2002)	Culture and leadership (King & Burgess, 2007)	Project Management (Ocker& Mudambi, 2003)	Knowledge management (Massey et al., 2001)	Innovation (WU & WU, 2005)
Sub-Factors	Customer profitability	Clear direction embracing CRM strategy.	Change management	Resistance to change	Project Management Techniques	Capture	Ease of use
	Segmentation	Covering CRM in the performance measurement system	Communication	Supportive culture	Change in control methods	Manage	Usefulness
	Acquisition	Developing a strategic set of activities for CRM adoption	Reward for CRM usage	Leadership		Transmit	
	Satisfaction						
	Retention						

b) Exploratory factor analysis

The Exploratory Factor Analysis (EFA) was employed preliminarily to evaluate new measures for use in hypothesis testing. Using EFA was appropriate in this study given that there was some uncertainty as to whether, being new, these measures would provide a sufficiently clear understanding of the underlying factors pattern. Based upon the factor analysis of the quantitative data, the measurement items were grouped to form a final group of 12 distinct potential sub-factors, as shown in Figure 7.1. This indicates that some of the 21 sub-factors in the survey overlapped or were not seen as relevant to CRM adoption in this research context.

Figure 7.1: Proposed Research Framework 2
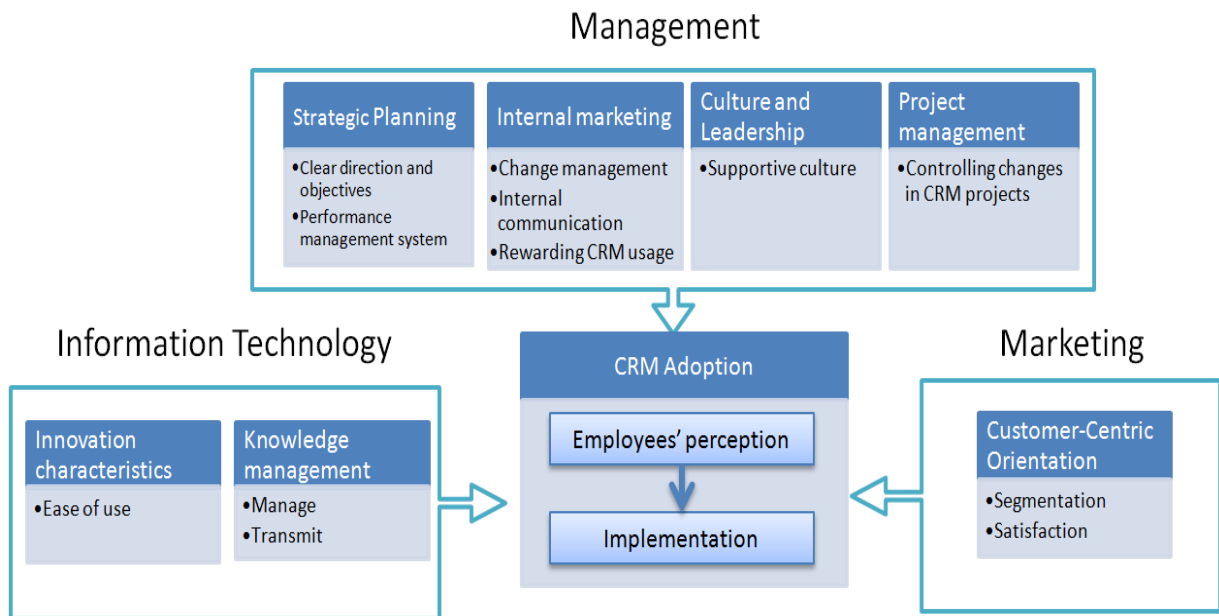
Taking all factors into account, the analysis in this study was used to propose that 12 distinctive sub-factors might be taken as potential predictors of the success rate of CRM adoption in a hierarchical model where employee perceptions of CRM mediate the effect of its implementation in an organisation, as shown in Figure 7.1. In light of the EFA, the hypotheses in the study were modified to accommodate the underlying structure of identified factors. As mentioned earlier in Chapter six, 13 hypotheses were proposed to investigate the relationships between the 12 factors resulting from EFA and employees' perception of CRM where the latter mediates the effect of the adoption factors on CRM implementation within an organisation.

c) Structural Equation Modelling

With respect to this proposition, the Structural Equation Modelling (SEM) analysis proved that only four sub-factors had a statically significant impact on employee perceptions of CRM, as depicted in Table 7.2. Therefore, four of the twelve hypotheses were supported. The four identified sub-factors were: clear direction and objectives of CRM, a performance management system incorporating CRM, segmentation analysis, and transmission of knowledge across an organisation. Overall, the four sub-factors were seen to offer an excellent explanatory power (R^2=.60) for estimating employee perception of CRM. Employee perceptions of CRM mediate the effect of these four factors in CRM implementation. Moreover, the SEM results showed that clear direction of CRM, rewarding CRM usage, and controlling changes in CRM projects were also significant predictors of CRM implementation in an organisation. Overall, these results offered a very good explanatory power (R^2=.48) for CRM implementation. Further discussion of the proposed 12 sub-factors, their relative main factors, and disciplines (marketing, management and IT) are highlighted in this section.

Table 7.2: Summary of Hypotheses and Results

Hypothesis No.	Relationship	Result
H1	Employees' perception (PER) �that Implementation of CRM (IMP)	**SUPPORTED**
H2	Clear direction and objectives � PER	**SUPPORTED**
H3	Performance management system ➤ PER	**SUPPORTED**
H4	Emphasis on segmentation analysis ➤ PER	**SUPPORTED**
H5	Emphasis on customer satisfaction ➤ PER	NOT SUPPORTED
H6	Change management ➤ PER	NOT SUPPORTED
H7	Internal communication ➤ PER	NOT SUPPORTED
H8	Rewarding CRM usage ➤ PER	NOT SUPPORTED
H9	Supportive culture ➤ PER	NOT SUPPORTED
H10	Managing changes in CRM projects ➤ PER	NOT SUPPORTED
H11	Perceived ease of use ➤ PER	NOT SUPPORTED
H12	Managing customer Knowledge ➤ PER	**SUPPORTED**
H13	Transmitting customer knowledge ➤ PER	NOT SUPPORTED
-----	Clear direction and objectives ➤ IMP	**SUPPORTED**
-----	Rewarding CRM usage ➤ IMP	**SUPPORTED**
-----	Managing changes in CRM projects ➤ IMP	**SUPPORTED**

The following sections discuss the factors affecting CRM adoption from the three major disciplines incorporated in this study.

7.3 CRM Adoption

The process of CRM adoption within an organisation, as considered in this study is composed of two dimensions: employee perception, and implementation. These two dimensions are important for reflecting CRM adoption from two different angles or perspectives: that of individuals/employees and that of organisational level. Considering CRM adoption from these two different perspectives is useful in unravelling the complexity of CRM. To the best of the author's knowledge, this study is rare in bringing together these two perspectives of CRM adoption and considering the factors affecting each one of them. The results demonstrate that employees based their judgements of CRM benefits on the degree to which these are seen to enhance customer satisfaction, retention, profitability and relationship. On the other hand, organisations are seen as implementing CRM technologies in order to better offer customer loyalty programs, manage customer loyalty, support internal communication, segment customers based on profitability, and provide services in one place.

This study takes the view that the implementation of CRM within an organisation is a result of employees' perception or appreciation of CRM offerings. Building on this point, it is suggested that employee perception of CRM's relevance mediates the

effects of four adoption factors (clear direction, performance management system, segmentation, and knowledge management) on the actual implementation within an organisation. However, it should be noted that clear direction and objectives have also a direct and indirect influence on the implementation of CRM at both individual and organisational level. Overall, the results support a first hypothesis relevant to the adoption process, that is:

H1: Employees' perceptions of CRM benefits mediate the effect of adoption factors on an organisation's implementation of CRM.

Results lead us to assert that employees' perception of CRM benefits serves as reasonable proxy for the actual organisational implementation, the premise being that rather than simply implementing technologies, organisations must consolidate employees' perceptions of CRM initiatives. These findings are consistent with prior research which concludes that management must plan ahead and prepare for CRM implementation by cultivating a culture that embraces its values (Shum *et al.*, 2008). CRM introduces a large scale change in an organisation. Managing this change requires altering employees' perception of CRM through four emerging concepts. First, organisations need to set clear objectives and goals before adopting CRM so that employees may have an initial idea of what CRM means, and prepare themselves to adhere to those objectives. Second, it is important for organisations to gauge aspects of CRM performance so that employees may perceive managerial commitment as sincere and resolute and have an enhanced positive perception of their own role in implementation. Third, the results confirm that organisations conducting segmentation analyses appreciate CRM offerings. This makes sense as segmentation and CRM concepts have been tied closely in many studies (eg: Rigby *et al.*, 2002; Meadows and Dibb 2012). Finally, demonstrating organisational capability of managing customer knowledge enables employees to recognise the importance of CRM. This is reasonable in that building an intimate understanding of customers is a fundamental concept for the technologies both of knowledge management and CRM.

The results of this study also show that three adoption factors have direct influences on the implementation of CRM within an organisation: clear direction of CRM, rewarding CRM usage, and controlling changes in CRM projects. The direct effects of these factors on CRM implementation will be discussed in the following sections.

7.4 Factors Affecting CRM Adoption

The value of this study lies in linking different disciplines within a single research framework and in the identification of some under-researched areas of CRM adoption. The framework presented in this study draws on thinking in the marketing, management, and IT disciplines, and addresses the call to develop measures and models to unravel the complex nature of CRM. Hence, it should bridge the gap in understanding and provide deeper insight into achieving success with CRM adoption.

A discussion of the results as relevant to those three disciplines will be provided as follows.

7.4.1 Marketing Discipline

The dominant critique of CRM articulated in the marketing literature is that when organisations ignore customer-centric orientation, CRM is notorious for failing (Reinartz *et al.*, 2004; Kim *et al.*, 2012). In this light, Tsiptsis and Chorianopoulos (2011:1) emphasise that "CRM should be a customer-centric approach based on customer insight". The review of the literature and the sequential qualitative study suggested that the customer-centric orientation contains five determinant sub-factors: customers' profitability, segmentation, acquisition, satisfaction and retention. However, in this research context, the factor analysis revealed only two potential elements: segmentation analysis and customer satisfaction. Hence, the following were hypothesised:

> *H4: Organisation's emphasis on segmentation analysis will have a positive effect on employee perceptions of CRM.*

> *H5: Organisation's emphasis on customer satisfaction will have a positive effect on employee perceptions of CRM.*

Based upon testing these two elements using SEM, the findings of this study highlight customer segmentation as the only element affecting CRM adoption. A discussion of each element of customer-centric orientation is discussed below.

i) Customer-centric Orientation

Segmentation

The findings of this research support hypothesis H4 which suggests that organisation's emphasis on traditional segmentation analysis will have a positive effect on employee perceptions of CRM. Such findings are reasonable, since segmentation is mainly concerned with analysing customer information to help organisations understand customer needs and to enhance profitability by differentiating marketing strategies. The research findings concerning the effect of segmentation on CRM adoption suggest that effective CRM requires gathering customer information related to segment markets, and segmenting customers based on their lifetime value. This supports Marcus' (2001) finding regarding segmentation analysis and its positive influence on CRM adoption. Moreover, Rigby *et al.* (2002) have argued that adopting CRM without 'good old-fashioned segmentation' is doomed to fail. For organisations in this study, segmentation seemed to be a key term. This confirms results of some studies suggesting segmentation as the core concept of CRM (Dibb, 2001). The reason segmentation is so important is because it highlights the importance of gaining insights as to the type and value of customers in order to plan accordingly for effective resource allocation. If this result seems to contradict the argument that CRM (the concept of focusing on individual customers) challenges the

segmentation approach (the concept of groups of customers), a more evolved position might conclude that CRM improves and complements the traditional thinking of segmentation rather than replacing it.

The results indicate that organisations applying the principles of market segmentation usefully apply CRM as a mean of developing greater power of insight. More specifically, organisations that are keen to accept CRM tend to use customer information to segment markets and to segment customers based on their lifetime. This implies that use of CRM may become increasingly imperative when organisations are seeking to generate insight into individual customer needs, in order to craft customer-specific marketing strategies. Similarly, Bailey *et al.* (2009) suggest that organisations should optimise a traditional segmentation process using the rich data on individual customers derived from CRM. Furthermore, reinforcing the link between traditional segmentation and CRM allows for individualised customer treatment. Consequently, the idea of serving smaller segments through the individualisation of offerings is only possible through CRM.

Relevant to this research's findings Hwang *et al.* (2004) indicate that identifying profitable customers is the starting point of CRM. At the centre of identifying profitable customers lies Customer lifetime value (CLV), a key metric pervading many CRM studies. According to Blattberg *et al.* (2009), CLV is a pivotal concept for identifying, acquiring, and building relationships with the right customers in CRM (Venkatesan and Kumar, 2004). Similarly, this study suggests that organisations using the metric of CLV are rapidly accepting CRM as a dynamic framework that enables maintaining and improving relationships with the right customers. CRM can help organisations to pick out specific customers with high CLV while discarding other types of customers.

In this study, segmentation has proven to be important for CRM adoption; in particular it is clear that a good segmentation analysis used by an organisation will lead to an increased understanding of CRM benefits. Such findings suggest that in today's fierce competition, organisations are starting to realise their responsibility for building and updating customer databases to optimise segmentation analysis (Dibb, 2001; Lu and Chang, 2011). This understanding will allow CRM to have substantial inputs to corporate planning and strategy. Because customer segmentation is considered as a vital precursor of CRM adoption, revisiting customer segmentation should be related to further refining of CRM strategies, processes and initiatives. Such strong links between segmentation and CRM promises to help staff relate more easily to CRM and its benefits.

The findings of this study suggest that segmentation analysis is the only element of customer-centric orientation which significantly affects CRM adoption. This contrasts quite markedly with many past studies suggesting that organisation orientation around other elements such as customer satisfaction is important for CRM (Stefanou *et al.*,

2003; Maklan and Knox, 2009). This can be explained by Meadows and Dibb (2012) who argue that CRM adoption is a journey which begins with segmentation analysis and identification of profitable customers, and that customer insight provided by segmentation analysis is the first step of customer-centric orientation. Meadows and Dibb (2012) further explain that only some organisations have managed to progress with CRM into gaining customer closeness. This might explain why in this study employees failed to relate their customer satisfaction orientation to CRM offerings. Based on prior argument, it can be assumed that organisations participating in this study are in early stages of their journey with CRM, and hence beginning that journey by relating existing segmentation analyses to CRM benefits. To embark on their journey, such organisations need to increase their understanding of CRM concepts and to promote the promising benefits of CRM more effectively for their members.

Satisfaction

This research rejects H5 that organisation's emphasis on customer satisfaction will have a positive effect on employee perception of CRM. The results suggest that although organisations focus their efforts around customer satisfaction, this does not seem to affect employees' perception of CRM positively. Such findings contrast with prior studies proposing that the underlying culture and systems of an organisation designed round customer satisfaction is likely to influence CRM adoption (Swift, 2000). A further reflection and analysis of extant studies are used to explain reasons behind this set of findings. A further review of the literature reveals that this study is supported by Stefanou *et al.* (2003), who unexpectedly found that organisations tend to overlook the importance of customer satisfaction influence on CRM; suggesting that no relationship exists between CRM adoption and the extent to which customer satisfaction is emphasised by organisations.

Several studies suggest that CRM fails to meet its promised outcomes (Mehta, 2011; Vella and Caruana, 2012). In this study, it is suggested that CRM specifically failed to fulfil the expectations of organisations focusing on customer satisfaction. This seems sensible as these particular organisations tended to have higher expectations from CRM. However, with CRM adoption short-term issues arise and benefits are preserved over long-term (XU and Walton, 2005). Prior studies suggest that CRM initiatives sometimes fail to be linked to increased customer satisfaction and this is influenced by an organisation's ability to plan and define CRM within the business framework (Feinberg and Kadam, 2002; Chen and Li, 2006; Richards and Jones, 2008). The noticeable lack of success in CRM adoption may therefore seem to rely on organisational failure to adopt an ideological stance to support customer satisfaction rhetoric.

7.4.2 Management Discipline

From a management perspective, researchers report that businesses are concerned with organisational issues related to CRM business strategy development and implementation, and the role of the employees and the organisation in managing the

adoption of CRM. The combination of the literature review and qualitative study suggested that these organisational issues also include strategic planning, culture and leadership, internal marketing, and project management.

i. Strategic Planning

In this study, strategic planning was proposed as one of the key drivers of CRM adoption. Based on the literature review and the qualitative stage of this research, it was hypothesised that three strategic planning sub-factors (clear direction of CRM, performance measurement of CRM, and integrating strategic sets of activities around CRM) positively influence employees' perception of CRM. However, the factor analysis confirmed that only two sub-factors were measurable from the collected data. These are clear direction of CRM and the performance management system of CRM. Upon further factor analysis, SEM was used to test the effect of these two elements on employee perception of CRM. The results support both hypotheses:

> *H2: Having a direction and objectives that embrace a clear CRM strategy will have a positive effect on employee perceptions of CRM.*

> *H3: Strategically covering CRM performance measurement mechanisms in an organisation will positively affects employee perceptions of CRM benefits.*

This suggests that an organisation should provide clear direction and objectives for CRM, and a means for evaluating its performance, in order to set up desired expectations among all stakeholders.

Clear Direction and Goals

Examining the strategic planning dimension of the framework, it is suggested that organisations see causality between having clear direction and objectives embracing CRM strategy, and employee perceptions of CRM. This indicates that every organisation needs to establish and agree on its CRM objectives and what exactly will bring value to their business. In other words, it should be clear in the organisation how CRM strategy supports the overall business strategy, by building and developing customer relationships for a sustained competitive advantage. Consistent with prior research, (Chen and Chen, 2004; Osarenkhoe and Benni, 2007), setting a clear direction and goals of CRM aligned with the overall organisation vision will keep the organisation engaged, focused and effective. Thus, it is vital that organisations embed CRM in their business strategy, and monitor how that strategy affects employee response to CRM. Moreover, Reynolds (2002) and Payne (2006) suggest that it is important to have a strong and clear strategy for focusing CRM solutions on business objectives, in order to yield the highest return on investment.

Many studies have suggested that objective setting of CRM can motivate employees (Galbreath and Rogers, 1999; Meadows and Dibb, 2012). But present discussion amongst scholars indicates that setting the right goals for CRM is not an easy process

(eg: Langerak and Verhoef, 2003; Kim *et al.*, 2012). This is mainly because CRM is large complex system correlating many concepts. The current study suggests that different organisations need to identify the right CRM objectives for them by focusing on their particular ideology for building relationships with customers, and rolling this into an overall business strategy. As a recent study argues, this is important, since while organisations might understand it as obvious to focus on customers, they often fail to include customer data in their CRM strategies (Elmuti *et al.*, 2009). Expanding on the findings of the current study, the importance of building CRM strategy around customers must include how the organisation plans to acquire, develop, retain and reactivate customers; if these strategies are clear and visible to employees, they will then perceive and respond to CRM trends.

Clear direction and objectives of CRM is a basic criterion for employee use and for evaluating the potential benefits of CRM in an organisation, since these provide accountability for strategies geared toward customer focus. Lack of clear objectives before launching CRM indicates that management expectations are unrealistic and inappropriate. Thus, the findings of this study indicate that it is the management responsibility to share its vision across the organisation. If the management does not articulate and share clear objectives of CRM, then the employees will certainly not adopt the attitude to accept and go along with CRM implementation.

As can be seen from the results of the final conceptual framework, clear direction and objectives of CRM positively influence CRM implementation in terms of technology. This means that only through setting clear objectives of CRM can the progress of its implementation be given impetus to accelerate. This is linked to Meadows and Dibb's (2012) findings suggesting that the progress of CRM and its implementation is determined by the ability to plan strategically. A possible benefit from embedding clear objectives for CRM in the business strategy may be the opportunity to bridge the gap between CRM plans as proposed by top management, and the progress of implementation of the CRM system. Careful planning and setting up of CRM is needed in order to support each procedure involved in CRM adoption, and to boost its implementation. Similarly, it has been argued that CRM will ultimately fail if organisations underestimate the clear objectives, and adequate allocation of resources essential for CRM implementation (Piskar and Faganel, 2009).

Performance Management System

Further findings of this study highlight that the CRM performance measurement mechanisms are an important dimension of strategic planning, which affects CRM adoption. This study suggests that CRM outcomes should be monitored, and the actual performance of CRM should be measured against the organisation's strategic plan. Although it takes a lot of time, CRM measures should match CRM objectives and should be held accountable for contributing to a progressive strategic plan. In particular, this study suggests there is an important causality between performance measurement and employee perception of CRM. This supports several studies

suggesting that organisations focusing on the importance of performance measurement are more likely to perceive the benefits of implemented innovation (Morgan, 2004; Sawang *et al.*, 2006). This is mainly because measuring strategic CRM performance provides employees with a detailed picture of what CRM implementation is capable of achieving.

According to Batenburg and Versendaal (2007), CRM performance measures should be linked to business strategy and further measurable axes. Since the adoption of CRM is associated with long-term projects, the question arises as to whether these projects are equally able to serve CRM objectives in each of the projects stages. The findings of this study suggest that an organisation needs first to define an appropriate CRM strategy and outline priorities fitting with its corporate business strategy, and then to build clear CRM measures to assess its strategy, and finally to cascade these across the organisation. This interrelated process would better lead to an in-depth understanding of CRM effectiveness and what should be done to achieve outcomes.

Neither should the importance nor the challenge of tailoring a performance measurement system that is flexible with employees' attitudes be underestimated, even if acknowledged as difficult. CRM is a complex system involved with a variety of stakeholders, each group seeking different types of benefits arising from its initiatives. A possible benefit from strategically measuring the performance of CRM could be the opportunity to assess and diagnose its progress, which would result in tailoring CRM measures that are valuable and relevant to each group of stakeholders' responsibilities. This would eventually lead to the acceptance of CRM by varied stakeholders. Hence, managers are recommended to assess whether the beliefs of organisational members towards CRM are consistent with the demands of using performance measures.

ii. Internal Marketing

This study sheds lights on the relationship between internal marketing rhetoric and its implementation in practice. Internal marketing has been proposed as one of the important conceptual factors affecting CRM adoption (eg: Grönroos, 1981; Rigby *et al.*, 2002). In conducting the qualitative study for this research, it was proposed that internal marketing consists of three dimensions: change management, internal communication, and rewarding CRM. These dimensions were considered as sub-factors positively affecting employees' perception of CRM. The factor analysis confirmed the three sub-factors can be measured from the collected data. Upon further analysis, SEM was employed to examine the influence of these two elements on employee perceptions of CRM. The results rejected the hypotheses of this study suggesting that those elements affect employee perceptions positively. Nevertheless, the results showed that rewarding CRM usage is an important factor affecting the CRM implementation phase of the adoption process. The results rejected all of the following hypotheses:

H6: Change management in an organisation will have a positive effect on employee perceptions of CRM.

H7: Internal communication in an organisation will have a positive effect on employee perception of CRM.

H8: Rewarding CRM usage will have a positive effect on employee perceptions of CRM.

In principle the three internal marketing ideas appear to be compatible with the three core internal marketing practices adopted by the organisations studied. However, SEM analysis of data sheds lights on incompatibilities and contradictions; internal marketing elements in terms of change management, internal communication, and rewarding CRM do not appear to promote CRM benefits to employees. This means that there are a number of paradoxes in internal marketing concepts and practice. Evidence from the study suggests that rewarding CRM usage positively influences the implementation levels of CRM technologies. The influence of each factor is discussed below.

The findings indicate that although those different forms of internal marketing exist, they failed in this study to address any internal perception of CRM. To the best of the author's knowledge, this study is the first to demonstrate that internal marketing efforts fail to influence employee perceptions of CRM. In other words, while management might have propounded seemingly sound internal marketing efforts, the employees did not fully realise the benefits of CRM. A possible reason for that might be that internal marketing efforts are only successful when organisations build a deeper understanding of their practicality. Ahmed and Rafiq (2003:10) state that "internal marketing is an unusually slippery concept, easy to visualise and yet exasperatingly difficult to operationalise", concluding that building a deeper understanding of internal marketing is not an easy process, either for practitioners or academics. It requires considering internal marketing as a management philosophy rather than "a short-lived exhortation programme or campaign to boost attention to customers" (Varey, 1995:41). Hence, this study extends the debate regarding issues surrounding internal marketing performance to the CRM domain. This is important, as research evidence proves that without active and continuous efforts of internal marketing the impact of CRM on customers would deteriorate (Grönroos, 1994).

Change Management

Prior research suggests that organisations need to recognise the importance of change management in creating the right motivation and climate for CRM adoption. The most common prominent theme within CRM adoption is addressing employee resistance to change. Organisations can address resistance to change by continuously educating employees on how to build relationships with customers. Training boosts motivation and reduces employee resistance to change resulting from CRM adoption (Chen and Popovich, 2003). According to Grönroos (2000), training is a task for improving

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employees' knowledge and altering their attitudes towards serving customers. Training helps organisations to facilitate rapid change and restructuring, by creating a positive learning environment. Several researchers highlight the vital role of training employees to interact with customers to manage CRM expectations (eg: Parvatiyar and Sheth, 2001).

The results of this study lead us to reject the hypothesis that change management has a positive effect on employee perception of CRM. More specifically, the results reveal that even if an organisation delivers training for CRM, training procedures may fail to create a positive perception of CRM. In other words, the whole ethos of training employees to improve customer service exists in organisations, but not enough on its own to promote CRM to employees. This goes to show that training procedures for helping employees deal with customers does not necessarily enhance their perception of CRM benefits. There are likely to be multiple reasons for this disappointing result, such as, lack of appropriate training in professionally handling customer relationships (Reinartz *et al.*, 2004).

Typically, training is a task which has been left to functional units such as human resources departments, whose approach to training is of particular concern for realising CRM benefits (Dibb, 2004). This research observes that there is a potential gap between training purposes and what happens in practice. More specifically, the study's findings indicated that while management were supporting CRM changes, the teams responsible for CRM changes, typically HR departments, were misinterpreting its real values for organisations. This could explain reasons behind internal marketing failure. Hence, management should monitor, interact, and commit to resolve training issues.

Internal Communication

The findings of the present study reject the hypothesis proposing that internal communication influences employees' perception of CRM. Such findings contrast with several studies highlighting the importance of internal communication to create interests in CRM and to arouse desire for the adoption of its ideas (eg: Chen and Popovich, 2003). This means that while internal communication essentials are present among organisations, this does not mean they are effective in attracting employees' interest to CRM. This extends the debate around what constitutes the right internal communication systems in internal marketing. The extant literature pertinent to internal marketing argues that there are gaps between the rhetoric of internal communication and how it is practiced within organisations (Rafiq and Ahmed, 2000; Papasolomou-Doukakis and Kitchen, 2003; Finney, 2011). Scholars in this area argue that organisations do not provide sufficient resources to invest in the internal marketing process. In a worst case scenario, internal marketing turns into a rigid and centralised approach that is not flexible to employees' needs. This weak internal communication system fails to promote the ideology of CRM.

On the other hand, Papasolomou-Doukakis and Kitchen (2003) suggest that a bureaucratic top-down structure is a barrier to successful communication of internal marketing messages. A recent study investigating communication strategies within enterprise resource planning, which is very similar to the nature of CRM indicated that practitioners lacked understanding of how internal communication needed to be managed (Finney, 2011). Finney (2011) also suggested that internal communication requires a tailored approach to meet varied stakeholder needs. As the data in this study have revealed, there are possible weaknesses in internal communication. This raise concerns that while employees are learning about CRM, the desired message of CRM implementation and practice should be delivered in the proper manner.

Rewarding CRM Usage

Although it was hypothesised that rewarding CRM usage would have a positive influence on employee perceptions of CRM, the findings do not support this hypothesis. Nevertheless, the results of this study have revealed that rewards have a direct influence on CRM strategy/technology implementation in an organisation. This indicates that factors affecting CRM adoption can have a different effect at different points in the adoption process. Although this claim is supported by many IT researchers investigating antecedents of innovation adoption (eg: King, 1990 as cited in Snug *et al.*, 2011; Damanpour and Schneider, 2006), prior studies of CRM, from management and marketing disciplines, do not seem to recognise that factors affecting CRM adoption vary between different points of the adoption.

What the results suggest is that rewarding usage encouraged organisations to embrace CRM technologies even when employees are not yet comfortable with these. A high level of reward increases employee eagerness to pursue CRM implementation; this reward ideally sufficient to encourage them in efforts to comply with management demands for CRM implementation. However, such rewards do not instil more favourable perceptions of CRM. In this event, it can be argued that employees have been moved rather than motivated. This may show that managing employee perception is not as straightforward as it may seem to practitioners and academics. Such an idea concurs with a recent study which argues that looking at CRM adoption purely from a management perspective is a common mistake, given that employees may behave in a manner different from that expected (Vella and Caruana, 2012). The current study suggests that if employees make use of CRM only as a result of incentives, this may lead managers to see their employees as having a positive perception and hence being internally motivated, when in fact it is management that is externally motivating them to use CRM. This suggestive result is strongly connected with Herzberg's argument (1987 as cited in Basset-Jones and Lloyd, 2005) that it is 'because of movement', in this context movement towards the implementation of CRM, that 'traditional individualised incentives' seem an appropriate way of rewarding employees. But such movement and such rewards are no guarantee of employees' motivation to change.

iii. Organisational Culture and Leadership

This study proposed an organisational culture and leadership element as one of the elements affecting CRM adoption. Based on the qualitative study of this research, it was hypothesised that three sub-factors (resistance to change, supportive culture and team work, and leadership) affect employees' adoption of CRM. Yet the factor analysis confirmed that only the supportive culture sub-factor yielded significant measurements from the quantitative data so that the other two sub-factors were discarded. Followed by SEM to investigate the relationship between constructs in the conceptual framework, the results rejected the following hypothesis:

> *H9: Supportive organisational culture (team working and a cross-functional work) will have a positive effect on employee perceptions of CRM.*

The results of the study are surprising, since researchers repeatedly assert that supportive culture (emphasising innovation, stressing quick response to changes in market, and being flexible to accept changes) is necessary to enable employees to perceive the benefits of CRM (Payne, 2006; Chen *et al.*, 2009a). But in hindsight this could be because of two main reasons. First, measurement of the supportive culture in this study is based upon opinions collected from organisation members. In other words, measurement of the supportive culture construct is based on subjective forms. Hence, organisation members in this study were self-describing their organisational culture as supportive in adopting innovation and changes. The measures used in this study to gauge the extent to which the organisational culture was supportive are common in prior research (eg: Khan, 2008), but appear potentially to introduce respondent bias. Second, considering the culture in the Middle East and in Jordan in particular, the disappointing results might be due the fact that organisations in such countries have relied heavily on top management. Such heavy emphasis on top management might leave organisational members bereft of the capacity to leverage CRM acceptance within an organisation. In Weir and Hutchings's (2005) study of Arab cultures, they report that junior staff are often faced with the difficulty of conducting changes or remodelling the business against the existing established structure of power and authority. However, they also point that this by no means implies that change is impossible there, especially since the area has witnessed a very rapid development over the last two decades.

iv. Project Management

The current study proposed project management as one of the key issued involved in CRM adoption. After the qualitative stage of this study, it was hypothesised that two project management sub-factors (project management techniques, and controlling changes in projects) influence employee perception of CRM. However, the factor analysis confirmed that only the second sub-factor can be measured from the collected data. Followed by SEM to test factors affecting CRM adoption, the results rejected the following hypothesis:

H10: Managing changes in CRM projects will have a positive effect on employee perceptions of CRM.

The results indicate that managing changes in CRM projects does not influence CRM perception amongst employees but influences its implementation. Although not originally proposed for improving implementation directly, the results reveal that managing changes of CRM projects enables its implementation within an organisation. The combination of these results suggests that project management methodologies are paying attention to management agenda/goals but ignoring employee perceptions. Thus, organisations are limited by the simplistic view of evaluating the project management effect on CRM adoption. This narrow view guides the project team to focus on changing and controlling CRM projects to meet management goals. That is why these results reveal that there is a practical necessity for project managers to reflect on the multi-stakeholder perspectives/qualities of the CRM adoption process. The findings of this study regarding the importance of managing changes in CRM projects are consistent with prior studies (Rigby *et al.*, 2002; Papadopoulos *et al.*, 2012) who extended their findings to consider two perspectives (employees and management) when evaluating and managing changes of projects, rather than a single perspective.

There are differences observed in the current study and in prior studies (eg: Man *et al.*, 2006) with respect to the influence of project management on employee perceptions within an organisation. These could be attributed to the reality that unless organisations have sufficient project management skill and experience to immediately respond to employees' concerns, CRM risks getting off to an inauspicious start. CRM is a long project and employees might not perceive progress until they see results of change. More specifically, this study explores potential incompatibility of the actual time of managing changes, which could negatively employees' perception of the project success. Essentially, this is an important issue in that organisations making efforts to respond to employees' requirements and needs so they make better use of CRM and provide better service, nevertheless often fail to create a positive attitude to CRM. Therefore, it is essential that existing methodologies for managing changes are efficient in informing employees about the content of projects but also the importance of CRM before its implementation. In support of this general viewpoint, Wilson *et al.* (2002) found that for CRM projects to be valuable within their scope, they need to be designed for flexibility in embracing employee issues.

In summary, research of organisations suggests that they must not only have control over project changes in order to propagate the development of CRM in their organisation, but also pay more attention to employee perceptions of CRM. This can be achieved by involving them in projects, so that project teams can be informed of employee requirements and address these concerns. In such an environment, there is an increased probability of meeting detailed organisational requirements and supporting eventual CRM implementation.

7.4.3 IT Discipline

From the IT perspective, CRM is a technology which organisations implement in order to build and maintain relationships with customers. The review of prior research in combination with sequencing qualitative results suggest two main themes affecting CRM adoption: knowledge management capabilities (Romano and Fjermerstad, 2003), and technology acceptance by users (Wu and Wu, 2005). However, the results of the quantitative data confirmed organisational ability to manage customer knowledge as the only factor affecting CRM adoption. Discussion of the results and the differences between the two sets of data (qualitative and quantitative) is developed in the following sections.

i. Innovation Characteristic (TAM constructs)

This study acknowledges the necessity of understanding individuals' behaviour in the process of organisational change. Along these lines, the Technology Acceptance Model (TAM) has been employed to analyse individual behaviour. The TAM is a widely model used to predict individuals' acceptance of technological change, based on two constructs: perceived ease of use (PEOU) and perceived usefulness (PU). After the qualitative stage, it was hypothesised that two innovation sub-factors (PEOU and PU) influence employee perceptions of CRM. However, the factor analysis confirmed that only PEOU can be measured from the collected quantitative data. This means that the measurement scales in this study were not an accurate predictor of the PU construct. Since the measures used in this study were developed from prior research (eg: Wu and Wu, 2005), this study suggests that existing measures for the PU construct in a CRM context may need further attention and validation from researchers.

Followed by SEM, the results rejected the following hypothesis:

> *H11: Perceived ease of use of CRM system will have a positive effect on employee perceptions of CRM.*

The results reveal that PEOU fails to attain a significant positive influence on employees' perception of CRM. This goes to show that implementing a user-friendly CRM, which is easy to use, does not necessarily enhance employee perceptions of the system. The surprising rejection of this relationship echoes the results obtained by Gefen (2000), who noted inconsistent findings regarding the influence of PEOU on users' attitudes (employee perceptions in this study). According to Gefen (2000), once the user has adopted the information technology, and experienced it, the influence of PEOU on attitude is not significant. Furthermore, a recent study investigating organisational adoption of social CRM argues that the TAM is limited in its understanding of technology acceptance, and hence that the TAM should be extended to incorporate salient properties of CRM (Askool and Nakata, 2010). Otherwise, the perception of the two constructs in the TAM model would only be symptomatic of salient properties. Alternatively, the rejection of the hypothesised relationship

between PEOU and technology acceptance might relate to the findings of Straub *et al.* (1997) and Rose and Straub (1998), indicating that the TAM is a less predictive and powerful construct in Arab countries. Reasons behind such suggestion relate to existing criticism of the TAM model for ignoring the cultural and social influence on technology (Mathieson, 1991; Fu *et al.*, 2006). Nevertheless, the cultural beliefs in Arab countries play crucial role in predicting technology acceptance (Straub, 2001). Moreover, these cultural beliefs represent complex cultural and social systems, which is often hard to characterise.

Although the validity of the TAM is evident in numerous research studies, the TAM has been criticised on the basis of a number of shortcomings, the main one being that it explains users' adoption from the IT perspective only. In its relevance to this study context, TAM is perceived as useful for investigating CRM adoption by users rather than by managers or professionals who are involved with the system but not using it. Consequently, if researchers focus on explaining CRM adoption by employing the TAM, they risk ignoring the behaviour of managers. This in turn may stifle development of a holistic view of CRM. Prior studies investigating CRM adoption by means of the TAM model have simply extended the model to include fragmented factors reflecting a narrow view of CRM and factors affecting it. Because this study aims to develop a holistic view of CRM, the TAM constructs (PU and PEOU) were incorporated into the conceptual model of the study rather than being the central focus of the study. Integrating those two constructs with other constructs from marketing and management domains might limit the model's ability to explain individuals' behaviours. In relation to this argument, Turner *et al.* (2010: 463) state that "care should be taken using the TAM outside the context in which it has been validated".

ii. Knowledge Management

In this study, the role of knowledge management capabilities (KM) has been proposed as a key determinant of the first stage of CRM adoption process. Knowledge management capabilities were identified as organisational capabilities for capturing, managing, and transmitting knowledge. These three elements have previously been proposed as having positive effects on an organisation's implementation of CRM mediated by employee perceptions. However, the factor analysis in this study suggested that capturing the knowledge element cannot be measured from the data. According to the SEM results, managing knowledge is the real antecedent of CRM adoption. Subsequently, the results accepted H12 but rejected H13.

> *H12: Managing knowledge will have a positive effect on employee perceptions of CRM.*

> *H13: Transmitting knowledge will have a positive effect on employee perceptions of CRM.*

The results show that organisational ability to manage customer knowledge will lead to better understanding of CRM and subsequently more innovativeness in an organisation. Organisations which use knowledge management are reported to appreciate CRM offerings and hence to be more innovative. These finding are highly compatible with observations made by Rigby *et al.* (2002) and Rollins and Halinen (2005) which stress that managing customer data is fundamental in justifying CRM adoption. In addition, Daghfous (2007) suggests that CRM requires knowledge management tools, such as business intelligence tools, to support its adoption.

In this study, managing customer knowledge is concerned with creating a pro-active environment, which serves to structure employees' and customers' interaction. In relation to this perspective, knowledge management is deemed to involve people's activity and technological endeavour. Consequently, it is suggested that organisations which integrate customer knowledge into everyday operations and processes at the right time are reported to be more innovative, readier to cope with change, and more willing to accept CRM strategies than other firms. This outcome is highly compatible with the view that knowledge management in organisations facilitates the introduction of innovation (Bennett and Gabriel, 1999). Hence, organisations should examine their capability to manage customer knowledge and how they can better leverage this capability before implementing CRM. Knowledge management capabilities serve in classifying customers, predicting their behaviour, cross-selling and up-selling, and conducting personalised marketing (Chan, 2005). From a managerial perspective, the importance of understanding the link between knowledge management and CRM adoption is that organisations can provide the infrastructure and resources to support CRM. Hence, organisations need proactively to incorporate customer knowledge into their services, strategies and operations, for employees to value CRM capabilities. In conclusion, it is evident for organisations that proactively integrating customer knowledge into their processes and operations is a key element in their quest for employees' affirmative perception of CRM adoption.

The findings show that even if organisations engage with the process of sharing knowledge, employees may fail to foresee reciprocation or even benefits of CRM. It is suggested that it is not sufficient to merely incorporate IT as a means of transmitting knowledge of customers throughout an organisation while hoping for direct positive effects on employee perceptions of CRM. By rejecting H13, this study contradicts several prior studies (Lee-Kelley *et al.*, 2003), and claims to identify practical issues with CRM and knowledge management integration. This is a surprising result because extant studies indicate that transferring and transmitting knowledge evidently supports CRM. In short, the effective use of knowledge sharing to pursue the goals of relationship marketing is still inchoate in organisations. Recently, researchers have begun to realise that simply sharing customer knowledge is not sufficient for the success of CRM (Devinney and Midgley, 2010). Moreover, Maqsood *et al.* (2004) point out that researchers' view of knowledge as easily shareable has lost its potency. According to Garrido-Moreno and Padilla-Melendez

(2011), if an organisation does not redesign its organisational structure to integrate knowledge management capabilities, employees will lack interest in CRM. This could be because employees do not know how customer knowledge is obtained; they value customer insight but do not understand the role of CRM in obtaining it and, hence, do not value it as a resource. With these claims in mind, this study argues that the nature of sharing knowledge may have different intrinsic properties, a nuanced insight which may not have been sufficiently investigated in prior studies of CRM. In summary, this study indicates that further research is necessary, in order to demonstrate conditions in which CRM can yield sustainable advantage in the face of knowledge sharing, and to further inform us as to how to incorporate knowledge sharing capability into the process underlying CRM.

7.5 The Impact of Organisational Characteristics on CRM Adoption

This study uses ANOVA to assess whether any differences in response to research constructs could be contributed to organisations' characteristics. First, Table 6.18 illustrates statistically significant differences between four main sectors, to enable profiles of firms for banking and finance, telecommunication, hospitality, and automotive industry sectors. The results show that there are significant industry type differences for clear direction (CLRD), performance management system (PMS), segmentation, perception of CRM, and implementation of CRM. The results pinpoint the variations in practice of the mentioned constructs across the four main sectors. This means that industry type influences the functions of strategic planning, and the level of CRM adoption. In other words, firms from different industries are adopting CRM differently. For example, the results show that the ranking order of the perceived clear direction of CRM among industries is: automotive, banking and finance, hospitality, telecommunication. Table 6.18 summarises the mean scores of each construct in the research model across industries. The review of the literature shows that a large number of CRM studies investigated CRM adoption in similar industries under investigation in this study: banking and finance, telecommunication, hospitality, and automotive. It is often argued that CRM adoption varies between industries (eg: Sin *et al.*, 2005). The findings of this study confirm this contention, at least for the four industries involved in this study.

Second, the data were checked for statistically significant differences between firms with different age profiles across industries, as show in Table 6.19. The results show that there are significant firm age differences for the CRM adoption stages and the two sub-factors of strategic planning: clear direction and performance management system. This implies that the younger the firm, the clearer the direction and the better the design of performance management system there. Moreover, it was found that, apart from the factors of rewarding CRM, and segmentation, the factor of a firm's age was significant in identifying the employees' perceptions and implementation of CRM; that is the younger the firm, the better the quality of CRM adoption. Specifically, firms which have been in the business for less than 20 years had higher mean scores than firms which have been in the business for more than 20 years.

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Insofar as it is often argued that younger firms suffer from the challenges of adopting the new changes of CRM adoption, this study result does not support this contention. On the other hand, it confirms Lancaster and Taylor's (1988) results proposing that the older the organisation, the more resistance there is to accepting innovations such as CRM.

Third, results show that there is a significant difference in a firm's turnover on rewarding CRM usage, as shown in Table 6.20. Thus, firm turnover significantly helps explain differences in usage of rewards in the implementation of CRM. Specifically, firms with smaller turnover were perceived to offer more rewards for CRM usage. This result suggests that the smaller the firm's turnover, the higher the rewards they might offer for CRM usage. This surprising result contradicts Ko *et al.*'s (2008) findings that firms with larger turnover are usually more able to invest in CRM and consequently offer more rewards than smaller ones. Consequently, the current study calls for in-depth thinking of factors affecting rewarding of CRM, rather than a simplistic view which leads us to think that rewards are often related to the turnover of the firm.

Fourth, Table 6.21 illustrates that there are no significant differences of the firm's operation on all constructs in the conceptual model. Thus, a firm's operation level does not help to explain CRM adoption. Finally, Table 6.22 illustrates that there are significant differences in a firm's ability to respond to changes quickly on all factors. Hence, a firm's ability to respond to changes quickly significantly helps explain the quality of CRM adoption. Specifically, the results suggest that a firm's ability to respond to changes quickly has the potential to positively influence factors affecting CRM adoption, employees' attitudes, and CRM implementation within the firm.

7.6 Summary

The value of this study lies in integrating the marketing, management and IT disciplines within a single conceptual framework. This serves the study purpose of developing a holistic picture of the impetus of CRM adoption in organisations. Moreover, two different perspectives were investigated, at individual (employee) and at organisational level. By doing so, this study intended to unravel the complexity of CRM. The proposed conceptual framework is developed around seven main concepts strongly linked to CRM adoption: customer-centric orientation, strategic planning, internal marketing, culture and leadership, project management, knowledge management capabilities, and innovation characteristics. The results of the study suggest that all of these concepts except for organisational culture and leadership are potential drivers of CRM adoption, though the impacts are felt at different levels (i.e., some individual, and some organisational). As a result, this study sheds lights on those concepts and their practicality in the context of CRM.

Similar to many conceptual models, the seven concepts were related to subsequent twenty one factors. Hence, this study proposed that there are twenty one factors

affecting CRM adoption. The measurement scale items of these factors were constructed and integrated on the basis of prior studies of CRM. However, the factor analysis showed that only twelve of the previously mentioned factors could be measured from the collected data. This demonstrates the need to develop valid and reliable measurement scales of CRM. By doing so, theoretical understanding will be advanced in discovering how CRM can best be adopted by organisations and how we can improve the applicability of theory to practice.

Based on the factor analysis results, this study proposed twelve factors to influence employee perceptions of CRM. Employee perception was placed in a hierarchal model where it mediates the effect of the twelve adoption factors on CRM implementation. The results provide support for five out of thirteen hypotheses. Figure 7.2 summarises the results of this study which suggests that six factors have a positive relationship with CRM adoption.

Figure 7.2: Summary of Factors Affecting CRM Adoption
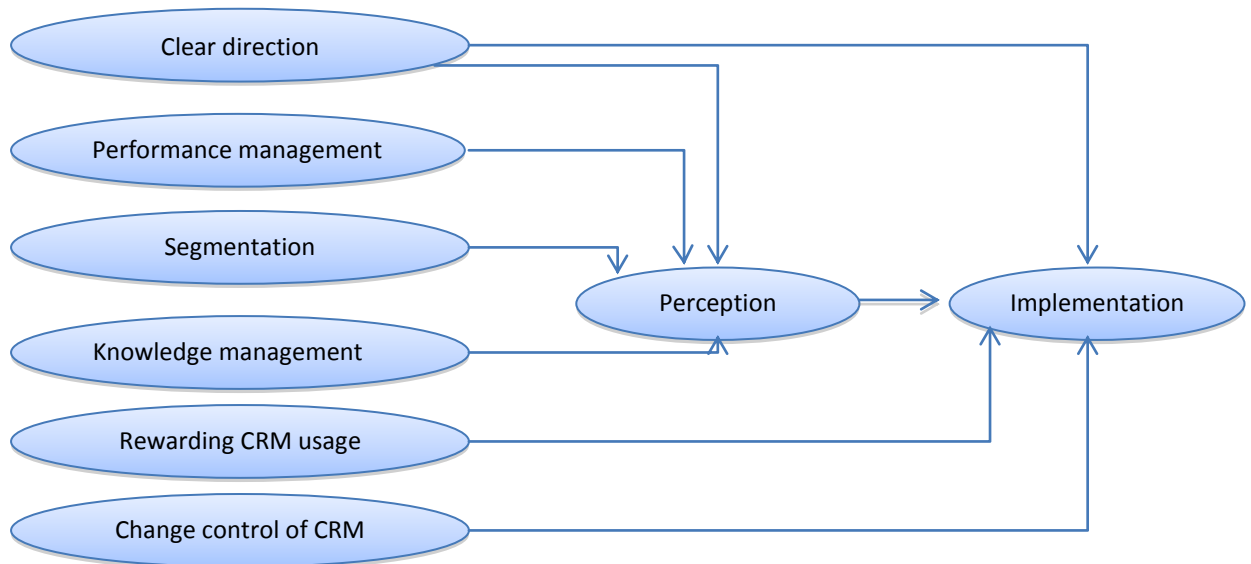
The surprising results of this study emphasise the need to address gaps between what is known from prior research and knowledge synthesis and actual organisational implementation of such knowledge with the intention to attain a desired future state. For example, this study demonstrates paradoxes in internal marketing implementation. The management staff of the organisations studied were seen to conduct sensible internal marketing efforts to promote CRM, but employees still did not value CRM offerings.

Despite the surprising results, the explanatory power of employee perceptions of CRM is excellent (60%), which suggests that the results provide a plausible answer to the question as to what factors aid the creation of a positive perception of CRM

among employees. In this study, there were four factors found to influence and explain employee perceptions of CRM: i) having a clear objective of CRM influences, ii) strategically measuring CRM performance, iii) traditional segmentation analysis, and iv) knowledge management.

Similarly, the explanatory power of the CRM implementation construct was found to be good (48%), meaning that this study is able to provide management with guidance of what might boost CRM implementation in their organisations. The results show that employee perception plays a critical role in the diffusion of CRM within an organisation. This perception mediates the effect of the four factors mentioned earlier. Moreover, there are three factors which were found to have direct impact on the implementation stage: i) clear direction of CRM, ii) rewarding usage, and iii) managing project changes. Implications and recommendation based on the current study results and their meanings will be provided in Chapter eight.

Chapter 8: Conclusions, implications and Further Research

8.1 Introduction

In today's complex business world, organisations must focus on building relationships with the customer to set themselves apart from the competition (Alshawi *et al.*, 2011). Given the speed of technology change, businesses now have the opportunities to interact and engage with the customer on a one-to-one basis (Lin *et al.*, 2010). This concept is embodied in a system called CRM which, if used properly, has the potential to effectively enhance an organisation's ability to develop long-term relationships with its valuable customers, and so gain an edge over competitors. Because of this, there has been a growing interest among organisations in adopting CRM, underlined by the need for intensive focus on customers. As a result, the number of organisations adopting CRM has rapidly increased and the concept of CRM has resonated with businesses and researchers. Despite the promising results, recent studies state that CRM projects fail to deliver the promised improvement in business performance (Frow *et al.*, 2011). Fundamental to controversies surrounding CRM are some radically different perspectives on the essentials of CRM adoption. The complexity of CRM therefore encourages users and researchers to develop a holistic approach which incorporates different perspectives.

The research objectives of this study are fourfold, with the aim of developing a conceptualisation of the major factors affecting organisations' adoption of CRM. Using insights from extant studies in combination with a qualitative study, a conceptual framework was proposed. This model identified potential factors expected to affect CRM adoption. It also provided a more generalised scrutiny of the topic. To investigate the validity of the proposed conceptual framework, a quantitative study was conducted. The resulting model revealed that only some of the proposed factors were found to influence CRM adoption. The results of this study were discussed in the last chapter.

This chapter will summarise and link the findings of this study with the research objectives. Then, it will represent the conclusions of the research findings and contributions to existing knowledge. Besides, some limitations and key areas for future research will be discussed and reported.

8.2 Objectives and Conclusions

Objective 1: to evaluate extant literature of CRM from the marketing, management and IT disciplines.

Different studies of CRM put emphasis on different perspectives, marketing, management, and information technology. These three perspectives have been advanced in the literature to provide somewhat different views on CRM adoption within organisations. There is a movement by researchers to combine some aspects from different disciplines to develop a new understanding of the phenomenon. Still,

the particular nature of this phenomenon remains elusive (Nguyen and Mutum, 2012). The premise behinds Chapter two in this study is to exhaustively investigate the different perspectives that CRM and CRM adoption represent, in order to develop a holistic view of factors affecting CRM adoption.

CRM is a well-known concept in the marketing discipline and one of its main philosophical bases is relationship marketing (RM) (Chen and Popovich, 2003). In order to identify the key elements of CRM, the key traits of leading RM schools should be addressed. This is crucial as it may help to avoid narrow views of CRM. It is generally agreed that there are three schools leading the RM thoughts and development: Anglo-Australian school (also known as the Cranfield School), North American school, and Nordic and industrial or international marketing and purchasing group (IMP) school.

The Anglo-Australian school takes a holistic approach to RM, which integrates quality management, service marketing, and customer relationship economics concepts (Christopher *et al.*, 2002). It also focuses on considering RM as a strategic approach which may call for a cross-functional reorganisation (Christopher *et al.*, 1991 as cited in Lindgreen *et al.*, 2006). The Nordic school highlights that the core concepts of RM incorporate relationships, networks and interactions. It also argues that service management is the underlying concept of RM. Accordingly, RM should be approached from a managerial perspective paying attention to the vital role of internal marketing; involving organisational members in developing relationship-oriented strategy and hence improved customer service (Gummesson *et al.*, 1997 as cited in Palmer *et al.*, 2005). According to this school internal marketing is a priority which aligns the organisation's structure, processes and culture around serving customers through a relational approach (Grönroos, 2004). Finally, the American school focuses on customer transactions and considers RM as a phenomenon rather than a developed concept (Egan, 2008). It also advocates for CRM adoption and the use of quality management performance systems to foster its success.

The similar but yet distinctive key traits of the RM schools were taken into account when reviewing the CRM literature. Moreover, some of these key traits, such as internal marketing (Nordic School) and the strategic holistic approach (Anglo-Australian School), related strongly to the literature reviewed in the management perspective section in Chapter two. Taking these elements into consideration, the author was able to develop an in-depth understanding of these managerial concepts to examine the links between them and the CRM adoption process.

Marketing scholars often criticise the practice of adopting CRM in organisations for not going far enough to reform an underlying culture that is customer focused (eg: Bolton, 2004). They argue that for CRM to reap its benefits, businesses need to consider it as a way of thinking that focuses on customers (Plakoyiannaki and Tzokas, 2002). This view is termed customer-centric orientation. Customer-centric orientation emphasises analysing customer profitability, and a precise segmenting of customers.

Its objective is to maximise organisations' profitability by acquiring, satisfying, and retaining profitable customers (Day, 1999). CRM is concerned with enabling the essentials of customer-centric orientations in organisations as it marshals the use of customer knowledge to support the manifestation of this competence. It is available to make customer segmentation, acquisition, profitability analysis, satisfaction, and retention much easier for businesses (Kim *et al.*, 2005). Given the relevant importance of these elements to businesses, they often arise in most CRM studies from marketing domain (eg: Meadows and Dibb, 2008). Thus, it is logical that customer-centric orientation elements are worthy of serious considerations.

From a management perspective, the challenges associated with CRM adoption are compounded by organisational issues. These issues are mainly concerned with a business' ability to develop and implement CRM strategy, and the role of people and organisation in supporting the adoption of CRM (Cascio *et al.*, 2010). Because of the multifunctional nature of these organisational concerns, the concept of CRM is expanded to several concepts including strategic planning, culture and leadership, internal marketing, and project management.

Getting into the world of CRM is not as easy as many businesses would like to think (Harrigan *et al.*, 2011). In their quest for sustained success, businesses are expected to re-engineer their strategies to focus on building relationships with the customer by incorporating CRM initiatives into their strategies. This should involve substantial restructuring of the business, often planning strategic organisational transformation, the aim of which is to focus on maximising the value of the customer relationship (Chaffey, 2008). Researchers suggest that CRM should be considered as a strategic approach embedded in business processes (Payne, 2006; Harrigan *et al.*, 2011). Based on this, strategic planning at a corporate level can help businesses to maintain a strategic fit between business strategy and CRM adoption, as the two spectrums need to adapt the new customer-centric philosophy (Meadows and Dibb, 2008). Strategically planning the CRM adoption helps businesses to create a receptive and a supportive environment among a large base of varied stakeholders to ensure the success of the adoption.

CRM strategies can only be achieved if they are well understood and supported by employees, especially those who interact and deal with the customer on a daily basis. Yet, the leading exponents of CRM adoption caution us against residual scepticism at an individual level; such scepticism, for instance, employees questioning CRM benefits, may potentially hinder its success. Therefore, internal marketing plays an indispensable role in changing the organisation culture and structure to fit with the new organisational paradigm (Ballantyne, 2000). Internal marketing means that the employees' attitude must be well attuned to CRM strategies and technologies (Ballantyne, 2003). It enables internal exchange and communication of new ideas between organisations' top management and their employees. Concluding with a note on the importance of internal marketing role on resolving issues surrounding CRM

adoption (Christopher *et al.*, 2002). Specifically, change management, internal communication, and rewards of CRM usage are three elements of internal marketing that may promote CRM strategies to employees within an organisation.

The CRM adoption process within an organisation is enormously complex. This is why project management has become essential for successful CRM adoption. Moreover, project managers need to implement specific project management skills and knowledge, in order to achieve CRM goals. These should drive insights into the unique factors associated with identifying objectives for value creation, detailing implementation plans, training of users, specifying milestones, carrying out monitoring, and motivating employees (Reynolds, 2002). In IT projects, such as CRM, changes are common and could be beneficial. These changes are results of many factors, including management expectations, revision of project requirements or scope, or recognition of some unknown requirements. Accordingly, the project plans should implement operational procedures to measure results, and adjust plans according to results obtained during the implementation of CRM projects (Ocker and Mudambi, 2003).

It would appear that organisational culture and leadership are critical in actively supporting CRM implementation, and improving customer and shareholder values (King and Burgess, 2007). The adoption of CRM imposes an organisational culture that is adaptive and supportive to change. Consequently, managers need to assess how CRM goals fit with the organisation's culture and values. A senior management team should view itself as a sponsor and champion for the adoption of CRM as a major goal for the organisation. The CRM strategy relies on management support and having customer-centric values in place; this way a culture is created to support cross-functional working across the organisation (Payne, 2006). Cultivating a supportive organisation's culture for CRM implementation is a continuous leadership task at all organisational levels. Hence, it is not surprising that businesses with CRM champions are more enthusiastic in undertaking investments to ensure that CRM initiatives achieve the desired results (Finnegan and Currie, 2010). CRM needs a champion to steer transformation between the actual and the desired new supportive culture. The supportive culture serves the CRM implementation, and is mainly described by four elements: a positive organisational climate, a customer-centric culture, a strong culture, and a learning climate.

The IT perspective is more concerned with two main themes: CRM alignment with knowledge management capabilities (KM) (Romano and Fjermerstad, 2003), and CRM usage and implementation factors (Wu and Wu, 2005). The current customer-centric business environment necessitates the development of customer insights, which can only attained through the effective usage and implementation of KM. Because of the synergies between KM and CRM, businesses need to integrate KM with CRM initiatives (Finnegan and Currie, 2010). Such integration can be the basis for successful CRM adoption and development within businesses. On the other hand,

IT researches also point out that system use has a strong effect on CRM adoption, referring to the idea that CRM will not succeed if it is not clearly appreciated and used by employees dealing with the customer on the front line. System use is one of the important considerations among IT researchers, and is often correlated with other constructs. A number of studies have successfully applied and extended technology acceptance model (TAM) developed by Davis (1989), to examine the acceptance of CRM as a new technology. The TAM is concerned with the individual (employee) usage-behaviour when adopting an information system. It elucidates that the individual behaviour is influenced by his/her behavioural intention, which is in turn influenced by the individual attitude, and the perceived usefulness of the technology. Moreover, the attitude and perceived usefulness constructs are influenced by the perceived ease of use construct.

Objective 2: to propose a conceptual research framework for understanding the factors influencing the adoption of CRM.

This study adopted mixed methods by combining qualitative and quantitative approaches in the methodology. The qualitative study was conducted earliest to evaluate the relevance of factors identified from the literature as well as the application of these factors for organisations across varied sectors in Jordan. Moreover, it provided the researcher with the opportunity to explore interviewees' subjective perceptions and experiences about CRM and issues with its adoption. As a result, a conceptual model of the factors affecting CRM adoption within organisations was proposed. Subsequently, the quantitative study was employed to examine dimensionality, and the relative importance of each factor in the proposed model. Since this section is concerned with the proposed model, only the qualitative study of this research will be discussed. The quantitative study will be discussed in the following section.

Building on the literature review of CRM meaning and CRM adoption, a conceptual framework of factors affecting CRM adoption was developed and used as the basis of the interviews design in this study. The interviews were semi-structured individual, in-depth, with nine participants from two different organisations (Bank A and Hotel B). To enable the development of holistic view of CRM in this study, the author opted to interview varied stakeholders involved with CRM from different functional units and organisational levels. Overall, participants were senior managers, marketers, or IT practitioners.

Interviews were transcribed and translated right after the interviews. The interview analysis encompassed two steps: within-case and cross-case analysis. The results of the interviews were in line with the reviewed literature summarised in the prior section. Moreover, the results suggested that knowledge management should be considered as one of the key drivers of CRM adoption and hence should be incorporated into the proposed conceptual model. Ultimately, a conceptual research framework was proposed based on incorporating key adoption factors that include:

organisation's customer-centric orientation, strategic plan, internal marketing, organisation culture and leadership, project management, knowledge management and innovation essentials. Like many multilevel models in the literature, the theoretical concepts in this study were expanded to include set of dimensions or sub-factors. As a result, 21 sub-factors were suggested to have a positive influence on employees' perception of CRM, and the employees' perception was suggested to have positive influence on CRM implementation within organisations. Accordingly, 22 hypotheses were developed.

Objective 3: to empirically identify the factors affecting organisational adoption of CRM.

The results of the qualitative exploratory study were considered as one of the main inputs into generating research models for further investigation. Then, exploratory factor analysis was used on data obtained from a survey of Jordan cross-sectional firm in the study (n=301). It showed that the measurement items in the survey grouped to for only 12 potential sub-factors. This means that, in this research context, 9 sub-factors in the survey overlapped with other factors, or failed to match with their measurement items in the survey. Such results might be explained by Sin *et al.* (2005) who argued that the measurement scales of CRM are still not sufficiently specific to allow for valid and reliable measures of it. Taking the remaining potential 12 sub-factors into account, the EFA in this study proposed that 12 unique sub-factors should be considered as potentials predictors of CRM adoption. Hence, a hierarchal model was proposed where employee perceptions of CRM mediated the influence of those 12 sub-factors on CRM implementation within an organisation. This demonstrates the need to develop valid and reliable measurement scales of CRM. By doing so, theoretical understanding will be advanced in discovering how CRM can best be adopted by organisations.

The validity of the constructs was confirmed by estimating the measurement model. This study proposed that 12 sub-factors are key determinants of employees' perception of CRM. However, the estimation of the structural model proved that only four sub-factors had significant impact on employees' perception of CRM: direction and objectives of CRM, a performance management system incorporating CRM, segmentation analysis, and transmission of knowledge across an organisation. Nevertheless, these factors offered an excellent explanatory power (R^2=.60) for estimating the perception of CRM. Therefore, the results provided support for 4 of the 12 hypotheses.

This study also proposed that employee perceptions of CRM mediate the effect of adoption factors on CRM implementation within an organisation. With respect to this proposition, the results supported that employee perceptions mediated the effect of the four sub-factors on the implementation of CRM. Therefore, the results provide support for the relevant hypothesis.

The findings lend support to five out of thirteen of the research hypotheses. In support of the first hypothesis, the results show that employees and their perceptions of CRM benefits are significantly related to the implementation of CRM within organisations. In other word, CRM implementation follows on from employee perceptions of CRM. Next, the findings support hypotheses: H2, H3, H4, and H12; however the results do not support the remaining seven hypotheses. H2 states that organisations' ability to provide clear direction and objectives for CRM motivates employees to form positive perceptions of CRM. H3 states that taking a relative approach of performance measurement for CRM initiative would foster employee perceptions of CRM. The central position of H4 is that when organisations view traditional segmentation analysis as important, employees are inclined to accept CRM adoption. H12 states that organisational ability to manage customer knowledge will lead to better understanding of CRM and subsequently more innovativeness in an organisation.

The seven rejected hypotheses provide further evidence that suggests that although organisations are using best practices (i.e. emphasising customer satisfaction, managing changes, and incorporating internal communication), they failed effectively to apply these practices to addressing their employees' perceptions of CRM. This observation may serve as a prompt to scholars for more research in several concept areas (i.e. internal marketing, knowledge management and employee perceptions) in order to advance our understanding of business approaches to CRM and its deficiencies.

Overall, it can be concluded that the results of this study provided support for 5 of the 13 hypotheses. Although not hypothesised, the results also showed that three sub-factors, clear direction, rewarding usage, and controlling projects changes were significant predictors of CRM implementation within organisations. Hence, having clear direction of CRM was found to be the only element affecting both stages of CRM adoption. Overall, this study suggested that there were 6 sub-factors out of 12 affecting CRM adoption process.

After empirically investigating the conceptual model, ANOVA was used to evaluate whether any group difference in means for research constructs could be contributed to organisations' characteristics. The results revealed that if the industry changed, there were significant differences for clear direction, performance management system, perception of CRM, and implementation, indicating that participants' ratings of these constructs differed between the four industries under investigation. Moreover, significant differences in age of firm were identified for clear direction and performance management system constructs. In addition, there was a significant difference of the firm's turnover as a factor related to rewarding CRM usage construct. Finally, significant speed of response to change differences was found for all constructs in the model. Those results indicate that organisational characteristics may have a key influence on CRM adoption process.

Objective 4: To offer insights into CRM adoption and its paradoxes.

Overall, IT is shifting the balance of power to the customer, so that businesses now need to think fast and adapt to dynamic changes in customers' needs. This argument is apparent in today's business environment, since changing pressures on industries from market, technology and society, have altered how businesses compete in today's new economy. On the one hand, businesses are challenged to engage with, interact with and adapt to changes in customer needs (Gummesson and Gönroos, 2012). On the other hand, businesses are challenged to look for innovative approaches to enhance marketing effectiveness with the goal of creating mutual values; it is far more expensive to acquire new customers than it is to nurture and retain existing ones (Alshawi *et al.*, 2011). Relationship marketing approach focuses on long-term interactions leading to repeat purchases especially in B2B and service contexts. One important tool for managing interaction in long-term relationships is CRM.

Despite the continuous growth in the number of organisations integrating CRM into their strategies and systems, there are a plethora of issues and challenges in existing approaches to CRM adoption within organisations (Plakoyiannaki, 2005; Sun and Li, 2011). CRM meaning varies and hence our understanding of this concept itself remains unclear. This in turn has led to confusion about what exactly CRM is. The lack of agreement on single definition of CRM reflects a tendency for practitioners and researchers to approach CRM according to their beliefs about the correct level of CRM application (Reintarz *et al.*, 2004). This study offers insights into CRM adoption and its paradoxes by investigating a wide coverage of marketing, management and IT concepts. Hence, this study provides businesses with academic inputs to help them improve their empirical practices. The research provides key academic and practical contributions to the field of CRM by highlighting the value of the following aspects:

- Developing a broad yet holistic understanding of CRM
- Employee perceptions of CRM benefits
- Understanding the variation in issues depending on the phase in the life-stages of the CRM adoption
- Segmenting customers based on their lifetime value
- Setting clear objectives, and monitoring the strategic performance of CRM
- Internal marketing and rewards
- Examining the rhetoric and reality of internal marketing
- Redesigning an organisational structure to integrate knowledge management capabilities

A more detailed discussion of the theoretical and practical contributions of the study will be presented in sections 8.3 and 8.4

8.3 Theoretical Implications

This section provides the contribution and/or implications of the study with respect to the research question, which investigates factors that lead organisations to adopt CRM, and how it may impinge on existing theories or understanding of CRM. In this section a number of theoretical implications offered by this study will be discussed as follows.

First and foremost, the most important theoretical contribution of the study lies in developing a holistic conceptualisation of the major factors affecting CRM adoption by organisations. This study represents one of the rare attempts to thoroughly integrate extant literature and extend previous research. This is achieved by incorporating different elements of CRM into its adoption process and illuminating reasons that explain the adoption process hierarchy. This study builds a broad yet thorough holistic framework which attempts to address CRM issues. Given the lack of a commonly agreed definition of CRM, such a big-picture conceptual framework, is doomed in trying to advance any comprehensive understandings of CRM implementation. Nevertheless, it supports CRM as a vital concept in modern marketing which can be translated into multidimensional actionable dimensions. The simple fundamental underlying principle of this multidimensional view indicates that CRM requires businesses to keep abreast of technology, managerial concepts, and an intensive focus on the customer. Undertaking such a view incorporates the fields of marketing, management and information technology into the CRM concept. Accordingly, this study builds on extant research from the marketing, management and IT disciplines to develop a holistic perspective on CRM, making a number of contributions to these three disciplines. Such multi-disciplinary integration is a key to unravelling the complexity of CRM and advancing its theoretical knowledge.

The second contribution of this study lies in the development of a hierarchical approach to understanding CRM adoption in a comprehensive adoption model, comprising direct as well as mediated relationships. Prior research from the business discipline has developed a broad interpretation of CRM adoption which encompasses a variety of factors affecting the adoption of CRM at an organisational level. Alternatively, researchers from the IT discipline have developed a narrow view of CRM focusing primarily on individual/staff adoption of CRM. This study extends prior research by considering CRM adoption as a multi-stage process (individual and organisational) with differing influences at each stage. Although both stages in the adoption process may be familiar to scholars, the value of this study lies in integrating these two levels of adoption, whereby offering a more holistic picture of CRM. There is a scarcity to date in multi-stage empirical investigation of the influence of factors on CRM adoption in organisations, and from a multi-disciplinarily review of different stages of different stages of the adoption process, in the CRM literature. The encouraging results in this study offer an alternative to hierarchical approaches to CRM adoption. The hierarchical approach starts from the individual level of adoption, of CRM strategies as something accepted and valued by employees, towards the

organisational level of adoption strategy as something an organisation implements. It indicates that employee perceptions and acceptance of CRM is the most important factor in CRM adoption. Hence, this study contributes to marketing literature by demonstrating that employee perceptions is so important as to warrant CRM implementation within an organisation.

The third contribution of this study is the demonstration of different measurement scales of CRM and its relative concepts. This study offers a further development to the current literature of CRM by developing a thoroughly conceptual framework of CRM adoption. Moreover, it provides empirical evidence to offer valid and reliable measuring scales for CRM and adoption factors. Such valid and reliable measurement scales address the conceptual and measurement issues surrounding the development of CRM theories. By doing so, theoretical understanding may be advanced in discovering how CRM can best be adopted by organisations. According to Sin *et al.* (2005), the development of a CRM paradigm is hindered by the lack of systemic studies attempting to develop valid and reliable measurement items for CRM. Gummesson (2002) suggests that CRM is an emerging paradigm, which is in need for advance developments. Hence, a clear conceptual model of CRM and its constructs is required to allow for cumulative development of CRM. This demonstrates the need to develop comprehensive valid and reliable measurement scales of CRM. To date, no study except one, by Sin *et al.* (2005), has attempted to offer measures of CRM that comprehensively incorporate different disciplines of CRM. That study covers four key dimensions: customer-focus, CRM organisation, knowledge management and technology-based CRM. Those dimensions represent more general, but not comprehensive measures of CRM adoption.

The final contribution of this study is the delineation of CRM antecedents. A basic premise of this study is that implementing the concept of CRM can be achieved through the accumulation of the following elements: active customer-centric orientation, strategic planning, internal marketing, supportive organisational culture and leadership, project management, knowledge management and innovation characteristics. This study argues that these seven dimensions are important in determining employee perceptions of CRM and the level of CRM implementation in organisations. Findings assert that elements from all of these concepts except for organisational culture and leadership are potential antecedents of CRM adoption. Accordingly, this study illuminates a number of aspects of potential drivers of CRM adoption.

This study extends a marketing perspective by stressing the importance of segmentation analysis for CRM. Findings assert that segmentation analysis is the only element of customer-centric orientation which significantly influences CRM adoption. In particular, effective use of traditional segmentation analysis, precisely to evaluate customers' lifetime value and targeted segments, is a critical part to help staff relate more easily to CRM values. This means that taking responsibility for segmenting

customers, which may include the activities of building and updating a customer database, is essential to meet the challenges of adopting CRM. In this vein, this study confirms existing knowledge relative to the effect of segmentation analysis on CRM adoption (Venkatesan and Kumar, 2004; Blattberg *et al.*, 2009; Meadows and Dibb 2012). Although, this study proposed that customer satisfaction positively influence employee perceptions of CRM, the findings do not support this hypothesis. This means that CRM does not fulfil the expectations of businesses aiming to improve customer satisfaction. Partly, this study suggests that some employees do not accept CRM because they do not trust technology, even though their attitude is in favour of customer satisfaction. On one hand, this study calls academics and specialists to seek for better ways to link or associate customer satisfaction with CRM. On the other hand, the findings shed some light on the risks of implementing CRM, and their influence on customer satisfaction. A recent study by Frow *et al.* (2011) argues that inappropriate or incomplete CRM leads to a variety of dark side behaviours including customer dissatisfaction.

This study extends a managerial perspective that highlights the importance of strategic planning, internal marketing and project management in managing CRM adoption. Furthermore, the research findings stress that strategic planning has two vital elements: clear direction of CRM and performance measurement system. First, the results of this study support the idea that having clear CRM direction and objectives is an important factor affecting employee evaluation of CRM potential benefits, since these provide accountability for strategies proactively committed to focus on customers. Moreover, the results show that clear direction and objectives can boost the progress of CRM implementation within an organisation. In summation, this study confirms previous knowledge relative to the importance of strategic planning in CRM adoption (Osarenkhoe and Benni, 2007; Meadows and Dibb, 2012).

The results of this study draw attention to an under-researched area in the CRM domain: how effective internal marketing is in changing employees' perception or way of thinking. The findings indicate that although the organisations made use of different forms of internal marketing, they failed to address any internal perception of CRM. To the best of the author's knowledge, this study is the first to show that internal marketing attempts fail to help employees foresee reciprocation or even benefits of CRM. This goes to show that internal marketing efforts are only successful when organisations build an in-depth understanding of their practicality. Consequently, this study extends the debate regarding issues and challenges surrounding internal marketing performance, and calls on academics to build a deeper understanding of internal marketing practicality. This study also suggests that employees have been moved rather than motivated by the reward process offered for CRM usage. This suggests that altering and aligning employees' perception with management agenda is not as straightforward as it may seem to practitioners and academics.

The results indicate that to implement CRM strategies/technologies, organisations should flexibly and continuously react to changes in CRM projects. Such findings stress that managing project changes is one of the vital dimensions of CRM. This is in line with previous knowledge about CRM (Rigby *et al.*, 2002; Payne, 2006; Papadopoulos *et al.*, 2012). However, the results indicate that managing project changes does not influence employee perceptions of CRM but influences CRM implementation within an organisation. With respect to the influence of managing project changes on employee perceptions, the results of this study contradict with prior studies (eg: Man *et al.*, 2006). This means that project management methodologies are only paying attention to management agenda/goals but ignoring the perceptions of employees. This is an important contribution as most existing studies of CRM are limited by their simplistic view of evaluating the project management effect on CRM adoption.

This study extends an information technology perspective that highlights the value of knowledge management in CRM. In particular, this study stresses the importance of managing customer knowledge as one of the antecedents of the first stage of the CRM adoption process (employee perceptions). This outcome is highly compatible with the view that knowledge management in organisations facilitates the introduction of innovation (Bennett and Gabriel, 1999). Hence, this study adds to our understanding of CRM by illustrating the relationships among customer knowledge utilisation and CRM adoption. However, the results contradict previous knowledge indicating that organisational culture and leadership, project management techniques knowledge sharing and technology ease of use are not vital factors affecting CRM adoption.

8.4 Managerial Implications

This study aimed to develop a conceptual framework of factors affecting CRM adoption. In the process it also sheds new light on potential management processes and practices which managers may use to consider the complexity of CRM, providing them with a tool with which to exploit the potential of CRM. This is important as organisations are challenged by CRM adoption, which can create situations of eminent failure. The hierarchical approach to understanding the CRM adoption process and the holistic view of CRM adoption factors has important practical implications. First, it reveals that employee perceptions serve as a critical mediator between organisational efforts to adopt CRM and actual CRM implementation within an organisation. Moreover, factors affecting CRM adoption can have a different effect on both individual (employees) and organisational elements in the adoption hierarchy. Throughout the adoption process businesses need to develop a holistic view of CRM and its adoption by focusing on the individual level of adoption, of CRM strategies as something accepted and valued by employees, towards the organisational level of adoption, strategy as something an organisation implements.

CRM introduces a new way of thinking about and approaching businesses, and aligning organisational resources around building relationship with customers. This requires the use of a new set of four emerging concepts to alter employee perceptions of CRM. First, by virtue of strategic plan, top managers need to set clear objectives and goals for CRM implementation so employees can have an initial idea of what CRM potentially does for the organisation. Second, as managers embrace strategic planning, CRM performance should be embedded in the performance measurement system of the organisation, so employees can perceive management commitment as sincere and resolute, which in turn would influence of CRM. Third, when moving to customer-centric orientation, businesses should apply the principle of market segmentation well ahead of time, as it helps employees to appreciated CRM as a means of developing greater power of customer insight. Finally, the development of organisational capability to manage customer knowledge reflects on employee perceptions of CRM.

On the other hand, if management wish to boost the implementation of CRM strategies/technologies, a number of initiatives should be in place: clear direction of CRM implementation stages, rewarding CRM usage, and controlling changes in CRM projects. These initiatives are elements of strategic plan, internal marketing and project management. However, the results strongly call into question the common practice of managing employees' perceptions of CRM, as it is not as straightforward as it may seem to businesses. Specifically, businesses need to pay more intention to employees when designing and evaluating their internal marketing and project management efforts. As these efforts do not seem to instil greater perception of CRM, it can be argued that such efforts risk merely moving employees when the goal has been rather to motivate them to work with CRM. This is important especially in that prior research has stressed the importance of focusing on employee issues when implementing CRM (Shum *et al.*, 2008). Moreover, the results of this study suggest more emphasis on the crucial role of employee perceptions on boosting CRM implementation.

In this study, some of the hypotheses were rejected. The rejected hypotheses may help businesses identify deficiencies in their approach to CRM, which may hinder their capacity to achieve CRM substantial outcomes. This is essential in that, although businesses have implemented CRM for a few decades, it is most of all now that they are highly challenged by the need to surmount a number of obstacles in order to achieve CRM promised returns. First, the results reveal that organisation orientation towards customer satisfaction is insignificant for CRM adoption. This means that the value of CRM may be negatively influenced by the high expectations of organisations oriented around satisfying customer. This goes to show that businesses which are already focused around customer satisfaction should be prepared to double their effort to instil greater perception of CRM. Second, the results of this study also lead us to reject the hypothesised relationship between change management and employee perception of CRM. In particular, the results show that the staff training in CRM fails

to create a positive perception of CRM. Apparently, managers make attempts to prepare employees for CRM changes with training procedures, but these attempts fails to promote CRM to employees. Hence, businesses should question the validity of any fallacious training assumptions. Third, the findings of this study reject the hypothesised relationship between internal communication and employees' perception of CRM. Therefore, this study highlights risks for businesses which lack understanding of how to tailor an internal communication approach that meets different stakeholders' needs. Fourth, the results reveal that technology of use is not significant for employee perceptions of CRM. This means that simply implementing a user-friendly CRM system does not enhance employee perceptions. Consequently, businesses should not rely exclusively on the importance of the system's ease of use when adopting CRM. Finally, this study reveals that organisational engagement with the knowledge sharing process fails to influence employee perceptions of CRM. This suggests that it is not enough merely to attempt to incorporate technology as a method of transmitting the customer knowledge throughout an organisation. The effective use of knowledge sharing to pursue the goals of CRM is still under-developed in organisations.

8.5 Limitations and Future Research

To the best of the author's knowledge, this study represents a first attempt to comprehensively examine and integrate multiple disciplines of CRM into one conceptual framework. The results are therefore more suggestive than conclusive. The conceptual model and the several propositions emerging from our findings imply a rich agenda for further research. First, there is a need and opportunity further to assess the generalisability of the conceptual model and to extend it to other businesses environments, for instance to adoption of CRM in European countries and the USA. This is mainly because different cultures can bring different themes and perspectives to the CRM domain. Hence, this study cautions against recommending a universal framework for CRM adoption. With more replicative and creative research, it is expected that a more comprehensive conceptual framework of CRM adoption can be offered in the near future.

Second, although this study fulfils its objectives of developing a conceptual framework of factors affecting CRM adoption, the number of survey respondents limited the author's ability to provide validation of the resulting model. One of the common ways to validate a research model is to conduct two pilot studies to assess the scale items of the model constructs that were adopted from prior studies. The pilot study samples should be different from the primary sample. Over the course of the two pilot studies, the constructs and their measures may be refined subsequently in the light of possible model improvements. However, the promise of this validation approach has been unrealistic in this study due to limited access to a very large number of respondents, considering the length of the survey instrument used in this study. Hence, it is recommended that future studies need to refine the CRM model, by using different preliminarily studies, with the goal of validating the model.

Although this study involved a mixed-method to increase the quality of the research by triangulating data, validity and reliability criterion for quality in qualitative study was not utilised. To be more specific, quality criteria used in management and marketing research (i.e. credibility, neutrality and etc) were not applied in this study. The subject of cirtieriology in qualitative research is hotly-debated especially that some qualitative research have clearer quality criteria than others (Healey, 2000; Bryman et al., 2008). Nevertheless, it would have enhanced the quality of this research, if the researcher complied with the quality criteria of qualitative research which link with her philosophical approach.

Third, although the results of this study offer a model of CRM adoption process, it is important to note that CRM adoption is expected to have overall a positive influence on business performance. Business performance is a multi-dimensional concept that may be related to several aspects including customer satisfaction, employee satisfaction, return on investment, market share and sales growth (Law, 2009). Future research needs to investigate what manifests as good CRM performance; whether this is to be financial performance, improved relationships, higher customer satisfaction or brand loyalty. Hence, exploring the complexities of the relationship between CRM adoption and business performance is one of the areas for further research.

Fourth, recent studies suggest that social media technologies, due to their personal, interactive and relational nature have great potentials for CRM (Harrigan *et al.*, 2011; Nair, 2011). These technologies are different than previous software packages technologies used in CRM (Harrigan *et al.*, 2011). Social media enable businesses to interact with and gather customers' information. Hence, further research should shed light on the area of social CRM and its potential to influence CRM adoption process.

Fifth, although this study did not investigate the dark side practices of CRM, we view our results linking to this area because they indicate that organisations and employees who are concerned about customer satisfaction have negative perceptions of CRM offerings. Nevertheless, this study has not initially considered the CRM adoption process as one through which dark side forms may emerge. Hence, this study draws attention to the necessity of further research to explore and identify the dark sides of CRM practice.

Sixth, the form and classification scheme for some concepts developed in this paper, such as internal marketing and organisational culture and leadership, may not be exhaustive. Hence, more systematic investigation of these concepts and their links to CRM adoption may remain to emerge in the future. Further research is needed to identify further forms of these two concepts by testing and possibly extending the conceptual model of this study.

Finally, this study does not seek to incorporate the psychology discipline, with particular reference to motivation, social and workplace creativity issues. Hence, another task of further research should incorporate the psychology discipline to

exhaustively explore motivational, social and creativity issues in workplace. Doing so will shed lights on the potential reasons behind organisational inability to motivate employees to accept CRM as a way of thinking.

8.6 Summary

Even with the promising results of CRM, recent studies state that CRM projects fail to deliver the promised improvement in business performance (Frow *et al.*, 2011) – an issue that perplexes practitioners and has yet to be explained by scholars. While previous research has discussed a number of controversies surrounding CRM, concepts of CRM adoption process remain underdeveloped. The complexity of CRM called for developing a holistic approach to CRM to incorporate different perspectives. This study makes a considerable contribution to both academics and practitioners by developing a holistic conceptual framework of factors affecting CRM adoption. The methodology is based on mixed methods by combining qualitative and quantitative approaches. The qualitative exploratory study was conducted first to assess and explore the relevance of factors identified from the literature, and contextualise the research question for organisations in Jordan. The results of the qualitative study were the main input into generating research models for further investigation. Then, exploratory factor analysis and structured equation modelling were used on data obtained from a survey of Jordan cross-sectional firm in study (n=301). As a result, a holistic conceptual framework of CRM adoption was developed.

This study offers insights into CRM adoption and its paradoxes for both academics and practitioners. It examines how CRM adoption can be addressed by adopting a more enlightened approach to CRM. This is important as organisations are challenged by CRM adoption which can create situations of eminent failure. It also sheds new light on potential processes and practices which managers can use to address the complexity of CRM, enabling them to exploit the potential of CRM. Although this study has considered a holistic approach to CRM and its adoption, and highlights key areas of poorly implemented practices, the findings of this study are suggestive rather than conclusive. Hence, it is suggested that future research should maintain to investigate some directions for studying CRM adoption.

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Appendix 4.1: Participant Information Sheet: Individual Interview

Study title: Organisations' Adoption of e-CRM

Invitation

You are being invited to take part in this research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

What is the purpose of the study?

I write to seek your support for a research study looking to develop a conceptual model of the major factors affecting organisations' adoption of an electronic customer relationship management (e-CRM) system. We are all aware of the increasing need for e-CRM systems to deliver their promised financial performance. This study will provide invaluable insights into what constitutes successful e-CRM adoption.

The research is being carried by a PhD student at Oxford Brookes University, Faten Jaber, a research student within the Department of Marketing and Operations Management. This is a three year research project, and the success of this research depends very much on your participation in the project.

The interview is comprehensive and will be completed at your business's workplace, and will typically take from 30 to 60 minutes to complete all information.

Why have I been invited to participate?

You are invited to participate because you are a manager with overall or partial responsibility of an e-CRM system, or an employee who uses an e-CRM system on a daily basis.

Do I have to take part?

The study is entirely voluntary. You are under no obligation to take part and do not need to give any reason for not doing so. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

What will happen to me if I take part?

First of all I will get in contact with your organisation to arrange a suitable time to meet with you and other participants. The interview will start with you signing the consent form and providing the researcher with your permission to record the interview. The interview will typically take from 30 to 60 minutes to be conducted as more of an informal conversation than a formal interview. Please feel free to make notes for the interview to remind yourself of certain details if you wish. All participants will be asked for permission to record the interviews.

What are the possible disadvantages and risks of taking part?

Due to the subject matter of the project it is not anticipated that any material collected will be of a sensitive nature. However, if any such sensitive material does arise, steps will be taken to ensure your anonymity will be secured and that you will not be compromised in any way. All of the information collected will be kept strictly confidential and every step will be taken to ensure any quotes used will not be identified as coming from you, unless you explicitly give permission for me to do so. However, you should be aware that the confidentiality of the data you provide can only be protected within the limitation of the law. Taking part of this study requires a small investment of time by all us that will contribute to better understanding of what constitute e-CRM successful adoption.

What are the possible benefits of taking part?

Your participation will contribute to the knowledge of e-CRM in away that further our understanding of the topic.

Will what I say in this study be kept confidential?

You and your company will never be identified by name, and only summary results across all companies will be published. In the transcript the names of yourself and all the other participants as well as those people who you mention will be changed so you will not be identifiable. I will ask everyone attending the interview to keep everything that was said during the discussion confidential. You can say as little or as much as you wish. The transcript will be kept in a secure place, in a paper or electronic format (audio files) for a period of five years after the completion of a research project.

What should I do if I want to take part?

After reading the information sheet and deciding to participate in this research, you can contact me if you have any queries or anything you would like to discuss. I will then get in contact with your organisation to arrange a suitable time to meet with you and other participants. At the beginning of the interview you will be asked to sign a consent form.

What will happen to the results of the research study?

I will transcribe the interview and if you are interested I will give you a copy of the transcript by mail to your address. The transcript will only be read and used by me and not be used for any other purpose. The information from these discussions will be the basis of my PhD thesis which will be assessed in order for me to gain the PhD degree. The transcripts might also be used to write and publish articles in academic journals. You are welcome to see the final thesis and/ or a copy of the articles before they are published.

Who is organising and funding the research?

The research is being carried by a PhD student at Brookes University, Faten Jaber, a research student within the Department of Marketing and Operations Management. This is a three year research project, which is funded by Oxford Brookes University.

Who has reviewed the study?

The research has been approved by the University Research Ethics Committee, Oxford Brookes University.

Director of the study (1[st] supervisor):

 Lyndon Simkin   email: lsimkin@brookes.ac.uk   Tel: +441865485712

2[nd] Supervisor:

Yuksel Ekinci   email: yekinci@brookes.ac.uk   Tel: +441865485488

If you have any concerns about the way in which the study has been conducted, you should contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk.

Contact for Further Information

Faten Jaber email: fjaber@brookes.ac.uk

Telephone number: +962796988679

Thank you

Thank you for reading this information sheet, and if it is possible, participating in the study.

Date 09/11/2010

OXFORD BROOKES UNIVERSITY

CONSENT FORM

Full title of Project: Organisations' adoption of CRM

Name, position and contact address of Researcher:

Faten Jaber, PhD student, fjaber@brookes.ac.uk

Please initial box

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason. ☐

3. I agree to take part in the above study. ☐

Please tick box

	Yes	No
4. I agree to the interview being audio recorded	☐	☐
5. I agree to the use of anonymised quotes in publications	☐	☐
6. I agree that my data gathered in this study may be stored (after it has been anonymised) at Oxford Brookes storage or repository and may be used for future research.	☐	☐

_____ _____ _____ _____

Name of Participant   Date   Address   Signature

_____ _____ _____

Name of Researcher   Date   Signature

Appendix 4.3: Interview Guideline

General question

1. What is your job role at your organisation?
2. How would you describe e-CRM?
3. What is CRM and e-CRM in your view?
4. For how long have your organisation adopted e-CRM?
5. In your opinion what are the drivers of your organisation's adoption of e-CRM?
6. In your organisation, what are the purposes of CRM? Its priorities?
7. In your organisation, who handles the operationalisation of CRM?
8. In your organisation, who are the main CRM stakeholders? Why?
9. In what ways do you see e-CRM technology is affecting the elements of the customer relationship?
10. How is CRM/e-CRM evolving/changing? Why?
11. What is best about CRM/e-CRM in your business now? Why?
12. What is worst about CRM/e-CRM in your business now? Why?

Strategic plan

1. Does your organisation have a clearly articulated direction and objectives which included the importance of maximising the value of relationships with customers?

2. To what extent the performance measurement system in your organisation explicitly covers the e-CRM activities?

3. To what extent your organisation depends on the development and integration of a strategic set of activities to implement e-CRM technology?

4. To what extent are the executives in your organisation committed to the adoption of e-CRM?

Customer-centric orientation

1. Does your organisation strategy align technology, process, and activities around the customer? In your organisation does CRM add value to customer-centric orientation essences (customers' segmentation, acquisition, profitability analysis, satisfaction, and retention)?

Culture and leadership

1. Did the introduction of e-CRM create any internal conflicts? What were the reasons (power changes, fear of job loss, lack of IT knowledge, and distrust about the increase of internal control)?

2. What kinds of contribution did the employees provide to improve processes and ways to construct relationships with customers?

3. To what extent do you think the leadership and top management support have the power to put in practice necessary changes for CRM initiatives?

Internal marketing

1. Was there any effort made to analyse and redesign your organisation's processes to help in changing organisational culture and employees' attitude, before the implementation of e-CRM technology?

2. What role does the communication between employees play to support CRM adoption? How is this improved in your organisation?

3. Are there any metrics to evaluate and reward the use of e-CRM?

Project management

1. Did your organisation have a detailed project plan for e-CRM implementation? Which techniques were used in that plan?

2. How did your organisation adjust project plans according to results obtained during the implementation of e-CRM projects?

Innovation

1. Do you understand that the use of the e-CRM technology, adds value to your job?

2. How effective do you think e-CRM is for customers' segmentation, acquisition, cross-selling, profitability analysis, satisfaction, and retention?

3. Do you think that e-CRM is easy to use? Does this motivate you to use the technology?

Summary questions

1. Let us summarise the main factors that may affect e-CRM successful implementation.

2. Does this summary sound complete?

3. Do you have any other factors?

4. What are the last comments you would like to say?

Appendix 4.4: A summary of one interview

1. What is your job role and what are the duties of your work in the bank?
My job title is a Marketing Manager. My main responsibilities include managing the corporate brand and developing marketing strategies that ensure offering customised commercial banking services to clients.

2. How would define the concept of CRM?
CRM is a concept to manage the relationship with clients. This concept is implemented using a set of tools and techniques that facilitate building and developing a direct relationship between the bank and the clients. It helps us understand clients better in order to develop a customer-centric approach in the bank.

3. What are the differences between CRM and E-CRM?
They represent the same concept, but the communication channels differ among them; (E) refers to the use of electronic tools that enable a direct communication with clients, which would more convenient to them.

4. In your opinion what are the drivers of your organisation's adoption of e-CRM?
Two main drivers:
- *To achieve a better understanding of our clients and their needs, especially profitable clients.*
- *To increase clients' satisfaction and eventually the bank profits. CRM is not only about developing relationships with clients but it is also about organising and directing these relationships in a way that generates profits for the bank.*

5. In your organisation, what are the purposes of CRM? Its priorities?
- *Targeting new potential segments by expanding our operations and developing new products and services to suit the needs of those segments.*
- *Enabling the bank to understand its clients, their behaviours and needs.; In order to plan for services that are more likely going to meet clients' needs.*
- *Obtaining a continuous feedback from clients regarding their satisfaction with our services.*
- *Directly promoting and advertising customised services to clients; this should be enhanced by our understanding of clients and their needs.*

6. Does CRM support developing an integrated message across the marketing channels dealing with clients?
Yes, it allows integrating our message across all our marketing channels, such as TV and radio.

7. In your organisation, who handles the operationalisation of CRM?
There are three different parties handling the operationalisation of CRM:

- *Marketing department uses CRM for marketing research like identifying our target segments.*
- *Service and sales representatives who are responsible for delivering services to clients.*
- *Call centres use CRM to communicate with clients.*

8. In your organisation, who are the main CRM stakeholders? Why?
The same parties mentioned in the prior answer. Firstly, the marketing department, considering that it is involved with identifying target segments which could benefit from CRM data and tools. Secondly, both of service and sales representatives, and call centres, as they both use CRM for interacting with clients. The IT department is also involved with troubleshooting technical problems with the system, and training users on how to use CRM.

In our bank, we classify clients in two types: mass clients, and VIP clients. CRM is less needed in mass markets because all of our services are standardised there. Thus, we mainly benefit from CRM to develop relationships with VIP clients who are identified as the most profitable clients in our bank. One-to-one relationship with this type of clients is essential, as these clients are the key profitable clients for the bank and they usually have sophisticated and diverse needs. These VIP clients are individuals needing to come into an investment to reach a greater return, and hence they often deal with our investment department.

9. In what ways do you see e-CRM technology is affecting the elements of the client relationship?
CRM is a way to build a relationship with the clients. As a result of the availability of rich data about the clients, CRM affects client satisfaction, client loyalty, cross-selling and the quality level of customer care.

10. How is CRM/e-CRM evolving/changing? Why?
The evolvement of CRM has emerged from two sources. Firstly, the increased development and diversity of the Bank's services underlined the needs to evolve and change CRM. Secondly, the evolvement of CRM is linked to clients' acceptance of CRM as a technology; the acceptance process and behaviour. Clients like to use technology at their convenience to facilitate different aspects of their lives, but at the same time they fear the risks of dealing with technology to make financial transactions. This is related to culture aspects which involve employees and clients. Therefore, we planned to apply CRM in phases over a period of time. In order to allow enough time to change employees' attitude towards the CRM, and to wait until clients are ready to deal with these services without fearing any risks.

11. What is the best thing in CRM and what is the worst thing?

CRM enables the bank to develop a better understanding of the clients, achieve a better access to targeted segments, and reduce the costs of delivering services to clients.

There are no dark sides or problems with the usage of CRM.

12. Does the bank have a clear direction when adopting CRM?

Of course, our adoption of CRM comes from the reality of our needs to satisfy clients, and to compete with rival Banks for their custom, following best practices to providing better services. Our goal is to adopt new communication channels that are proven to be more effective than traditional channels; CRM reduces the cost of financial transactions conducted at the counter desk in the bank.

13. To what extent the performance measurement system in your organisation explicitly covers the e-CRM activities?

Our performance measurement covers the CRM system, but CRM still does not have its own explicit separate scorecard. It is indirectly included when evaluating client satisfaction and the level of service, as a modern marketing approach.

From my experience, The CRM implementation needs time and commitment. This is mainly because CRM is a complex system that includes many aspects such as culture and strategy. We need time to reach the maturity state of CRM implementation
Looking at Royal Bank of Canada experience with CRM, we find that it took them 11 years to adopt CRM and reach the maturity state regarding CRM adoption. This is why we need time to reach the maturity state and include CRM in our performance measurement.

14. Does the bank to change his plans because of CRM?

There is an interest in the application of CRM and in benefitting from its advantages. However so far we have not yet arrived at the stage of changing our plans accordingly in order to expedite CRM adoption.

15. Does the bank facilitate an integrated work between departments to facilitate the use of CRM?

Our bank is in a transition position. In new branches integration between departments to facilitate CRM was considered. But the old branches did not change their way of work.

16. Does your organisation strategy align technology, process and activities around the customer?

It is normal that the customer-centric approach is essential and we align all our resources to serve this approach. These resources include people, technology and

process. We value the client as an asset that drives our strategy and working process in the bank.

17. In your organisation does CRM add value to customer-centric orientation essences (customers' segmentation, acquisition, profitability analysis, satisfaction, and retention)?
Yes, and I will prioritise the list: segmentation and acquisition, profitability analysis, satisfaction and retention.

18. Did the introduction of e-CRM create any internal conflicts?
People were questioning its approach and benefits. There was no objection but people had questions about CRM and its benefits; this demonstrated unawareness of the CRM concept and its benefits.

19. Did that differ between departments?
Yes, for example, the investment department which deal with VIP clients or wealth clients accepted the CRM system much better than other departments.

20. What are the reasons behind people uncertainties or questions about CRM and its benefits?
It is because of the old traditional values that employees hold about the working process in banks, these old values looked at the client as a transaction (withdraw and deposit) rather than an opportunity and a need for the bank.

21. What kinds of contribution did the employees provide to improve processes and ways to construct relationships with customers?
Of course, employee awareness of the benefits of CRM was reflected on the quality of service they want to offer clients. Employees attempted to satisfy clients using CRM.

22. To what extent do you think the leadership and top management support have the power to put in practice necessary changes for CRM initiatives?
The leadership support is important because CRM is an innovative approach and it needs a champion to positively change people's attitudes towards the adoption of CRM. And of course, the top management support is vital for CRM adoption as it was their decision to purchase this system.

Therefore, without management support there would be no CRM adopted in the bank. Although the management has supported this CRM approach, the level of support has varied at senior level, as some managers are innovative and like technology while others are nervous about new technology.

23. Was there any effort made to analyse and redesign your organisation's processes to help in changing organisational culture and employees' attitude, before the implementation of e-CRM technology?

Yes, of course. The decision of adopting CRM was a result of the management decision to change and restructure the bank working process to eventually improve the client service level. A cross-functional team, representing staff from all departments in the bank, was formed to sponsor the change process. This team has also supported the CRM and promoted its benefits to employees.

24. What role does the communication between employees play to support CRM adoption? How is this improved in your organisation?

Our Bank achieved a huge success in Jordan, as it was initially specialised on housing loans, then it has been developed to become a commercial bank as well. It's now the second biggest back in Jordan in terms of customer equity, but it is the first bank in Jordan when it terms of customer share. The success of this bank is a result of management efforts, strategic plans and a strategic direction, conveying the idea of change and development in the organisation.

25. Does the bank reward the use of CRM?

There are no direct rewards related to the CRM usage as a system. However, there are rewards for the results of CRM: client satisfaction and better service level. There is also a reward for increasing sales which is facilitated by CRM. Hence, CRM indirectly affects employees' rewards. By the end of the year, a percentage of the bank profits is distributed to employees as rewards.

26. Was there a project plan or steps for the application of the CRM?

Yes, they used project management tools.

27. Are you with them in the project?

Yes

28. How did your organisation adjust project plans according to results obtained during the implementation of e-CRM projects?

There was a change in the plans as a result of our recognition to the needs to gradually introduce CRM to the clients, while maintaining control on the project.

28. Do you understand that the use of the e-CRM technology, adds value to your job?

Yes, of course.

29. How effective do you think e-CRM is for clients' segmentation, acquisition, cross-selling, profitability analysis, satisfaction, and retention?

It's effective for all of them, but I would prioritise these benefits: segmentation, client satisfaction, client Retention, profitability, and cross-selling

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30. Do you think that e-CRM is easy to use?

Yes.

31. Does that motivate you to use it?

The system is clear and easy to use, but this is not the main reason for using it. I use it because I need to meet my job responsibilities and benefits of the system.

32. What are the factors that affect the need for the CRM system?

The success of the CRM system is based on four dimensions:

- *Promoting a better understanding of CRM, that correlates CRM with its benefits to meet and understand the client needs. This is a key dimension.*

- *Highlighting to employees that CRM is an innovative system that is designed to facilitate their jobs and make it easier.*

- *Integrating CRM with the all the communication channels and systems in the bank.*

- *Facilitating the communication internally in the bank and externally with the clients is essential for CRM.*

Appendix 5.1: Participant Information Sheet: Questionnaire

Study title: Organisations' Adoption of e-CRM

Invitation

You are being invited to take part in this research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

What is the purpose of the study?

I write to seek your support for a research study looking to develop a conceptual model of the major factors affecting organisations' adoption of an electronic customer relationship management (e-CRM) system. We are all aware of the increasing need for e-CRM systems to deliver their promised financial performance. This study will provide invaluable insights into what constitutes successful e-CRM adoption.

The research is being carried by a PhD student at Oxford Brookes University, Faten Jaber, a research student within the Department of Marketing and Operations Management. This is a three year research project, and the success of this research depends very much on your participation in the project.

The survey is comprehensive and will be completed at your business's workplace by a variety of fifty to sixty participants of marketing managers, CIOs and employees. The questionnaire will typically takes from 15 minutes to ½ hour to complete all information. The questionnaire will be administered to fifty-sixty participants, including marketing managers, CIOs and employees.

Why have I been invited to participate?

You are invited to participate because you are a manager with overall or partial responsibility of an e-CRM system, or an employee who uses an e-CRM system on a daily basis

Do I have to take part?

The study is entirely voluntary. You are under no obligation to take part and do not need to give any reason for not doing so. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

What will happen to me if I take part?

First of all I will get in contact with your organisation to arrange a suitable time to meet with you and other participants. The questionnaire will start with you signing the consent form and will typically take from 15 to 20 minutes to be conducted.

What are the possible disadvantages and risks of taking part?

Due to the subject matter of the project it is not anticipated that any material collected will be of a sensitive nature. However, if any such sensitive material does arise, steps will be taken to ensure your anonymity will be secured and that you will not be compromised in any way. All of the information collected will be kept strictly confidential and every step will be taken to ensure any quotes used will not be identified as coming from you, unless you explicitly give permission for me to do so. Taking part of this study requires a small investment of time by all us that will contribute to better understanding of what constitute e-CRM successful adoption.

What are the possible benefits of taking part?

Your participation will contribute to the knowledge of e-CRM in away that further our understanding of the topic.

Will what I say in this study be kept confidential?

You and your company will never be identified by name, and only summary results across all companies will be published. In the research results the names of yourself and all the other participants as well as those people who you mention will be changed so you will not be identifiable. The results will be kept in a secure place, in a paper or electronic format (audio files) for a period of five years after the completion of a research project.

What should I do if I want to take part?

After reading the information sheet and deciding to participate in this research, you can contact me if you have any queries or anything you would like to discuss. I will then get in contact with your organisation to arrange a suitable time to meet with you and other participants. At the beginning of the survey you will be asked to sign a consent form.

What will happen to the results of the research study?

I will summarise the survey results and if you are interested I will give you a copy of the results by mail to your address. The survey information will only be read and used by me and not be used for any other purpose. The information from these surveys will be the basis of my PhD thesis which will be assessed in order for me to gain the PhD degree. The results might also be used to write and publish articles in academic journals. You are welcome to see the final thesis and/ or a copy of the articles before they are published.

Who is organising and funding the research?

The research is being carried by a PhD student at Brookes University, Faten Jaber, a research student within the Department of Marketing and Operations Management. This is a three year research project, which is funded by Oxford Brookes University.

Who has reviewed the study?

The research has been approved by the University Research Ethics Committee, Oxford Brookes University.

Director of the study (1st supervisor):
 Lyndon Simkin   email: lsimkin@brookes.ac.uk   Tel: +441865485712
2nd Supervisor:
Yuksel Ekinci   email: yekinci@brookes.ac.uk   Tel: +441865485488
If you have any concerns about the way in which the study has been conducted, you should contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk.

Contact for Further Information

Faten Jaber email: fjaber@brookes.ac.uk
Telephone number: +962796988679

Thank you

Thank you for reading this information sheet, and if it is possible, participating in the study.

Date: 09/11/2010

Appendix 5.2: Questionnaire (English version)

The Electronic Customer Relationship Management (e-CRM) Survey

Electronic Customer Relationship Management (e-CRM) is utilising information technology (IT) for adding relevance to marketing, and enabling an organisation to provide better value for customer by building strong customer relationships and loyalty over time, generating the highest return on investment.
 (Note: Some organisations may refer to e-CRM as Opera or Fidelio system).

SECTION 1: ABOUT e-CRM in YOUR ORGANISATION

Please fill out the space or check the box which best describes your organisation?

1. How long has your organisation been using e-CRM?
     ❑ Less than 1 year ❑ 1-2 years ❑ 3-4 years
     ❑ 4-5 years ❑ 6-7 years ❑ 8-9 years ❑ 10 or above

 2. Please indicate to what extent you think your organisation is using the following e-CRM strategies

   1. Not at all   2. Not much   3. Just a little   4. Somewhat moderately
   5. Somewhat   6. Mostly   7. Very much

E-CRM strategy	1	2	3	4	5	6	7
1. Developing customer database							
2. Personal customisation through customer database analysis							
3. Developing products through customer involvement							
4. Offering customer loyalty programs							
5. Offering real-time customer services							
6. Managing customer loyalty							
7. Managing customer complaints							
8. Developing member-only site in your organisation's website							
9. Categorising/segmenting customers based on spending (lifetime value)							
10. Customising services depending on customers categories/segments							
11. Providing customer with information via email							
12. Developing sales promotion strategy							
13. Providing products and services in one place							
14. Automating cross-sell and up-sell capability							

3. How likely is that your organisation will continue to use e-CRM in the next 12 months?
❑ Very Unlikely ❑ Unlikely ❑ Not sure ❑ Likely ❑ Very Likely

If it is likely to use, please explain why?
_____
_____.

SECTION 2: ADOPTION of e-CRM in YOUR ORGANISATION

4. Please indicate to what extent you agree/disagree with the statements listed by using a 7-point numeric scale shown below.

1. Strongly Disagree   2. Somewhat Disagree 3. Disagree   4. Neither Disagree nor Agree   5. Agree   6. Somewhat Agree   7. Strongly Agree

Statement	1	2	3	4	5	6	7
e-CRM applications enable our organisation to……….							
• .... gain competitive advantage.							
• .... analyse customer requirements more efficiently.							
• .... identify new selling opportunities.							
• .... increase customer satisfaction.							
• .... increase customer loyalty.							
• .... increase customer retention rate.							
• .... increase revenue and profitability.							
• .... increase employee productivity.							
• .... enhance customer relationships.							

5. What other benefits has the e-CRM offered to your organisation?

6. Please indicate to what extent you agree/disagree with the statements listed by using a 7-point numeric scale shown below.

1. Strongly Disagree   2. Somewhat Disagree 3. Disagree 4. Neither Disagree nor Agree   5. Agree   6. Somewhat Agree   7. Strongly Agree

Statement	1	2	3	4	5	6	7
• Our organisation has clear business vision and direction.							
• Our organisation has clear business goals related to customer acquisition, development, retention and reactivation.							
• The majority of our employees are aware of the organisation's vision.							
• Our approach to customers is an important part of the organisational vision.							
• In our organisation, e-CRM is an important strategic issue.							
• There is a set of clear priorities for e-CRM projects.							
• These e-CRM projects are consistent with our organisation's vision and statements.							

Statement	1	2	3	4	5	6	7
• We regularly measure the effectiveness and the success of e-CRM activities.							
• Our approach to e-CRM is reflected in our performance measures used throughout our organisation.							
• Acquiring customer knowledge (understanding customer and analysing customer information) is a key performance measure used throughout our organisation.							
• Promoting effective communication channels with customers is a key performance measure used throughout our organisation.							
• Customer loyalty is a key performance measure used throughout our organisation.							
• Customer value (customer equity and customer lifetime value) is a key performance measure used throughout our organisation.							
• There is a top-down planning process for linking e-CRM strategy to business needs.							
• All of our business functions (e.g. marketing/sales, manufacturing, research and development) are integrated in serving the needs of our target markets.							
• Our organisation allocated multi-functional teams that work on plans to achieve e-CRM objectives.							
• Our organisational structure is meticulously designed around our customers.							
• We continuously track customers' information in order to assess customers' lifetime value.							
• We use information technology to help us determine which of our current customers are of the highest value.							
• Our organisation systematically attempts to manage the expectations of high value customers.							
• We use customer information to segment markets.							
• We segment customers based on their lifetime value (e.g., high, moderate, and low).							
• We are structured to optimally respond to groups of customers with different needs.							
• We made appropriate attempts to attract prospects.							
• We have a continuous process in place for getting feedback to improve the acquisition process.							
• We differentiate our acquisition investments based on customer lifetime value.							
• We have technologies that allow for one-to-one communications with potential customers.							
• Our organisation strategy is driven by customer satisfaction.							
• We frequently and systematically measure customer satisfaction.							

Statement	1	2	3	4	5	6	7
• Our organisation responds quickly to negative customer satisfaction wherever it may occur in the organisation.							
• In our organisation sustaining relationship with customers is more important than customers' acquisition.							
• We actively stress customer loyalty or retention programmes.							
• We have systematic training procedures for helping employees deal differently with high- and-low value customers.							
• The top management has full confidence in implementing change.							
• The introduction of e-CRM raised a conflict of interest among different functional units.							
• We have had very few problems fitting e-CRM within our organisation culture.							
• Our organisation emphasises the need for innovation for development.							
• People in this organisation stress quick response to changing market conditions.							
• In general, our organisational culture has a flexibility to accept change readily.							
• Our organisational structure facilitates cross-functional cooperation and collaboration.							
• Top management provides full support to practicing e-CRM, in order to keep good relationship with customers.							
• In order to change for the better, senior management believes that good customer relationship is a necessity.							
• Top management constantly monitors our level of commitment and orientation to serving customers' needs.							
• Our top management formally promotes and encourages cross-functional teamwork.							
• E-CRM has a strong champion at the top of our organisation.							
• Our organisation tries to help employees understand what is happening in the organisation.							
• Our organisation gives employees opportunities to be involved in the decision-making process.							
• Our organisation tries to help employees understand the dynamics of the market situation (competitors' pressure, customer satisfaction, and the new marketing approach which makes use of information technology).							
• The training that was provided by our organisation has helped me to understand management's expectations regarding e-CRM.							
• Effective communication channels often support the implementation of e-CRM.							
• Staff training emphasises internal communication and cooperation across departments to build customer relationships.							

Statement	1	2	3	4	5	6	7
• Our organisation encourages the communication between different levels and functional units.							
• The development of communication systems (e.g. email, fax, mobile SMS, website, and social media) helps our organisation communicate better across different departments and with customers.							
• Communication in our organisation helps the employees to know the details of the e-CRM programme and the problems which may occur during the execution.							
• Our organisation's policy rewards the use of e-CRM.							
• In our organisation, employees who use e-CRM to provide excellent customer service are rewarded for their efforts.							
• Our performance measurement and rewards systems encourage employees to work with e-CRM system.							
• Our organisation is content with how our e-CRM project priorities are set.							
• In our organisation, there are appropriate project schedules, plans and clear strategy for e-CRM implementation.							
• It is difficult to train users on how to use the e-CRM system.							
• Our information technology (IT) function constantly monitors the performance of e-CRM functions.							
• In our organisation, users' ideas are given due attention in the e-CRM planning and implementation process.							
• Our IT function often meets changes in e-CRM requirements by users or due to business environment change.							
• Our IT function has the ability to adjust e-CRM project plans on an ad hoc basis.							
• Our e-CRM enhances my effectiveness in my job.							
• Our e-CRM is useful to my job.							
• Implementing e-CRM increases the profitability of our organisation.							
• My interaction with e-CRM is clear and understandable.							
• Our e-CRM system is easy to use.							
• It is easy to get our e-CRM to do what I want it to do.							
• Our organisation invests in technology to capture and acquire real time customer information and feedback.							
• We use customer information to develop customer profiles.							

Statement	1	2	3	4	5	6	7
• Our organisation maintains a comprehensive database of our customers.							
• Our organisation is able to provide fast customer response because of integrated customer knowledge across several functional areas.							
• Our organisation is able to provide fast decision-making due to customer knowledge availability and precision.							
• Our organisation can provide authentic customer information for quick and accurate customer interaction.							
• Our organisation can generally predict future customers' expectations.							
• Individual customer information is available at every point of contact.							
• Information on customers is disseminated throughout the organisation.							
• In our organisation customer information is redirected to the right people.							

Balanced Scorecard is a strategic planning and management system that is used to align business activities to the vision and strategy of the organisation, improve internal and external communications, and monitor organisation performance against strategic goals.

7. Are you familiar with the Balanced Scorecard concept?
   ❏ Yes   ❏ No   (If you answer No, please go to question 9)

8. To what extent do you think the **Balanced Scorecard** has been fully implemented within in your organisation?
   ❏ Fully implemented   ❏ Somewhat implemented
   ❏ Slightly implemented   ❏ Not implemented

Please respond to the questions below with your valuable comments

9. What kind of practices are conducted in order to involve the customer in the relationship with your organisation?

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10. What is the level of continuous commitment and support the top management provides to ensure effective practice of e-CRM?

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11. Please provide examples that outline your organisation's success/failure in utilising knowledge for, from, and about customers to achieve superior performance from e-CRM?

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12. What is the best aspect of CRM/e-CRM in your business now? and why?

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13. What is the worst aspect of e-CRM in your business now? and why?

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14. What ideas do you have to improve e-CRM implementation in the future?

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15. How do you think your e-CRM system/approach compares with other organisations' practices? and why?

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SECTION 3: ABOUT YOUR ORGANISATAION

Please fill out the space and check the box which best describes your organisation

16. How long has your organisation been in business?_____ year(s)

17. Please estimate how long has the organisation had a website? ___year(s) ____ month(s)

18. Number of employees in the organisation
❏ 25 or less   ❏ 26 – 50   ❏ 51 – 100
❏ 101 – 150   ❏ 151 – 200   ❏ 201 or more

19. Turnover in 2010 (million Dinars)
❏ 25 or less   ❏ 26 – 50   ❏ 51 – 100
❏ 101 – 150   ❏ 151 – 200   ❏ 201 or more

20. Industry type
❏ Banking and Financial services ❏ Telecommunication ❏ Hotels ❏
Automotive

21. Ownership
❏ Sole proprietorship   ❏ Partnership   ❏ Joint venture
❏ Subsidiary   ❏ Associate company   ❏ Corporation
❏ Other- please specify_____.

22. Operation of organisation
❏ Regional   ❏ International

23. Speed of response to changes to the external environment in your organisation
❏ Slow   ❏ Fair   ❏ Fast

SECTION 4: ABOUT YOU

Please fill out the space and check the box which best describe you

24. Your gender: ❏ Male ❏ Female

25. Your age: ____years

26. Your education level
❏ High school ❏ Vocational/ Diploma ❏ Bachelor
❏ Master   ❏ Doctorate   ❏ Other

27. What is your job role in your organisation?
_____.

28. Work experience
❏ 1-2 years   ❏ 2-3 years   ❏ 3-5 years
❏ 5-7 years   ❏ 7 years and above

29. Technology experience
❏ Less than 1 year   ❏ 1-2 years   ❏ 2-3 years
❏ 3-5 years   ❏ 5-7 years   ❏ 7 years and above

30. E-CRM technology experience
❏ Less than 1 year   ❏ 1-2 years   ❏ 2-3 years
❏ 3-5 years   ❏ 5-7 years   ❏ 7 years and above

Appendix 5.3: Inter-item Correlations

	2	3	4	6	7	8	21	22	28	29	30	33	34	35	37	38	39	51	52	53	55	56	57	62	63	64	68	69	70	74	75	76	78	79	80
FAC2	1																																		
FAC3	.49	1																																	
4	.54	.57	1																																
6	.43	.44	.46	1																															
7	.42	.36	.41	.77	1																														
8	.36	.44	.36	.61	.65	1																													
21	.28	.32	.27	.28	.34	.36	1																												
22	.21	.31	.11	.22	.27	.35	.61	1																											
28	.41	.27	.31	.30	.30	.27	.39	.22	1																										
29	.30	.22	.28	.25	.31	.28	.33	.25	.56	1																									
30	.37	.25	.38	.36	.35	.30	.31	.16	.48	.54	1																								
33	.44	.40	.38	.42	.38	.42	.33	.37	.25	.22	.23	1																							
34	.47	.37	.39	.44	.48	.50	.30	.25	.28	.29	.32	.66	1																						
35	.39	.37	.35	.47	.46	.43	.27	.20	.26	.28	.29	.55	.66	1																					
37	.30	.43	.39	.33	.35	.42	.39	.37	.44	.36	.31	.43	.38	.40	1																				
38	.32	.34	.33	.28	.28	.39	.35	.33	.42	.37	.29	.38	.40	.37	.66	1																			
39	.33	.44	.35	.33	.35	.45	.32	.30	.34	.31	.23	.45	.44	.34	.55	.64	1																		
51	.30	.31	.43	.47	.39	.43	.26	.16	.39	.30	.39	.40	.35	.33	.35	.33	.34	1																	
52	.31	.32	.36	.47	.42	.38	.30	.26	.30	.25	.29	.42	.40	.37	.30	.31	.41	.61	1																
53	.35	.31	.42	.41	.38	.38	.33	.20	.43	.31	.37	.41	.39	.35	.45	.39	.38	.56	.58	1															
55	.20	.31	.25	.31	.34	.37	.27	.18	.14	.20	.24	.22	.32	.31	.24	.27	.29	.29	.23	.32	1														
56	.29	.32	.26	.29	.31	.38	.18	.21	.12	.21	.20	.25	.37	.29	.19	.18	.33	.25	.29	.22	.63	1													
57	.26	.31	.18	.28	.28	.41	.19	.20	.11	.24	.25	.28	.36	.29	.25	.27	.40	.28	.31	.28	.60	.73	1												
62	.28	.37	.30	.24	.32	.37	.37	.24	.27	.33	.24	.29	.33	.32	.36	.33	.37	.28	.28	.28	.41	.45	.36	1											
63	.30	.39	.31	.37	.36	.42	.36	.34	.37	.30	.30	.40	.32	.31	.48	.45	.42	.39	.35	.38	.29	.30	.34	.58	1										
64	.28	.28	.25	.21	.26	.27	.29	.24	.30	.25	.29	.31	.24	.28	.34	.38	.31	.26	.26	.25	.22	.25	.25	.51	.60	1									
68	.41	.32	.33	.38	.35	.40	.38	.32	.36	.22	.23	.50	.39	.35	.41	.40	.37	.35	.41	.36	.25	.19	.21	.37	.43	.36	1								
69	.42	.37	.36	.37	.38	.43	.37	.32	.43	.26	.17	.44	.37	.30	.41	.40	.33	.39	.38	.36	.20	.17	.21	.40	.46	.36	.71	1							
70	.36	.38	.31	.40	.38	.45	.33	.38	.38	.29	.32	.41	.34	.37	.43	.37	.31	.37	.37	.34	.26	.19	.27	.34	.47	.35	.61	.72	1						
74	.38	.31	.40	.35	.36	.39	.30	.25	.31	.35	.34	.40	.44	.39	.41	.49	.45	.35	.37	.44	.31	.26	.28	.43	.41	.39	.40	.38	.35	1					
75	.35	.25	.32	.28	.32	.37	.24	.15	.36	.36	.28	.35	.38	.34	.31	.42	.46	.33	.33	.34	.20	.27	.30	.37	.35	.45	.38	.36	.33	.62	1				
76	.30	.27	.35	.32	.36	.40	.32	.13	.33	.31	.26	.29	.40	.34	.35	.34	.36	.35	.34	.39	.23	.30	.25	.42	.37	.38	.33	.34	.29	.54	.60	1			
78	.26	.35	.30	.34	.28	.31	.32	.24	.26	.22	.28	.32	.29	.30	.35	.38	.29	.32	.27	.26	.22	.20	.18	.24	.35	.27	.38	.34	.37	.31	.31	.34	1		
79	.12	.22	.17	.21	.23	.22	.26	.19	.18	.17	.20	.18	.20	.22	.23	.31	.24	.20	.20	.18	.31	.22	.20	.33	.34	.22	.23	.24	.27	.19	.19	.18	.59	1	
80	.30	.38	.39	.32	.25	.31	.29	.26	.27	.29	.30	.33	.24	.25	.40	.34	.33	.31	.36	.32	.14	.13	.16	.29	.34	.23	.43	.41	.42	.34	.28	.22	.51	.41	1